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JOBS DIAGNOSTIC NEPAL

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ABBREVIATIONS

ADB.....Agriculture Development Bank
BSO .....Business support organization
CBS .....Central Bureau of Statistics
DoFE.....Department of Foreign Employment
EPI .....Economic Policy Incubator
FDI.....Foreign direct investment
FITTA .....Foreign Investment and Technology Transfer Act
FY.....Fiscal year
GCC .....Gulf Cooperation Council
GDP.....Gross domestic product
GoN .....Government of Nepal
ICLS.....International Conference of Labor Statisticians
ILO.....International Labour Organization
IRR.....Internal rate of return
LFP .....Labor force participation
LLC .....Limited liability company
LMIC .....Lower middle income country
MFI.....Micro-finance institution
NEET.....Not employed or in education or training
NGO .....Non-governmental organization
NLFS .....National Labor Force Survey
OECD .....Organisation for Economic Cooperation and Development
SCC .....Savings and credit cooperative
SDG.....Sustainable Development Goal
SIF .....Special Investment Fund
SSF .....Social Security Fund
WDI.....World Development Indicators

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PREFACE

The analysis for this report was carried out during 2019, relying primarily on data collected during 2018 and 2019, prior to the outbreak of Covid-19. The analysis therefore does not address the shocks experienced by Nepal's economy and its people beginning in March 2020.

Not only is the Covid-19 pandemic having dire effects on the health of populations worldwide, it has severely disrupted day-to-day economic activity in all corners of the world. The global nature of the crisis and the imposition of mobility restrictions to limit contagion has in most economies resulted in work stoppages, self-quarantining at home, and return migration. This impact is not only wide—most countries, most sectors, most households—but also very deep. A large share of workers have experienced income loss and temporary or permanent job separation. As workers are laid-off, many migrants must make their way back home, whether internally (from cities back to rural villages) or from destinations abroad.

What began as a severe supply-side shock for labor markets has become a joint supply and demand crisis, and this interaction risks deepening the crisis and significantly delaying recovery. Global and local supply chains have broken down, even in industries where demand remains strong. For firms that have managed to continue operations, many have scaled back production. And the uncertain length and depth of the crisis discourages firms from investing or hiring. All of these effects are serious, especially when aggregated across economies.

Some population groups are likely to be especially hard hit. Many manufacturing sector workers have been laid off as factories suspend production. With the closure of most retail outlets (with some food-related exceptions), retail workers in both large and small establishments have been forced out of work. Cash-strapped small and medium enterprises (SMEs) struggle to pay their employees. A majority of self-employed and informally employed workers lack access to social insurance protections such as unemployment benefits. This includes street-vendors and household producers for whom consumer demand has dried up. It includes small-scale agriculture producers who cannot get their goods to market. It includes input-providers of goods and services along supply chains. And it includes migrant workers no longer able to work or send remittances home to their families. In Nepal, where the majority of the labor force is informally employed, 2.8 million Nepalese work abroad, and remittances account for around 30 percent of gross domestic product (GDP), the impact of the Covid-19 pandemic will impose extreme hardship on households suffering sharp declines in labor income and/or remittances.

Governments around the world are beginning to implement a range of policy options to help address these jobs challenges, including:

1. **Policies that provide income support to workers who have experienced significant earnings losses.** Income support—whether in cash or in kind—is essential for sustaining consumption and avoiding dissaving, disinvestment in human capital, and displacement.

2. **Policies that target support to firms in order to minimize layoffs** and permanent job destruction. Providing firms with the liquidity needed to survive the shock—most importantly to meet payroll, but also to pay for rent and utilities and maintain their network of economic linkages—will enable them to retain workers and quickly scale up production following the crisis. Otherwise many firms risk permanent closure or unsustainable debt burdens under which a short-term liquidity crisis spirals into a prolonged solvency crisis.

3. **Policies that help workers and firms adjust to new working conditions.** For separated workers, temporary public works programs can provide alternative work. Training offerings could be adapted to online delivery to accommodate furloughed workers. Reducing or subsidizing fees for internet connectivity can help maintain education delivery, telehealth services, and firms' connection to clients. Providing technical assistance to small firms to help them shift to e-commerce may enhance their viability. Labor regulations that stipulate minimum working hours may need to be revised to accommodate firms opting to reduce working hours rather than separating workers.

4. **Policies that keep remittance channels open**, thereby safeguarding some of the poorest remittance-dependent communities' access to basic needs. Remittances represent a key income source in developing countries, helping families afford food, health care, schooling and basic needs.

These types of crisis-response policies entail very complex design challenges, particularly when the support is needed quickly, in all regions of a country, and at levels adequate to sustain workers and firms throughout the crisis period. Delivery mechanisms, selection criteria and screening of eligible firms and workers, and identifying and locating informal workers who do not already appear on social assistance or social insurance registries are just a few of the many challenging aspects to be addressed to ensure effective policies.

The Government of Nepal has already initiated a series of policies to provide income support and liquidity relief to firms and households, include waiving social insurance contributions, food assistance to needy populations, subsidies for electricity consumption and internet use, private school tuition waivers, and extensions on loan repayments, taxes and reporting requirements, inter alia.

Looking beyond the crisis, when Nepal's economy enters recovery phase, it will be crucial to defend the significant development gains achieved in recent years, and identify opportunities to address the many remaining labor market challenges highlighted in this report.

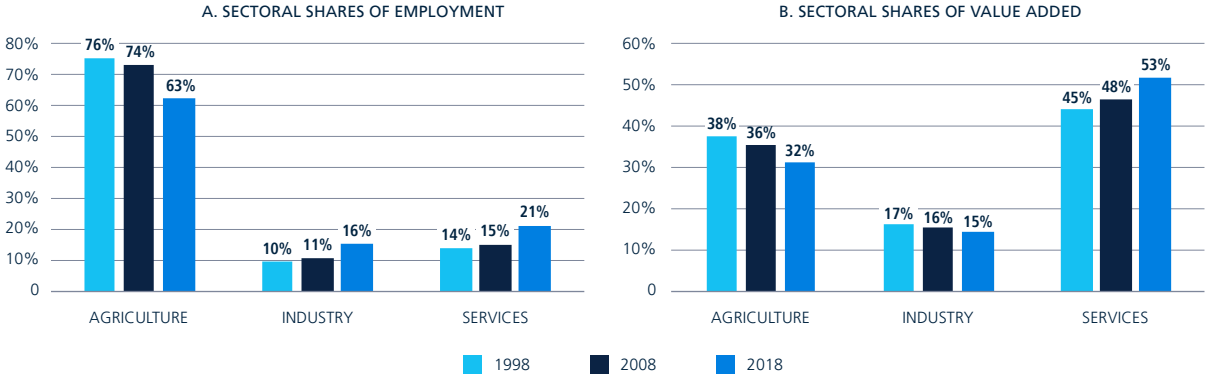
EXECUTIVE SUMMARY

Nepal's economy is gradually shifting from largely subsistence agriculture to more modern industry and services. Agriculture's share of domestic output and employment is declining, industry is holding steady and services now account for over half of total domestic production. In the last two decades, large numbers of men have entered jobs in construction, manufacturing, commerce and transportation, among others; even though most of these are informal jobs[1] or temporary wage jobs, they are nevertheless more productive and provide improved livelihoods compared to traditional low-productivity farm work. Women, on the other hand, have not transitioned in significant numbers. Nepal's structural transformation has been slow due to the prevalence of subsistence activities. Nepal remains a largely agrarian economy characterized by small-scale family farming using traditional methods and producing primarily for household consumption. Six in 10 workers are engaged in agriculture, but generate only one-third of total output (Figures 0.1a and 0.1b). Over half of the labor force does not produce enough output on their farms or in their households to generate surplus to sell in the market.

This structural transformation brought more workers to cities, where many were able to access better jobs, especially firm-based wage employment. Nepal's population shift to urban areas, particularly to Kathmandu valley, is partly driven by the high concentration of economic activity in the city of Kathmandu and its environs. Kathmandu's population has exploded, growing an average 5 percent annually, while many remote districts experienced negative population growth. Province 3 added one million new jobs in the last decade; over half of these were in Kathmandu valley, and nearly 300,000 of which were wage jobs.

The gradual shift toward wage employment signals a fundamental change in Nepal's economic development. Similar to worldwide patterns as countries move into lower middle-income country (LMIC) status, this shift reflects increased sectoral diversification and increased economies of scale as production and employment specialize and the economy moves from self-employment to cooperative production. Urbanization amplifies these effects through concentrating economic activities and increasing the variety in products and

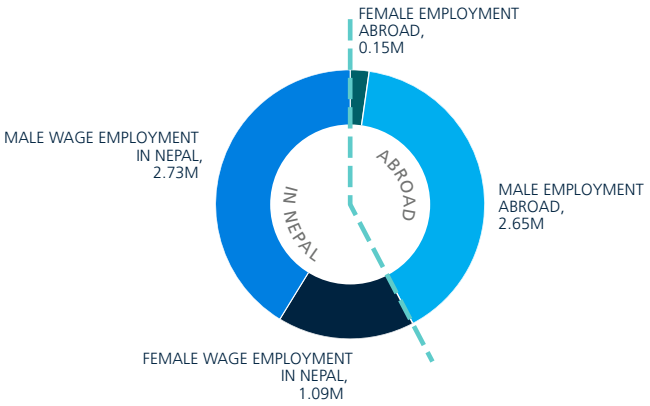
Figure 0.1
Sectoral shares of employment and sectoral shares of value added



Source: Panel A: NLFS 1998, 2008, and 2018. Panel B: WDI.

[1] Workers are defined as informal if they are not covered by social security or if they are self-employed and unregistered or the employer of an unregistered business.

Figure 0.2
Wage employment in Nepal and abroad



Source: NLFS 2018.

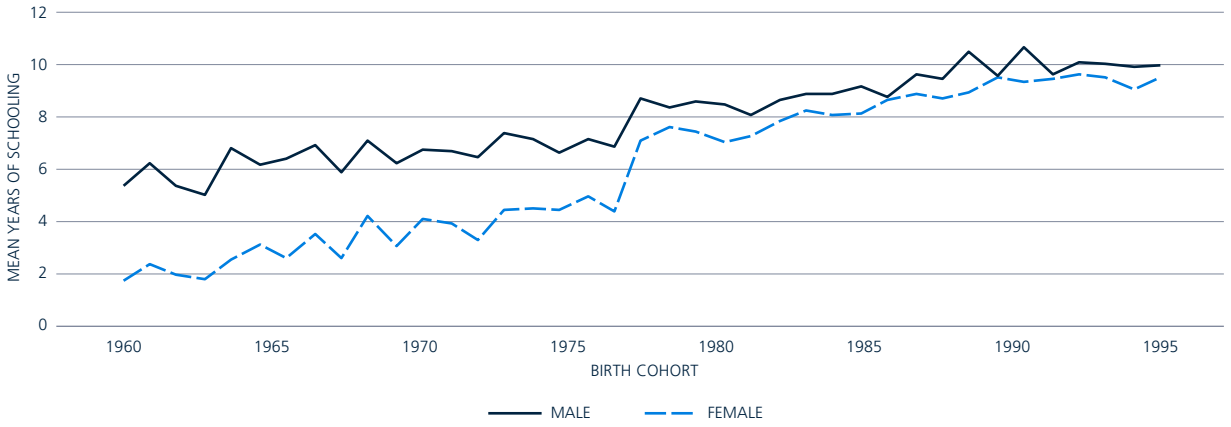
services. The share of wage work in Nepal jumped from 17 percent to 24 percent of total employment between 2008 and 2018. Of the four million jobs added to the economy since 2008, nearly half were wage jobs. At the same time, the share of unpaid workers and self-employed farmers declined markedly, especially among men.

Despite important gains, there are not yet enough wage jobs to absorb all job seekers. This leads many into self-employment or unpaid work, and many others to seek employment abroad. By 2018, there were 3.8 million wage jobs in Nepal, and another 2.8 million Nepalese were employed in wage jobs in other countries (Figure 0.2). Most international migrants are male, two-thirds are under age 35, and 85 percent have less than a secondary education. International migrants earn much higher wages than their counterparts at home despite the mostly unskilled nature of the work. External migration acts as a pressure valve by accommodating excess male labor supply, but does not provide a viable option for most women.

Recent household- and firm-level survey data show Nepal's strong economic and human development gains over the past two decades. Extreme poverty fell from 46 percent in 1996 to 15 percent in 2011 (based on the international definition of US$1.90 per day; World Bank 2017). Rapid poverty decline is explained in large measure by remittances from Nepalese working abroad; over one-quarter of all households have a family member working abroad, and remittance inflows are equivalent to around 30 percent of GDP. In addition to the direct impact on household incomes, remittances boost household welfare indirectly by facilitating health and education spending. Educational attainment increased markedly over the past 3 decades, especially among women, whose average years of schooling rose from 2 years for those born in 1960 (and nearing 60 years old today) to over 9 years for those born after 1990 (and currently in their 20s; Figure 0.3).

Economic and human development gains were mirrored by solid improvements in labor outcomes. Despite slower GDP growth than many neighboring South Asian countries, Nepal had comparatively faster job growth during the last decade, averaging 3 percent per year. Wage jobs increased at an annual pace of 7 percent, compared to 2 percent for non-wage jobs, and unemployment remained low. Job creation occurred across a mix of low-productivity and high-productivity sectors (Figure 0.4). The construction, manufacturing and hotel and restaurant sectors increased their shares of total employment, but they have below average productivity. The finance and real estate, and the transport and communications sectors, have the highest average productivity levels, and both added jobs. And two sectors with average productivity—wholesale and retail (employing low-skilled workers) and health and education (employing more educated workers)—both increased their shares of total employment. Although most jobs in Nepal are informal, economic growth was sufficient to generate large real wage gains in all sectors and in all wage categories (formal and informal). Taken together, there are more jobs of higher average quality today compared to 10 years ago, and this translates into improved worker welfare.

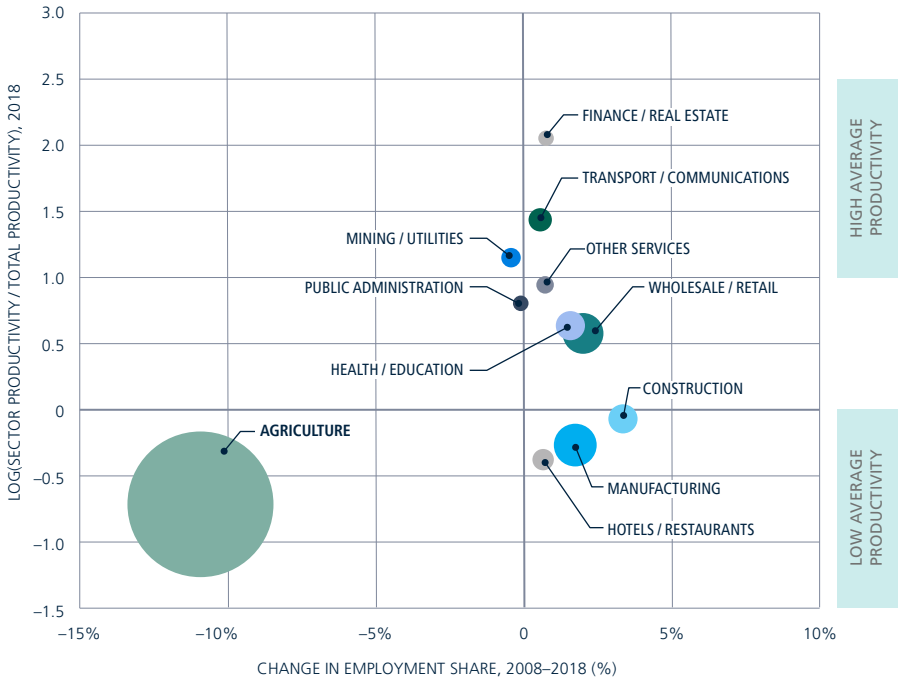
Figure 0.3
Average years of schooling by birth year cohort (males, females)



Note: The averages are for those aged 20 or above.

Source: NLFS 1998, 2008, and 2018.

Figure 0.4
Both low- and high-productivity sectors gained employment share

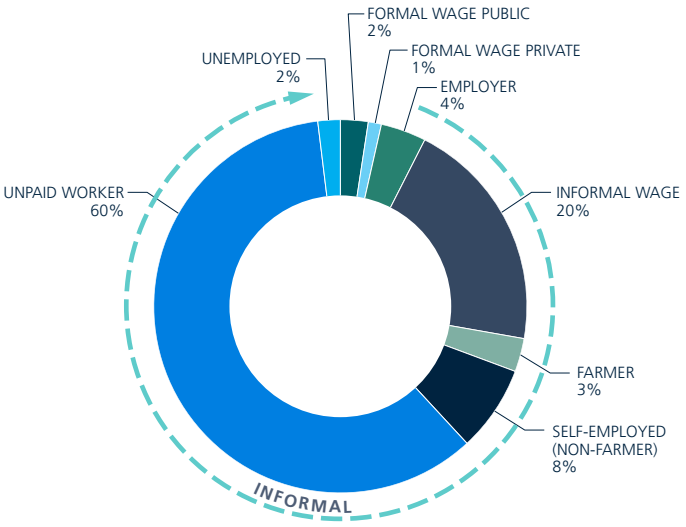


Note: Bubble size reflects sector employment in 2008; productivity is measured as sector-level value added per worker.

Source: World Bank calculations based on NLFS 2008 and 2018 and national accounts data.

Despite Nepal's employment gains, the Government would like even stronger domestic job creation to absorb the large number of external migrants back into good jobs at home. Meeting this objective will take time, given the many factors that contribute to high migration, and will require a multi-pronged cross-government approach.

Figure 0.5
Labor force status (2018)



Source: NLFS 2018.

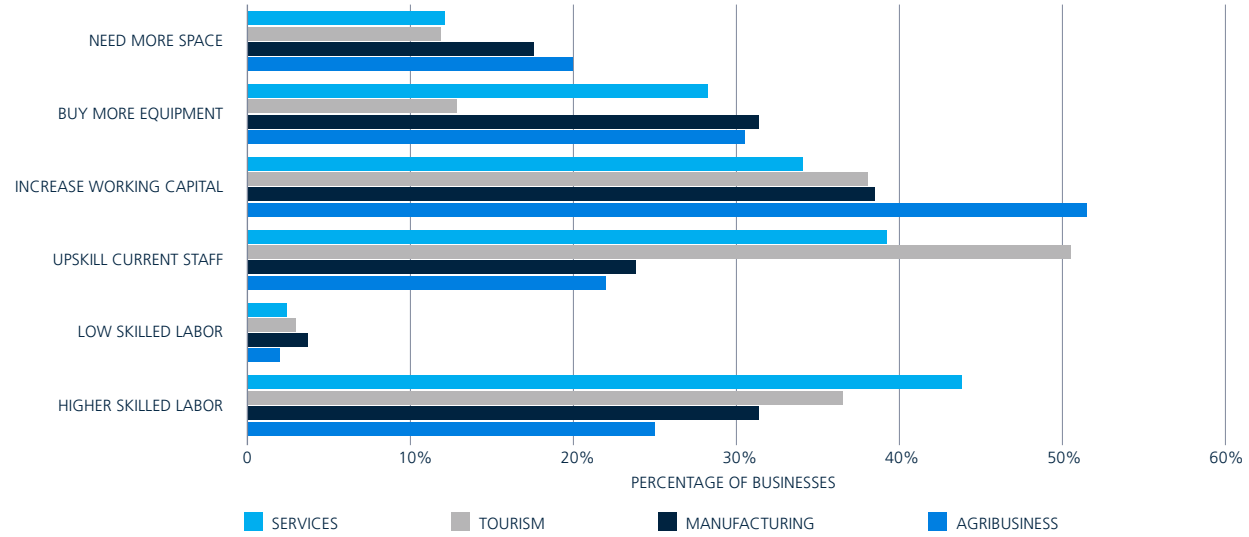
Several structural rigidities impede further improvements in job outcomes. Nepal's dramatic topography makes it hard for many workers to access wage jobs. Difficult transport and logistics make it costly to connect producers to domestic and foreign consumers, raising the cost of doing business. Over half of employment is in subsistence activities, and 60 percent of employment is in unpaid work (Figure 0.5). Fertility declined over the past 3 decades, expanding the working-age population, which contributed to per capita value-added growth. But Nepal is already part way through its demographic window of opportunity during which a growing working-age population can contribute to productivity increases; fully realizing this potential will require available workers to be engaged in productive work.

A number of other factors hinder the creation of more and better jobs. Most jobs concentrate in relatively low productivity sectors—notably farming (30 percent), construction (16 percent), retail (14 percent) and manufacturing (8 percent)—and most jobs in these sectors are informal. Workers' skills are generally low: even among wage employees, three-quarters have not completed secondary school and two-thirds are in relatively low-level occupations. Employers of small and medium enterprises (SMEs) report that they lack crucial skills such as marketing, management and technical know-how. SMEs and business support organizations indicate a high degree of local competition, especially among micro-firms and necessity entrepreneurs[2] offering similar products. The vast majority of firms are micro-sized, are characterized by low productivity, and target the small domestic market rather than exporting or connecting to global value chains. According to the 2018 Economic Census, nearly 4 in 10 firms are single-person entities, another 58 percent have fewer than 10 employees, over half are in wholesale and retail trade, and restaurants and hotels account for the next largest share. Firms struggle to differentiate product offerings or reach beyond a local customer base.

Nepal's business environment is challenging on many fronts. SMEs have difficulty accessing credit through formal channels due to a lack of creditworthiness and high interest rates. This is a serious impediment not only for capital investments such as for technology or capacity upgrades to improve product quality, but also for working capital to enhance business operations and create space for entrepreneurs to pursue innovation or explore new markets. Entrepreneurs also report a shortage of skilled labor needed to expand their operations (Figure 0.6). Firms cite competition, tax regulations, high taxes, and bureaucratic inefficiencies as obstacles.

[2] Our analysis distinguishes between "necessity" entrepreneurs, who started their business out of necessity, and "opportunity" entrepreneurs, who perceived a market opportunity or set out to solve a problem.

Figure 0.6
Requirements to grow business

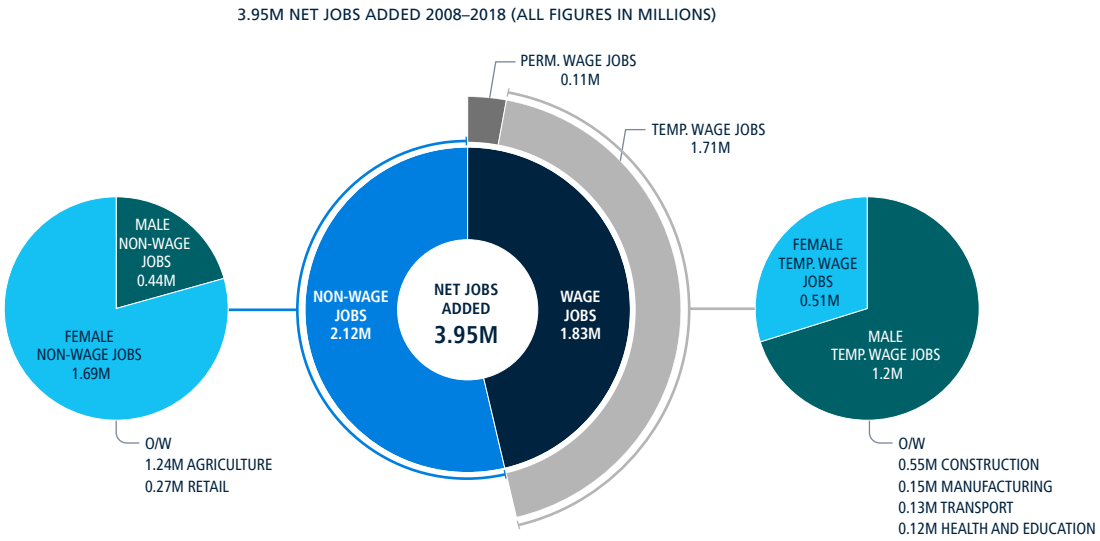


Source: SME survey 2019 (IMC Worldwide 2019).

The new Labor Act and Social Security reform together extend labor protections and social insurance coverage to employees in all firms (not just those with more than 10 workers). But the associated increase in the labor tax rate may deter employers from hiring, or even from registering or accurately reporting earnings to the tax authorities, which could reduce social insurance coverage for workers in small and medium-sized enterprises.

Firms are not creating enough good-quality wage jobs to absorb available labor, especially women. More than half of jobs added in the last decade were non-wage jobs, and the vast majority of the wage jobs added were temporary and informal (Figure 0.7). A rising share of men have found wage work over the past decade, but women face very limited earning opportunities. The construction boom—fueled by post-earthquake

Figure 0.7
Decomposition of net jobs added between 2008 and 2018



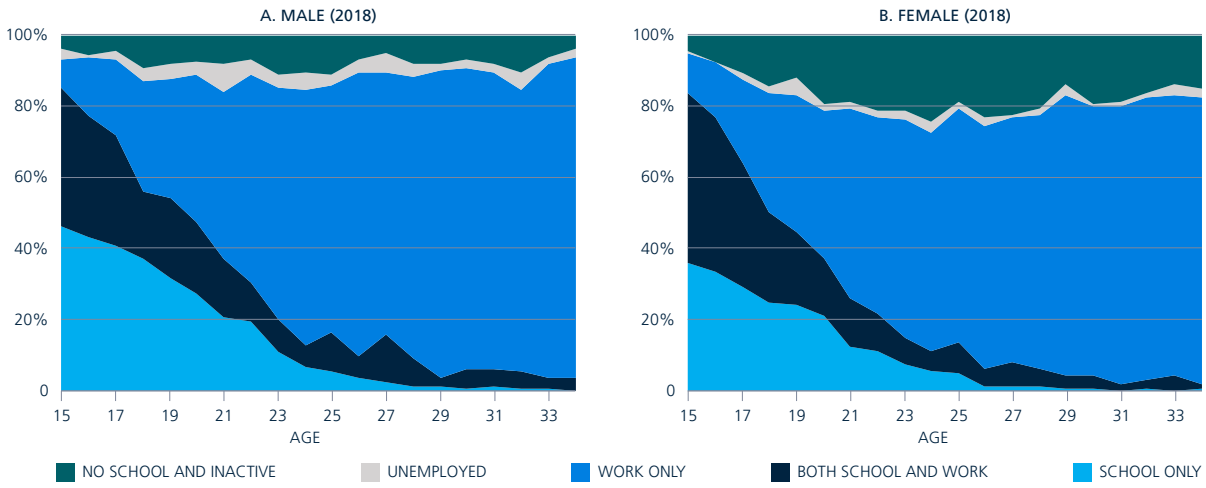
Source: Staff calculations based on NLFS 2008, 2018.

reconstruction and remittance-financed housing upgrades—absorbed over 550,000 men into well-paid temporary wage jobs since 2008, jobs typically deemed unsuitable for women. More men than women entered manufacturing work, but these jobs are also mostly informal and low-skilled, in addition to being poorly paid. Men also accessed wage employment in the transport and communications, health and education and financial and business services sectors. Women relied on opportunities in health and education, but these jobs are still predominantly informal.

Traditional gender roles continue to marginalize women, and female human capital is underutilized and under-remunerated. Family-care responsibilities predominantly fall to Nepal's women, limiting the time they have available to engage in full-time work or move for better work opportunities. Due to a combination of mobility constraints associated with family care responsibilities, as well as security concerns and restrictive legislation, women are less likely to migrate internationally. Three-quarters of new jobs taken up by women between 2008 and 2018 were in non-wage self-employment or unpaid family work, much of which was farm work. Occupational segregation and social norms—such as bias against female entrepreneurship, or construction work, or external migration—contribute to the large earnings gap between men and women. Work preferences among younger and more educated women appear to be changing faster than private labor demand. Around 1 in 5 young females opts to remain outside the labor force (Figure 0.8).

Nepal's growing economy remains dominated by low-quality low-productivity jobs, limiting the expansionary synergies that innovation, diversification and structural transformation can bring. Nepal's limited integration into global markets represents a forgone opportunity for accessing larger markets and raising quality standards to competitive levels. Robust improvements in labor outcomes in the past decade reflect Nepal's migration and remittances-driven economic growth model: migration and remittances have increased household income and consumption, reduced poverty, and spurred household spending on local goods and services. Some of this increased spending enhanced both welfare and human capital, such as through housing upgrades (contributing to the construction boom) as well as increased investments in education and health. But a large portion was limited to relatively low value-added goods and services with modest spillovers for job creation. In the absence of large and connected domestic markets, SMEs need to look outward but they face difficulty competing in foreign markets. The small number of very large firms that do export tend to compete in low-margin, low-value-added manufactured products with limited scope for upgrading quality and sophistication. The tourism sector is largely export-oriented, but Nepal's tourism offerings face pressures from external competition and environmental concerns, and are vulnerable to global demand shocks.

Figure 0.8
School-to-work transitions by age



Source: World Bank calculations using NLFS 2018.

Nepal's private sector is creating some higher productivity jobs, but not enough to absorb the many workers who remain underutilized and in marginal employment. This is especially the case for women and for rural populations, given the predominance of unpaid work and subsistence agriculture. A significant segment of Nepal's human capital resources is underutilized. Many poor, vulnerable, and low-productivity workers—namely, the informally employed—lack technical capacity, financial resources and/or market access. This prevents them from connecting to formal wage jobs or to buyers in larger markets and/or more productive value chains that could help boost output and therefore earnings. Achieving economic growth that can generate sustainable livelihoods for Nepal's workers—including those engaged in low-productivity activities—requires a multi-pronged approach comprising a range of coordinated interventions.

POLICY IMPLICATIONS

Given its recent transition to a federal government system, Nepal is at a critical juncture for setting a pro-jobs agenda. A robust and resilient economy requires a policy framework and supporting institutions to facilitate private sector development, job creation and improved worker welfare. Structural transformation of Nepal's economy is likely to progress slowly without more ambitious development interventions. The key challenge is how to support diversified private sector growth, expand markets, and increase product quality and firms' earnings. Ultimately, the goal is to stimulate private sector output, higher productivity and upgraded skills, which in turn creates more and better jobs, better utilizes human capital, and increases worker welfare—important components for achieving sustainable and inclusive growth.

The policy interventions to improve job outcomes in Nepal presented here are considered through four main channels: (a) fostering SME productivity and growth; (b) improving the business environment and labor market policies; (c) increasing the individual, family and economy-wide benefits of international migration; and (d) preparing and connecting women and youth to better job options including entrepreneurship. Firms of all sizes need to become more competitive to expand production and create more jobs, including better quality jobs requiring higher skills. Entrepreneurs (including the self-employed) need to differentiate their products/services and identify new markets. This includes rural producers, especially women. Updating methods to increase yields and/or product quality and integrating into value-chains would raise rural productivity and earnings. To grow, SMEs need policies to facilitate access to finance and business knowledge, reduce regulatory and tax burdens, and improve market connectivity. Increasing the returns to migration—for both the migrant worker and the sending family—will boost job quality and household earnings, with positive economic spillovers. Expanding women and youth access to better jobs in a wider range of activities, and ensuring they have the necessary skills to succeed, will accelerate structural transformation and boost labor earnings. Strengthening guidance for schoolchildren and out-of-school youth to prepare them for the labor market will increase the relevance of their skills. And expanding access to assets, services, know-how and networks for informal producers and entrepreneurs in both urban and rural markets will enhance productivity and living standards.

Table 0.1
Policy recommendations

1. Foster SME productivity and growth	**Short-term actions** • Accelerate implementation of recent legislative and regulatory changes to (a) promote and develop Venture Capital and Private Equity markets; (b) foster Fintech through modern retail payments system; (c) expand and deepen the use of robust credit information and secured transactions systems to promote moveable collateral-based lending for MSMEs. • Channel technical assistance toward strengthening government and regulatory capacity related to these recent legislative and regulatory reforms. Develop dissemination and training tools to encourage private sector take-up (for example, retailers and consumers for fintech payments, MSMEs and MFIs for the moveable assets registry). • Partner with the private sector to develop support addressing common SME challenges by creating online guidance on sources of finance and technical assistance (TA), developing digital tutorials on basic techniques such as book-keeping, and creating summary guides on business regulations and tax rules. • Facilitate growth of commercially sustainable firms by encouraging private sector delivery of high-quality business support services through business support organization (BSO) accreditation and promoting BSO services. • Review and update quality standards and accreditation facilities to meet the import requirements of trading partners. • Pilot a program of subsidized support combining TA and equity financing to labor-intensive SMEs with high job-growth potential.
	Strategic long-term priorities • Review and revise foreign investment policies to better target SME market opportunities and foster linkages between potential foreign investors and SMEs, including revisiting the recent increase in the foreign investment threshold to Rs. 50 million and current Investment Board Foreign Investment and Technology Transfer Act (FITTA) threshold of Rs. 6 billion. • Strengthen the export promotion framework to reach out to new markets to connect foreign buyers and domestic SME suppliers. • Identify policies and programs to encourage innovation and adoption of better technologies that enhance sustainability and/or target foreign consumers and foster backward linkages. • Establish the enabling environment for digital solutions that can boost Nepal's market share beyond its currently limited export base through: coordinated federal regulatory and policy approaches, adequate digital infrastructure, and ICT literacy and innovation training within schools and through alternative delivery mechanisms for those who have left school.
2. Improve business environment and labor market policies	**Short-term actions** • Accelerate progress in improving Doing Business indicators—especially targeting SMEs—through a clear implementation strategy rooted in greater inter-governmental coordination on investment climate improvement at federal and at federal, provincial, and local levels. • Establish robust public-private dialogue arrangements to better partner with the private sector on the design, implementation and monitoring of initiatives in supporting private sector and SME-led growth at national and sub-national levels. Adopt a cross-government mission statement stressing the importance of private sector firms and encourage Ministries to weigh the impact of their decisions on the private sector. • Develop and implement mechanisms to monitor the impact of the new labor tax and social security system on formal employment (for example, through tracking of firm registrations and worker participation, firm surveys/interviews, and household surveys).
	Strategic long-term priorities • Consider narrowing the gap between formal and informal status to minimize evasion by reducing employers' labor tax contribution rates to bring them closer to international norms. • Increase capacity to monitor labor regulations; explore partnerships with civil society organizations (CSOs) to monitor compliance with labor regulations. • Review the impact of the maternity leave and benefit scheme under the Social Security Fund (SSF) on women's participation in formal employment. • Review trade policies (including import tariffs on technologies with a job creating impact), the logistics and connectivity environment and the trade facilitation agenda to increase exports and promote trade-related jobs.
3. Increase benefits of international migration	**Short-term actions** • Strengthen migration monitoring systems and introduce data collection instruments to track external migrants' employment outcomes and enhance evidence-based policy making. • Increase integration of domestic and international labor intermediation systems to provide aspiring migrants better information on trade-offs between domestic and overseas opportunities, better coordinate reintegration of returning migrants, and reduce fraud.

3. Increase benefits of international migration	• Ensure that mandatory pre-departure training programs incorporate financial literacy, soft skills, and psychological preparedness, customized to specific destinations. Complement with awareness programs targeting sending-families. • Promote the design and take-up of remittance-linked financial products such as remittance-sending products, remittance-backed credit for productive investments in Nepal, remittance-linked household savings instruments, and credit instruments to finance up-front migration costs. • Develop a comprehensive migration strategy to improve labor outcomes and safety for migrants, covering the complete migration cycle (from pre-decision to reintegration) and addressing gender concerns in a way that enables safe female migration. • Regulate recruitment service providers, and increase transparency and competition by introducing a web-based platform for migrants to rate agents and employers.
	Strategic long-term priorities • Increase financial inclusion for remittance-receiving households and strengthen linkages with schemes aimed to increase household and community resilience. • Create space in the market for new remittance transfer providers that increases competition and reduces costs. Review the regulatory setting and the necessary telecom infrastructure to attract fintech options and address exclusivity contracts. • Promote successful reintegration of returnees by developing a multi-pronged reintegration support program based on evidence from existing pilots and assessment of labor market constraints faced by returnees. • Diversify migration destinations and occupations to reduce dependence on few countries and shift towards higher-wage markets with better working conditions.
4. Prepare and connect women and youth to better jobs including entrepreneurship	**Short-term actions** • Strengthen implementation of curriculum revisions based on regular Government review of school and technical and vocational education and training (TVET) curricula, with a view to enhancing employability in a globally connected world (including, for example, foreign language skills and cultural training). • Develop simple digital training modules (for example, fundamental "rules of thumb" about business processes) and design a digital outreach strategy and marketing campaign (e.g., voice/text digital "mini-bulletins"). • Promote entrepreneur networks targeting women and youth and develop a mentoring program to match younger firms/self-employed youth with established firms. • Support programs for increasing the productivity and incomes of subsistence and small holder farmers, for example, through assistance establishing cooperatives, linking to value chains, accessing seed capital/asset transfers, improving market access, price information, financial education, business and/or technical training related to both farm and off-farm activities. • Facilitate connections between rural producer/entrepreneur networks, agriculture extension activities/advice and SMEs operating along the agri-processing value chain (including transport, logistics, quality standards, export promotion). • Co-sponsor innovation competitions/hackathons to develop digital solutions for small-scale producers. • Develop public information campaigns to de-stigmatize or neutralize gender-differences in occupations or sectors.
	Strategic long-term priorities • Continue mainstreaming soft skills such as problem solving, team work and communication skills into school curriculum, vocational training, and programs for youth and adults engaged in low-productivity activities. • Guide primary and early secondary students' career aspirations by exposing gender-neutral options including entrepreneurship using digital tools, site visits; adapt guidance tools to non-youth audience. • Encourage private firms to provide systematic input into a demand-driven skills development system (for example, through recently established sector skills councils). • Review the higher education system and curricula with input from employers. • Develop a multi-sectoral youth employment strategy that addresses skills, intermediation services, and expanded use of internships and apprenticeships, with gender- and geographically-differentiated approaches. • Consider piloting multidimensional economic inclusion interventions to address barriers to better jobs faced by extreme poor, ethnic minorities, rural women and other marginalized groups. • Review the food system and food safety controls and the role of agri-processing for meeting domestic and global demand, including assessment of gaps in global food value chains, logistics, hygiene and quality standards, and lay the institutional groundwork for public oversight. • Foster childcare and eldercare services industries to facilitate female labor force participation and female labor mobility out of unpaid family work. Government's role can include training and regulation of providers (including accreditation), and care services promotion at the national and local levels.

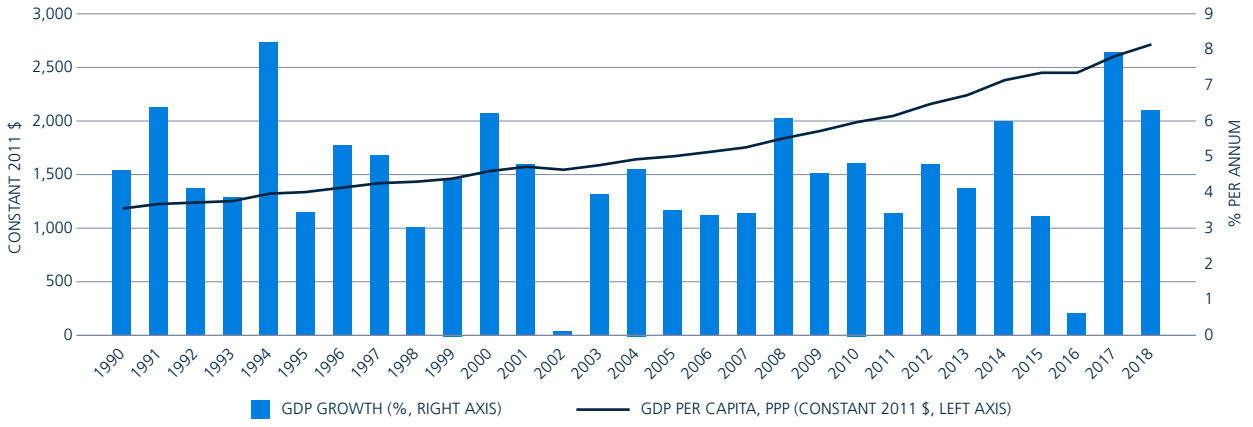
1. OVERVIEW OF THE ECONOMY AND STRUCTURAL TRANSFORMATION

1.1 SNAPSHOT OF THE ECONOMY

Nepal's economy experienced modest growth in recent decades, punctuated by severe shocks and periods of recovery (Figure 1.1). Nepal grappled with the Maoist conflict from 1996 to 2006, a turbulent decade marked by political upheaval. The 7.8 magnitude earthquake in 2015 wrought havoc and mass destruction across the country, killing 9,000 and destroying assets, infrastructure, and livelihoods. Parliament passed a new constitution in 2015, which was followed by a 6-month interruption of cross-border trade with India in protest over the new constitution.[3] The cumulative result was economic stagnation in 2016. The economy rebounded thereafter, posting 8 percent growth in 2017, over 6 percent in 2018, and 7 percent in 2019, on the back of political stability, regular electricity supply, earthquake reconstruction stimulus, remittances and tourism growth (Ezemenari and Joshi 2019).

This volatility translated into relatively tepid average economic growth and modest cumulative income gains. Nepal remains one of the slowest-growing and poorest economies in Asia. Annual economic growth averaged 4.6 percent in the past decade, trailing most regional neighbors as well as some structural peers[4] such as Tajikistan (6.7 percent) and Uganda (5.4 percent; Figure 1.2a). Per capita income reached US$2,724 in 2018 (measured in US$ 2011 PPP terms), which places Nepal in the world's poorest income-per-capita decile (Figure 1.2b).

Figure 1.1
GDP growth rate and GDP per capita



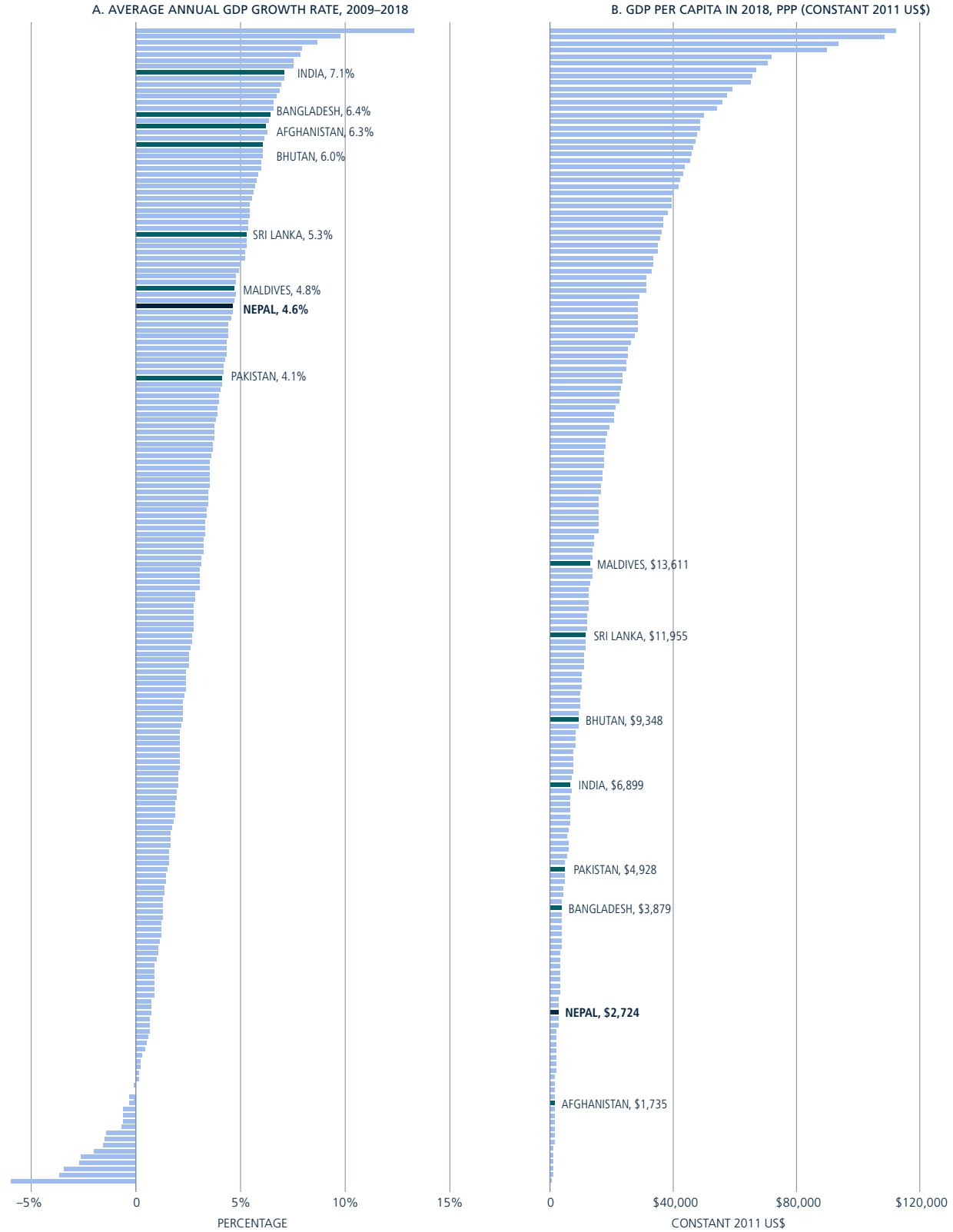
Note: Data is for fiscal years.

Source: WDI.

[3] Over half of Nepal's goods exports are destined for India.

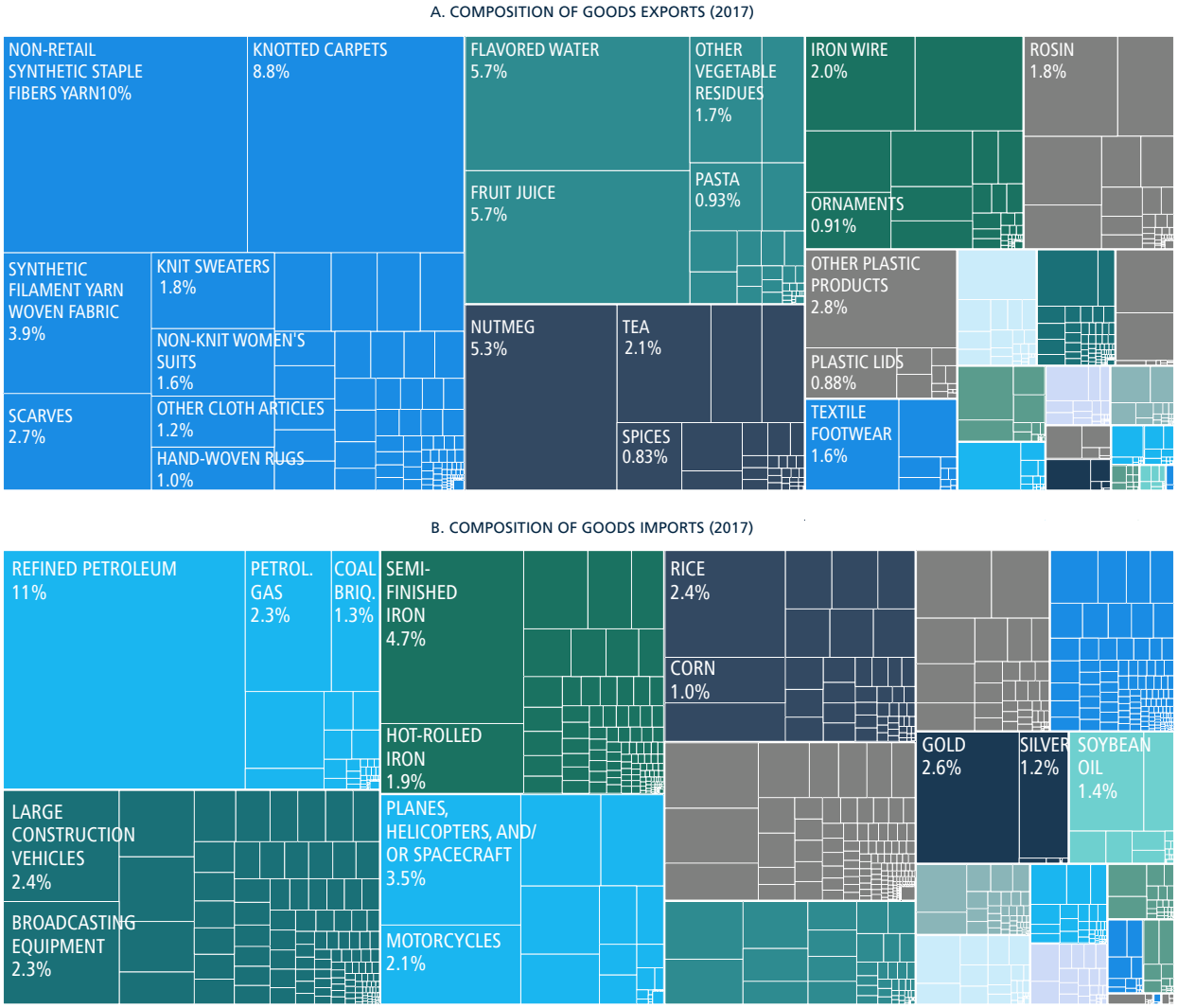
[4] "Structural" peers are countries with a similar structure to Nepal: landlocked, agrarian, non-resource rich, population of 5 million to 50 million, and a per capita gross national income of between US$600 and US$1,400. For Nepal, these peers include Afghanistan, Burkina Faso, the Kyrgyz Republic, Mali, Tajikistan, Uganda, and Zimbabwe.

Figure 1.2
International comparison of average annual GDP growth rate (2009–2018) and GDP per capita in 2018, PPP (constant 2011 US$)



Source: WDI.

Figure 1.3
Composition of good exports and imports (2017)

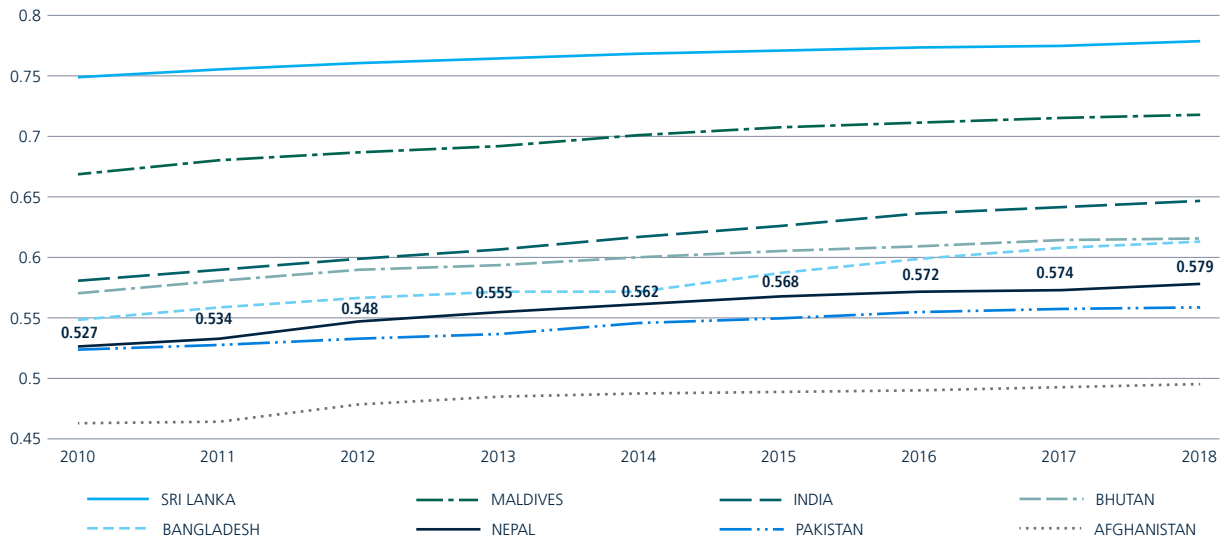


Source: Observatory of Economic Complexity (Simoes and Hidalgo 2011).

Nepal has struggled to integrate into the global economy. The export-to-import ratio is low and falling and reflects extremely low participation in global value chains. Two-tenths of all goods exports are textile products, followed by foodstuffs, spices, vegetable products and fruit (Figure 1.3a). Vegetable and foodstuffs imports are high for a rural economy, and imports of other final consumption goods such as petroleum products, vehicles, and even textiles and precious metals are significant (Figure 1.3b), in large part financed by remittances. But remittance-financed imports drive up domestic prices, putting upward pressure on the real exchange rate, and thus undermining Nepal's competitiveness.[5] In 2017, Nepal imported US$12 worth of goods and services for every dollar it exported. Import tariffs represent a key source of government revenue, but high tariffs on imports of intermediate and capital goods raises domestic production costs, discourages private investment, and creates an anti-export bias, thereby slowing economic growth. Services exports—especially tourism and travel—are an

[5] Nepal has experienced a 55 percent real exchange rate appreciation since 2002, during which time remittance inflows surged.

Figure 1.4
Human Development Index



Source: UNDP indicators.

important source of foreign exchange and make a solid contribution to value added through backward linkages. Their net impact is constrained, however, by the low quality and low cost of services.[6]

Despite modest GDP growth, Nepal made remarkable progress in reducing poverty and improving living standards. Nepal reduced extreme poverty from 46 percent in 1996 to 15 percent in 2011 (based on the international definition of US$1.90 per day; World Bank 2017). According to the consumption-based national poverty line set by the Central Bureau of Statistics, the poverty rate stood at 25 percent in 2011. The sharp increase in remittances from the millions of Nepalis working abroad partially explains the rapid decline in poverty. In 2011, 30 percent of households—both poor and non-poor—received remittances from abroad. Remittance income is estimated to directly account for 27 percent of the poverty reduction between 1996 and 2011, and indirectly boosted incomes and welfare through higher wages and improved health and education outcomes (Tiwari 2016).

Development gains since 2010 have been more measured, but are nevertheless positive. Improvements in Nepal's human development measures are similar to those of its regional peers (Figure 1.4). The World Economic Forum's Inclusive Development Index, 2018, ranks Nepal 22nd among emerging countries, surpassing others in the South Asian region. Vulnerability remains significant, however; around 45 percent of households remained vulnerable to poverty in 2011 (Tiwari 2016), and risks are exacerbated by the high likelihood of natural disasters, which will only increase with climate change. The Global Climate Index ranks Nepal as the 11th most affected country in the world in the last 20 years.

1.2 STRUCTURAL TRANSFORMATION AND PRODUCTIVITY

In per capita terms, Nepal's value-added growth averaged 2 percent annually over the past two decades. Most gains were from reallocation of labor from less productive sectors—namely, agriculture—to the more productive industry and services sectors, especially between 2008 and 2018 (Figure 1.5).[7] There were also important productivity gains due to demographic shifts that significantly expanded the working age population.

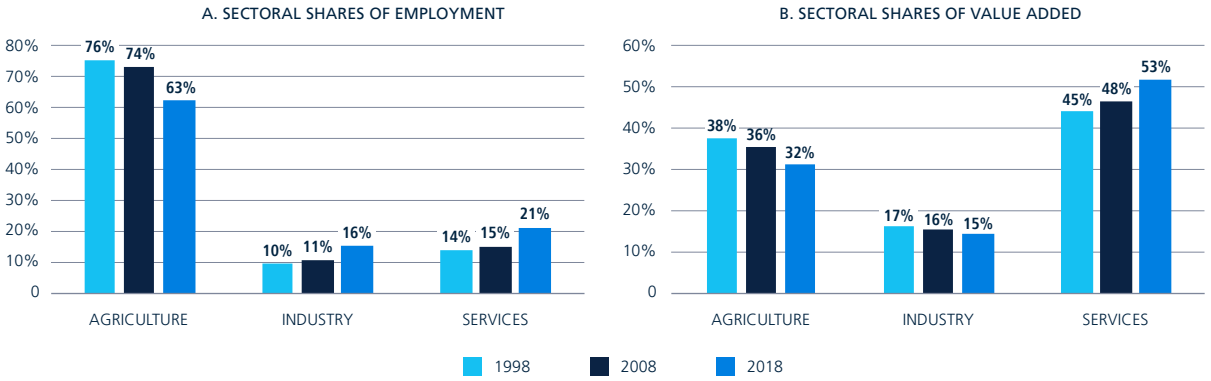
[6] Varela et al. 2016.

[7] A more detailed sectoral breakdown is considered in Figure 2.25.

Figure 1.5
Decomposition of per capita value-added growth

Source: World Bank calculations using national accounts and NLFS data.

Figure 1.6
Sectoral shares of employment and sectoral shares of value added



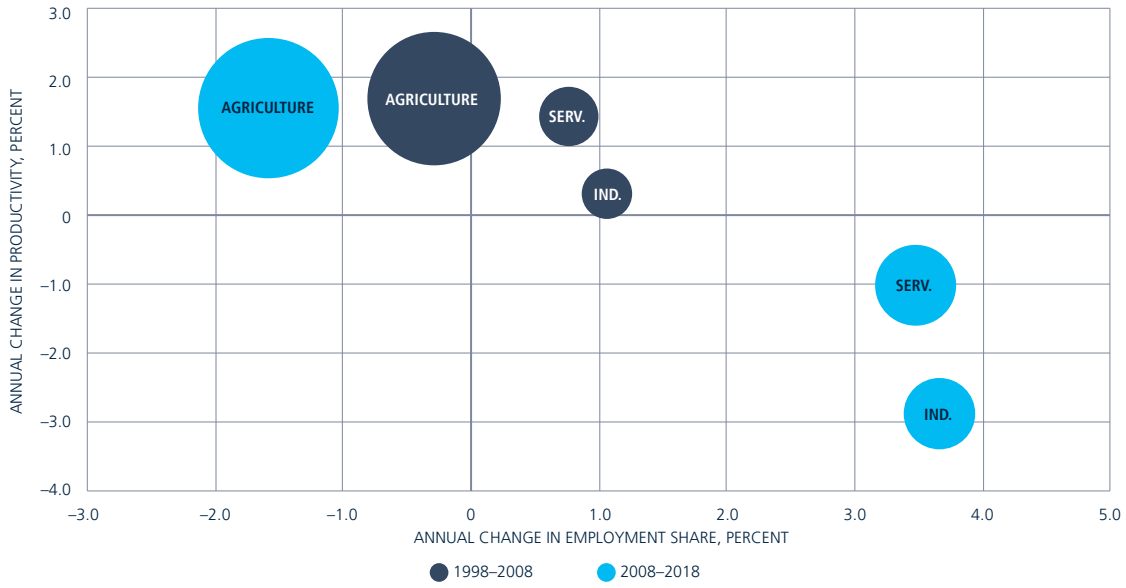
Source: Panel A: NLFS 1998, 2008, and 2018. Panel B: WDI.

These structural gains were offset, however, by declining labor force participation rates, especially between 2008 and 2018, which constrained value-added growth.

Nepal's structural transformation has been slow due to the prevalence of subsistence activities. Nepal remains a largely agrarian economy characterized by small-scale family farming using traditional methods and producing primarily for household consumption. Six in 10 workers are engaged in agriculture, but generate only one-third of total output (Figures 1.6a and 1.6b). Over half of the workforce does not produce enough output on their farms to generate surplus to sell in the market. Nevertheless, agriculture's share of domestic output and employment is declining as the economy and jobs gradually shift toward industrial and services activities.

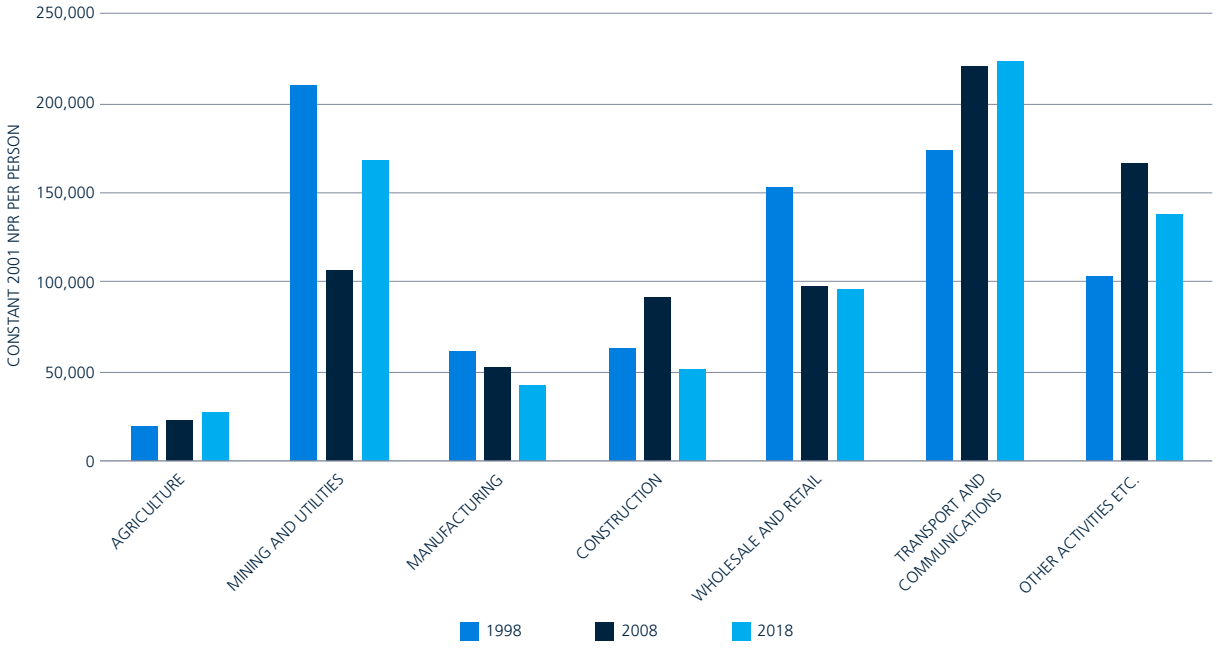
Sector-level productivity—measured as value-added per worker—is low and falling. Between 2008 and 2018, industry productivity fell by 3 percent annually and services productivity fell by 1 percent annually (Figure 1.7), concurrent with the influx of agriculture workers. Looking closer at subsectors, it becomes clear that transition out of agriculture into other sectors yielded relative productivity gains, since agriculture is the least productive sector (Figure 1.8). In industry, for example, the share of employment rose from 11 to 16 percent in the last decade, but the industry share of total output fell, as did the average productivity level. Wholesale

Figure 1.7
Correlation between change in sectoral productivity and employment shares



Source: NLFS 1998, 2008, 2018 and national accounts.

Figure 1.8
Value added per worker by sector



Source: NLFS 1998, 2008, 2018 and national accounts.

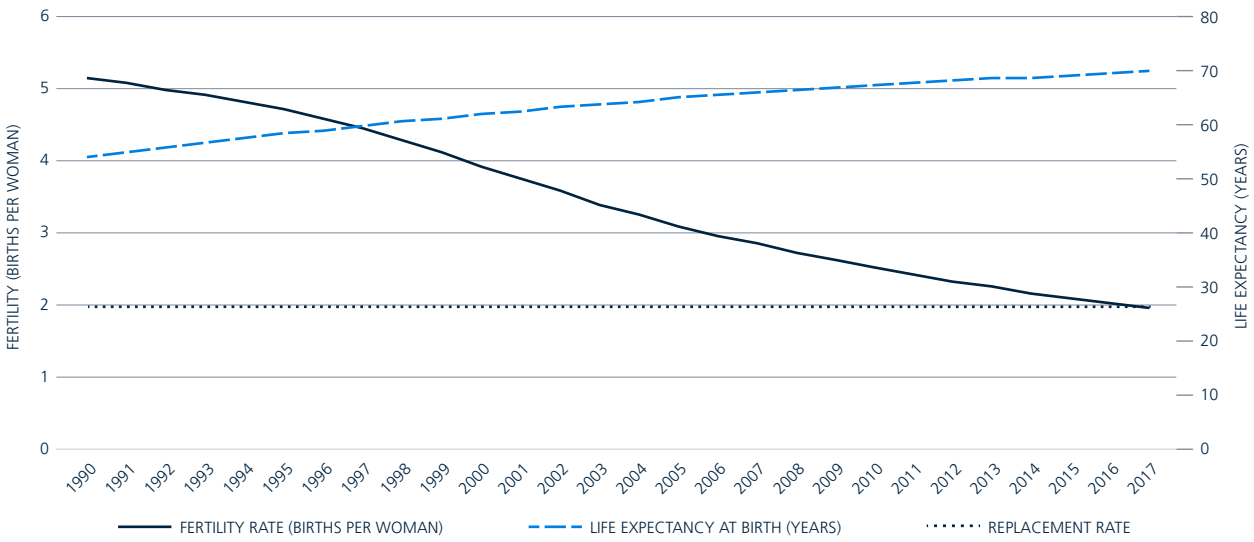
and retail trade—which employs a large share of the workforce—experienced sharp reduction in productivity. Productivity in the construction sector also suffered in the last decade, associated with large expansion of employment. The transport and communications sector is the exception; it has the highest average productivity level, and productivity has risen since 1998.

1.3 DEMOGRAPHIC TRANSITION

Nepal's population age structure is rapidly changing, driven by two offsetting factors: declining fertility and rising life expectancy (Figure 1.9). The total fertility rate declined from 4 births per woman in 2000 to just 2.1 in 2015, thus slowing population growth. The dependency ratio fell from 81 per 100 working age people in 2000 to 61 in 2015. This translates into higher living standards because every working age adult has fewer mouths to feed. This shift creates the potential for a positive demographic dividend for economic growth, as a larger share of the population enters working age.

Nepal's advances in human development creates a demographic opportunity, but the time to exploit this opportunity is limited. Nepal's fertility rate, equal to replacement rate, has almost reached levels prevailing in advanced OECD countries, indicating that Nepal is in the mid-to-late stage of demographic transition (Figure 1.10). In 2015, the working age population—aged 15 to 64—accounted for 62 percent of the total population, while children and elderly accounted for 33 and 6 percent respectively. By 2030, the projected demographic profile will be considerably altered; the share of children will fall markedly while the share of elderly will see modest growth, leading to a 6 percentage point rise in the productive population share, as the youth bulge enters the labor force (Figure 1.11). Eventually, fertility rates will level and life expectancy will continue to rise, causing the dependency ratio to rise once again. The window to take advantage of the potential demographic dividend is therefore limited, projected to close around 2047.[8] Realizing this "dividend" will require not only investments in human capital and saving, but also effective deployment of this enhanced stock of human capital—that is, new labor force entrants and currently underutilized labor—into productive employment.

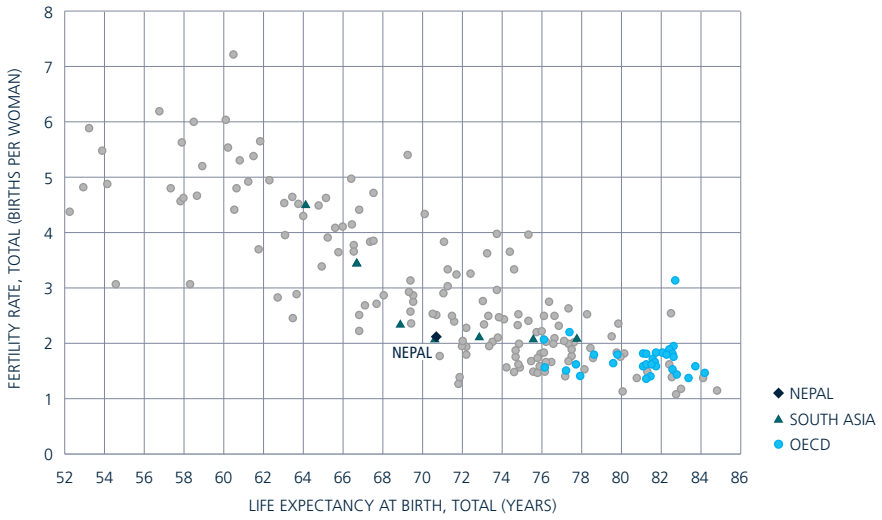
Figure 1.9
Fertility rate and life expectancy at birth, trend projections



Source: WDI.

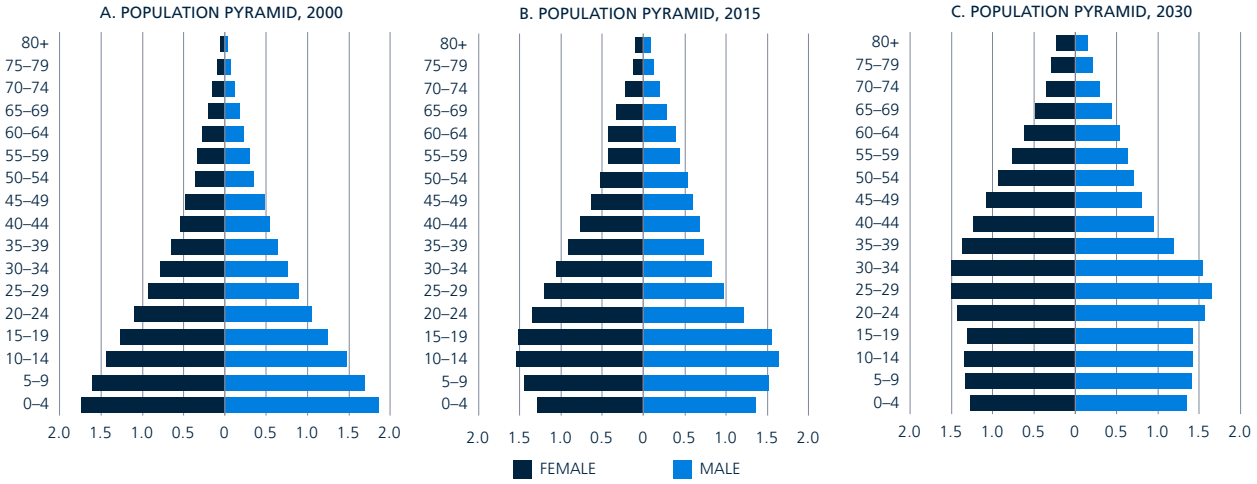
[8] Government of Nepal National Planning Commission (2017).

Figure 1.10
Fertility rates and life expectancy, international comparison (2017)



Source: WDI.

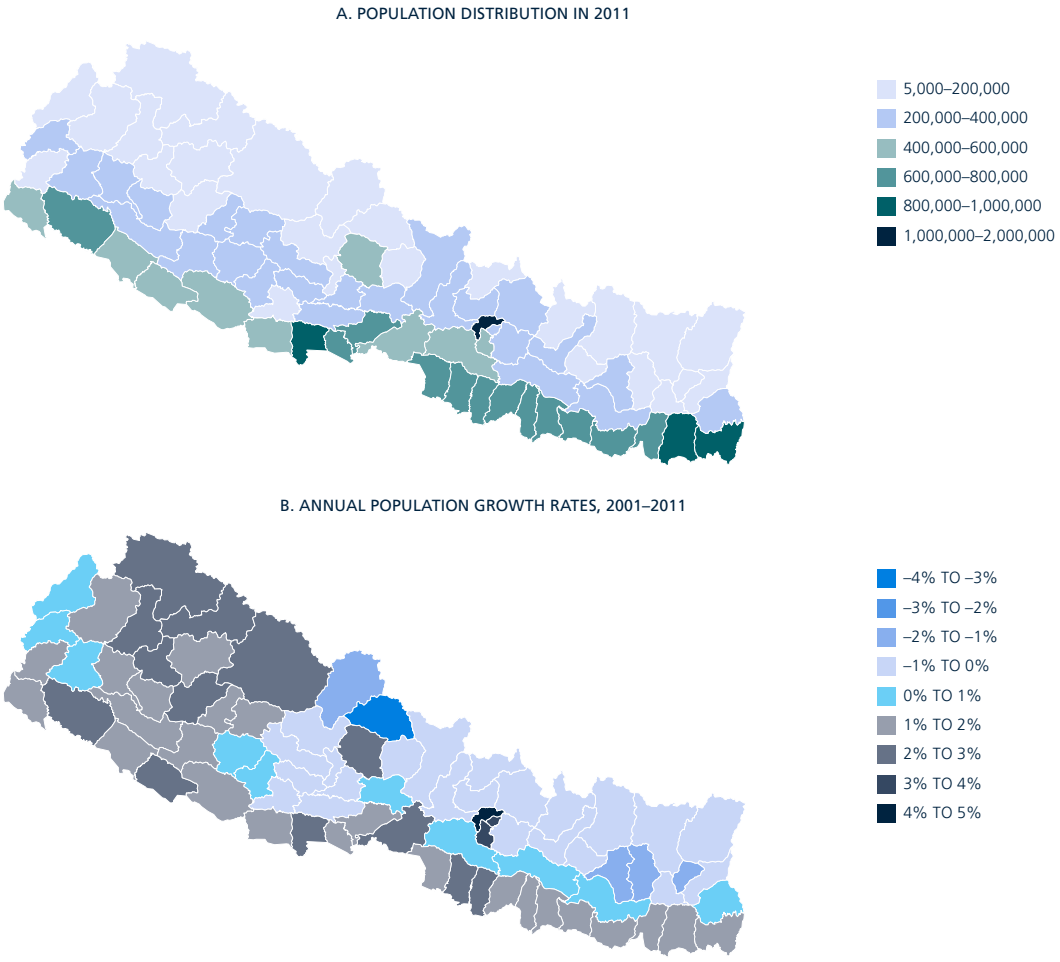
Figure 1.11
Nepal's population pyramids by five-year age groups: 2000, 2015 and 2030 (millions)



Source: WDI.

Nepal is also undergoing a population shift to urban areas, particularly to the Kathmandu valley, which risks exacerbating already unequal development across regions. The high concentration of economic activity in Kathmandu continues to draw workers to the city and its environs. Kathmandu's population has exploded, growing an average 5 percent annually between 2001 and 2011. Nepal's topography has also prompted dense settlements in Terai, the southern plains commonly known as the "granary" of Nepal (Figure 1.12a). Many remote districts, especially in the eastern mountains and hills, experienced negative population growth between 2001 and 2011, consistent with the move toward economic centers (Figure 1.12b).

Figure 1.12
Population distribution in 2011 and annual population growth rates, 2001–2011



Source: 2011 Population Census.

2. IMPACT OF STRUCTURAL AND DEMOGRAPHIC TRANSITION ON LABOR MARKET OUTCOMES

2.1 CHALLENGES IN UNDERSTANDING LABOR MARKET TRENDS

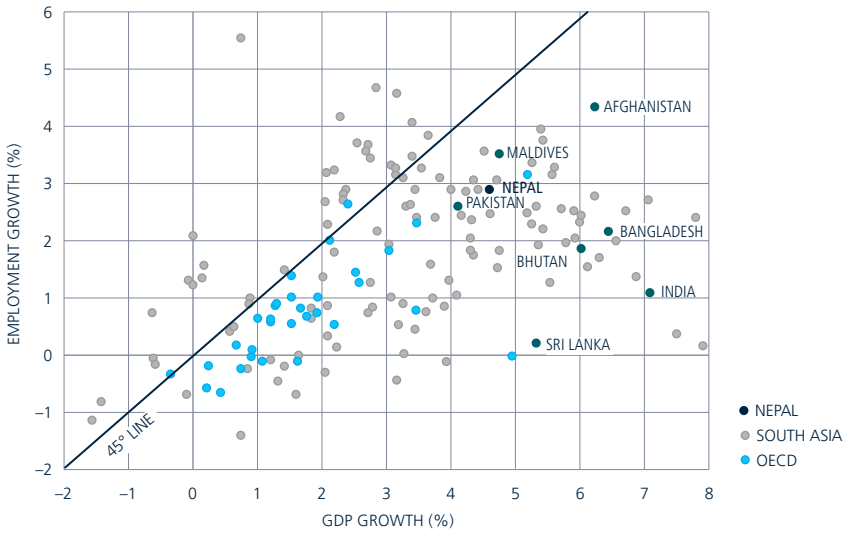
How do economic and demographic trends jointly determine the number of jobs available in Nepal, the quality of these jobs, and what types of workers are successful in obtaining these jobs? This chapter explores the characteristics of Nepal's labor force and labor market outcomes using both macro- and micro-level data to understand level of employment, the quality of existing jobs, and the distribution of these jobs across different segments of the population.

At first glance, Nepal's economic growth over the last decade appears to have been moderately employment-intensive. Despite slower GDP growth than many neighboring South Asian countries, Nepal had comparatively faster job growth averaging 2.9 percent per year (Figure 2.1). Employment growth largely kept pace with labor force growth, which averaged 3 percent per year during the same period (Figure 2.2).

These macro-level trends mask important shortcomings in job quality and access. Micro-level data from the household-based surveys enable detailed assessment of labor market outcomes, and reveals a more complex reality, in some ways quite positive but also reflecting serious challenges.

Measuring labor market trends over time is complicated by recent changes in Nepal's data collection methodology. The analysis in this chapter relies on the National Labor Force Surveys conducted by the

Figure 2.1
Employment growth and GDP growth across countries, 2008–2018



Source: Based on WDI and ILO estimates, Nepal NLFS 2008 and 2018.

Figure 2.2
Labor force and employment average annual growth rates worldwide, Age 15+, 2008–2018

Source: WDI and ILO estimates, and Nepal NLFS 2008, 2018.

Central Bureau of Statistics in 1998, 2008 and 2018. The 2018 National Labor Force Survey (NLFS) used a new survey questionnaire adapted to the revised international definitions of what constitutes work, which excludes subsistence activities. These new definitions align with revisions agreed at the 19th International Conference of Labor Statisticians in 2013, and bring three main changes to Nepal's classification of work status (described in detail in Box 2.1). Nepal is an early adopter of the new definition, and the shift renders it difficult to make consistent comparisons over time—that is, between 2008 and 2018—as well as between Nepal and other countries that have yet to adopt the new approach. For example, Nepal's labor force participation (LFP) rate was 83 percent in 2008 but fell to 38 percent in 2018 when those engaged in subsistence activities were no longer counted as part of the labor force.

Although the new NLFS does not collect exactly the same information as in prior rounds, it is detailed enough to closely re-create the previous definitions to establish valid time series data for key variables of interest, such as labor force, employment and unemployment (see Box 2.1 for a summary of old and new definitions and their effect on time series data). Note that unless otherwise indicated, the definitions used in this report are consistent with the previous internationally recognized definitions (first row of Table 2.1).

BOX 2.1: NEW LFS DEFINITIONS

Nepal's adoption in 2018 of the new standards revised in the 19th International Conference of Labor Statisticians in 2013 resulted in 3 fundamental changes in the 2018 NLFS (definitions summarized in Table 2.1):

i. Unemployment: Nepal adopted the international definition of unemployment, which requires workers to be both available and looking for work. Nepal's previous definition only required workers to be available for work, which resulted in higher unemployment (see Table 2.1 below).

ii. Employment: The new definition of employment includes only work performed for pay, profit or family income, and excludes subsistence work (production for own final use), whether in agriculture or in non-agriculture family or household enterprises.

iii. Labor force: Under the new definition, those engaged in subsistence activities are considered to be outside of the labor force. As a result, the labor force falls from 12 million in 2008 to 8 million in 2018, and this translates into a much higher unemployment rate due to the smaller labor force in the denominator.

These changes represent a significant departure from previous definitions still used in many countries. They also result in a sharp break in Nepal's official measures of labor force participation, unemployment and employment rates between 2008 and 2018 (Table 2.2).

Although the 2018 survey data are not fully comparable to previous NLFS rounds, the survey questions cover nearly-identical ground, enabling accurate estimates of comparable indicators across the three survey rounds (and consistent with the previous ILO definitions).

Table 2.1
Summary of definitions

	Employment	Unemployment
Temporally comparable definitions used in this report for 1998, 2008 and 2018 (previous ILO definitions)	At least an hour worked in the last 7 days for pay, profit, family gain or production for own use	Available to work during the last 7 days, looked for work during the last 30 days or didn't look for work because have found work
NLFS 1998 and 2008 official definitions	At least an hour worked in the last 7 days for pay, profit, family gain or production for own use	Available to work during the last 7 days even if didn't look for work as long as were available to look for work
NLFS 2018 new official definitions (consistent with ICLS-19)	At least an hour worked in the last 7 days for pay, profit, family gain	Available to work during the last 7 days or within next 15 days, looked for work during the last 30 days or didn't look for work because have found work

Table 2.2
Key labor market statistics comparing new official definitions and temporally comparable definitions

	Nepal Official Definitions			Previous ILO Definitions			
Year	LFP rate (% of WAP)	Unemployment rate (% of LF)	Employment ratio (% of WAP)	LFP rate (% of WAP)	Unemployment rate (% of LF)	Employment ratio (% of WAP)	Subsistence employment as % of total employment)
1998	85.80%	1.80%	84.25%	85.19%	1.11%	84.25%	-
2008	83.40%	2.10%	81.66%	82.80%	1.38%	81.66%	-
2018	38.50%	11.40%	34.20%	77.33%	1.93%	75.83%	54.95%

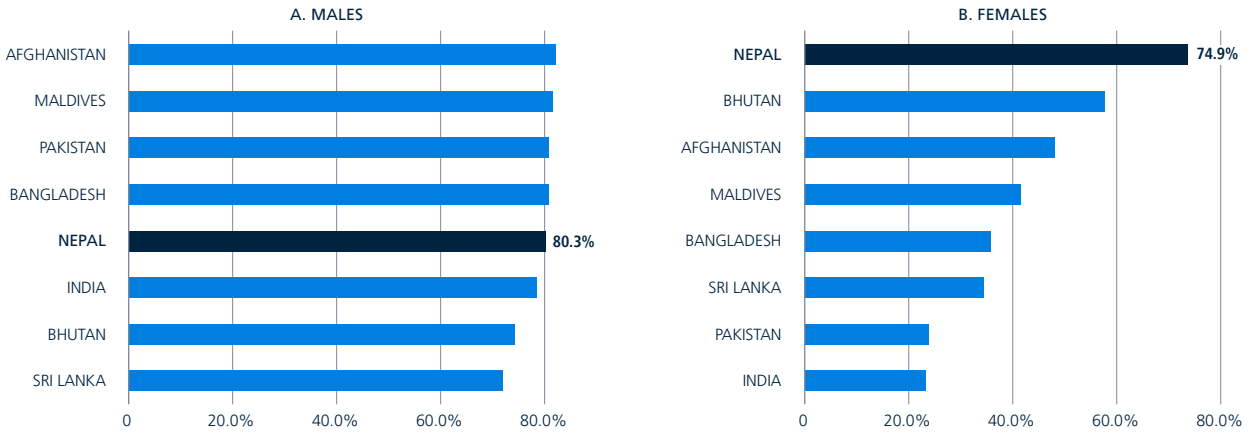
2.2 CHANGING PATTERNS IN LABOR FORCE PARTICIPATION

Labor force participation (LFP) in Nepal is high at 77 percent of the working age population (2018 NLFS data).[9] Nepal has among the highest LFP rates in South Asia. Male LFP is 80 percent, while female LFP is especially high at 75 percent, far outstripping the participation rates of women elsewhere in the region (Figure 2.3). In fact, Nepal's female LFP rate is among the highest in the world.

Both male and female LFP have declined markedly over the past two decades, as youth delay entry into work. Nearly 90 percent of males were active in the labor market in 1998, and 81 percent of females. A large part of the decline is due to higher educational attainment; as youth stay in school longer, they delay labor force entry. Education gains have been remarkable over the past three decades, although issues related to the quality of learning exist. Education gains were especially strong for women, as average years of schooling rose from 2 years for females born in 1960 (and nearing 60 years old today) to over 9 years for those born after

[9] The LFP rate according to household survey 2014/15 was 82.7 percent, and 80.1 percent according to the living standards survey 2010/11.

Figure 2.3
Labor force participation rates (2018)



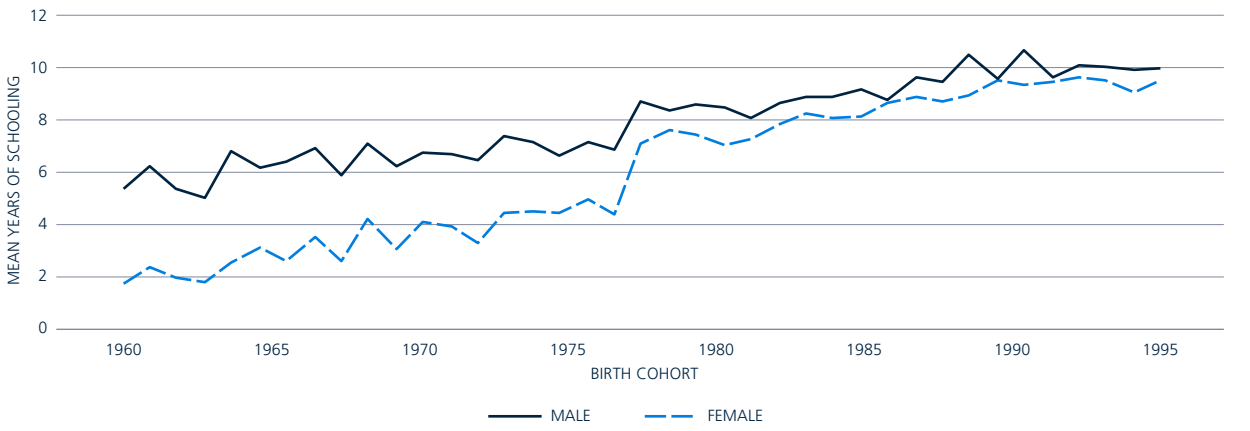
Source: NLFS 2018 for Nepal; Sri Lanka LFS 2017 for Sri Lanka; WDI and ILO estimates for the other countries.

1990 (and currently in their 20s; Figure 2.4). Today's male youth have slightly higher average years of schooling at about 10 years.

Striking advances in educational attainment have changed when and how youth enter the labor force. In 1998, a large share of school-aged youth had left school by age 15 to work (Figure 2.5). The gender differences were especially acute: in 1998, over a quarter of males and nearly half of females aged 15 had already left school and entered work. But by 2018, most youth were still in school at age 15, with similar patterns (Figure 2.5, lower panel).

Youth are increasingly choosing to remain outside the labor force after completing school. This worrying trend affects both male and female youth, although young women are much more likely to be neither in employment nor education nor training (NEET). In fact, the lowest female LFP rates coincide with prime childbearing years and rise thereafter as many women return to some form of work. But a sizeable share of women opts to remain outside the labor force altogether, and a non-negligible share of male youth is joining them. In 2018, nearly 1 in 5 female youth ages 25–34 were outside the labor force, compared to 7 percent of

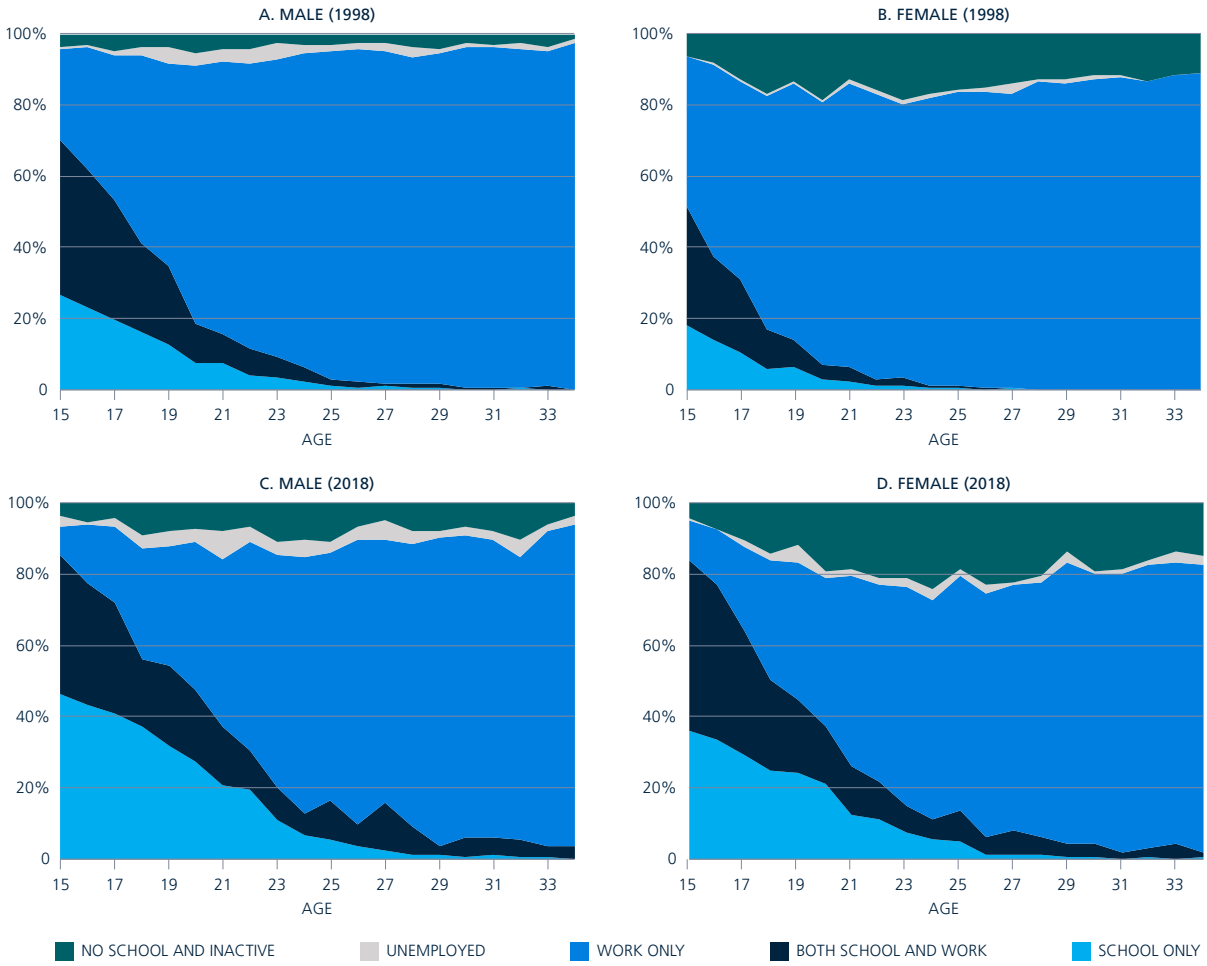
Figure 2.4
Average years of schooling by birth year cohort (males, females)



Note: The averages are for those aged 20 or above.

Source: NLFS 1998, 2008, and 2018.

Figure 2.5
School-to-work transitions by age: 1998 versus 2018[10]



Source: World Bank calculations using NLFS 1998, 2018.

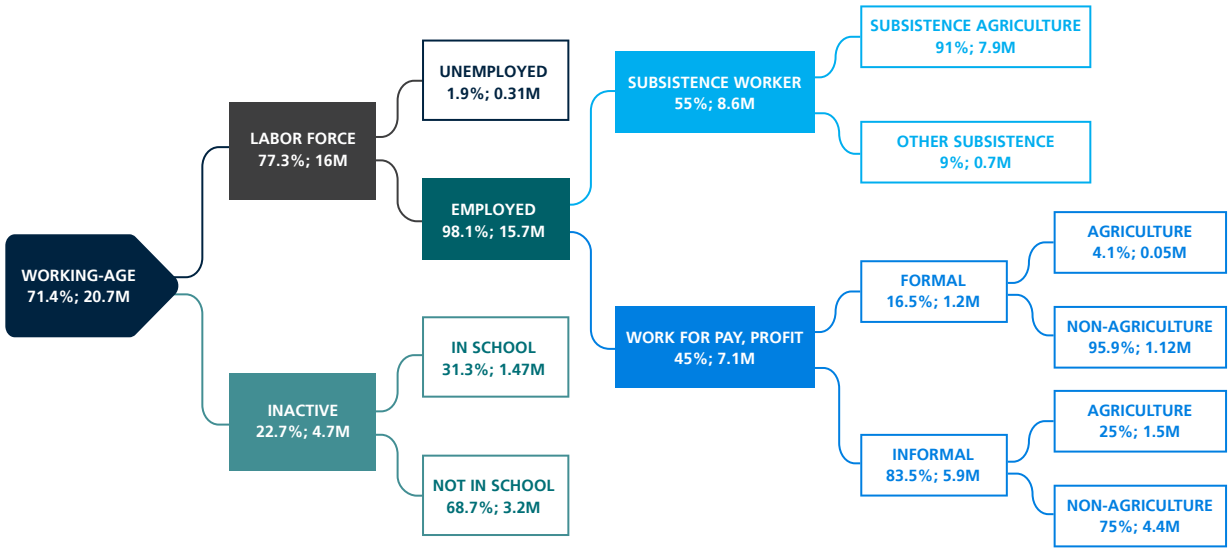
male youth the same age. This compares to 13 percent of females and only 3 percent of males in the same age cohort in 1998. Youth may be opting out of work because of lower poverty rates and thus a diminished need to work; but it is also likely due to low quality of available work opportunities in Nepal and the rise of external migration. We explore these themes in more detail below. Note that unemployment rates remain very low, although marginally higher for males than females: 3.2 percent for males ages 25–34 in 2018, and 2 percent for females ages 25–34 in 2018 (Figure 2.5, lower panel).

2.3 WORK STATUS AND JOB QUALITY

Subsistence agriculture accounts for a major share of Nepal's labor force activity. Over half of Nepal's 16 million workers in 2018 engaged in subsistence activities—that is, production of goods for own final use, nine-tenths of which is agriculture (Figure 2.6). Subsistence activities are informal and generate no income. Recall that while the new NLFS and ICLS-19 definitions consider subsistence workers to be outside the labor force, this analysis includes them in the labor force.

[10] This is not a dynamic analysis but a plot of the 1998 and 2018 work status by age for youth between ages 15 and 34.

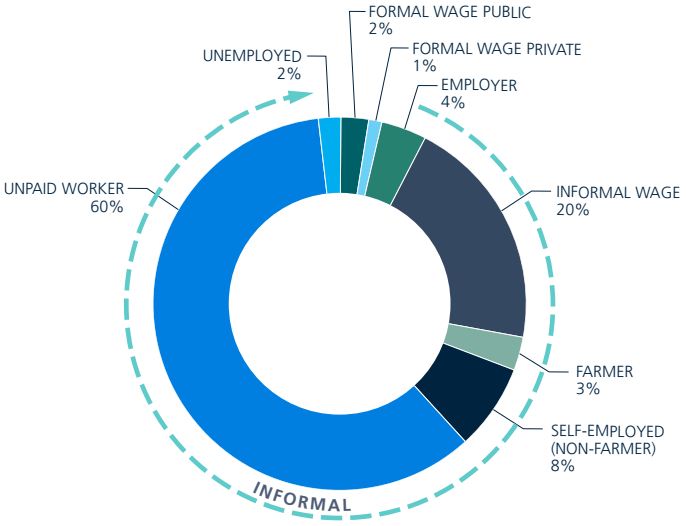
Figure 2.6
Snapshot of Nepal's labor market in 2018



Source: NLFS 2018.

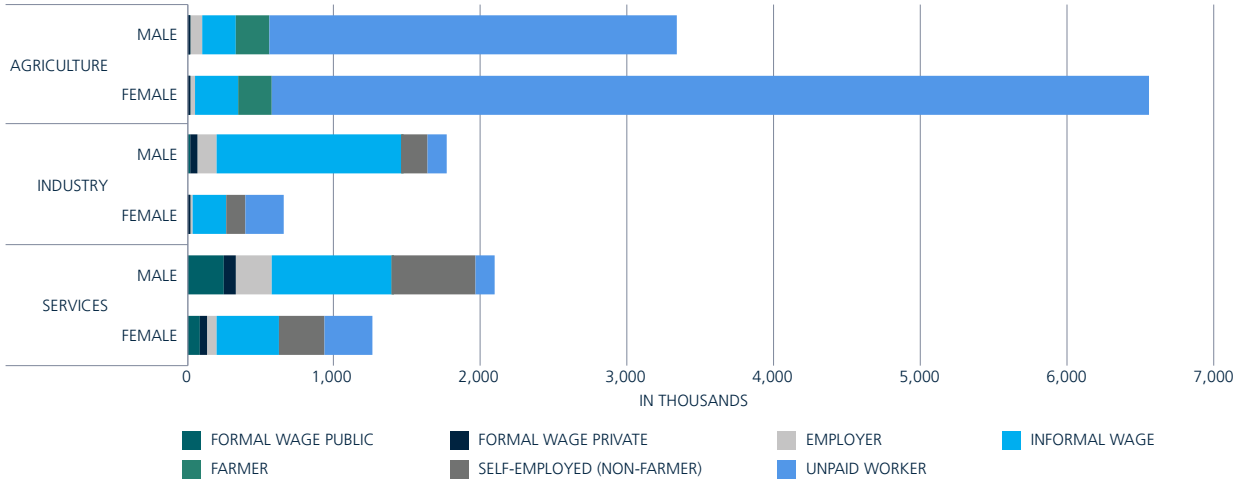
Most employment is unpaid, and most unpaid work is in agriculture, especially among women. Agriculture is a major component of Nepal's economic production, spanning both subsistence and non-subsistence activities. Agriculture employs half of employed males and 3 in 4 employed females. Only 3 percent of the labor force are farmers (self-employed workers in the agriculture sector) and another 8 percent are self-employed in sectors other than agriculture (Figure 2.7). Nepal has a particularly high share of unpaid family workers, accounting for 60 percent of the labor force (9.6 million workers), the majority of whom work on the family farm (Figure 2.8). Women are more likely than men to be in unpaid farm work (6 million women compared to 2.8 million men). These gender differences in the labor market mirror social norms around gender roles at home

Figure 2.7
Labor force status (2018)



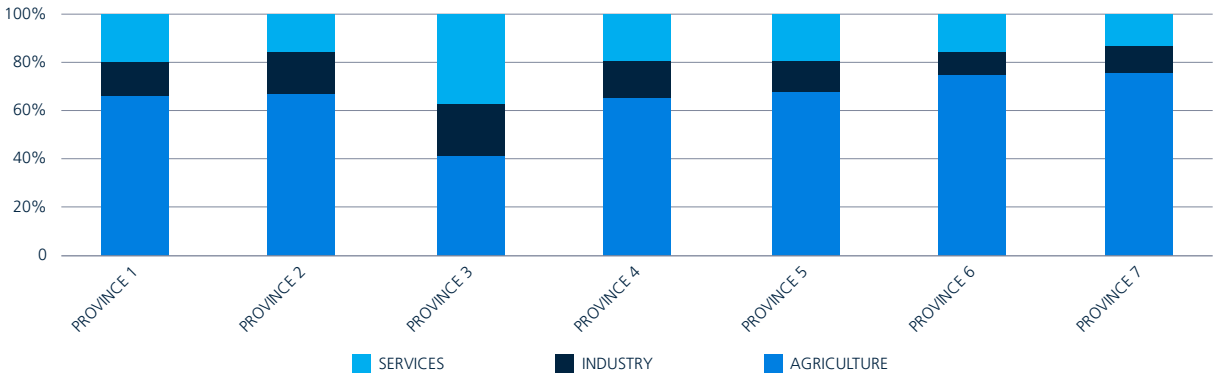
Source: NLFS 2018.

Figure 2.8
Male and female work status by sector (2018)



Source: NLFS 2018.

Figure 2.9
Sector distribution of employment by province



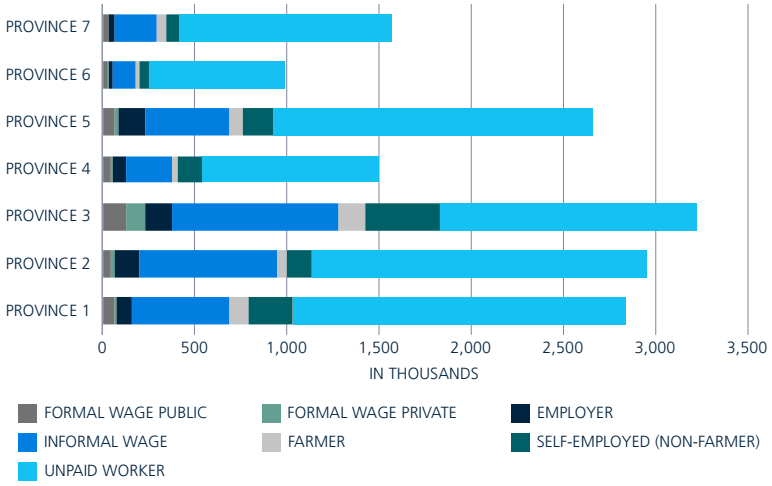
Source: NLFS 2018.

(housekeeping, food production, childcare) and in society. Men hold a disproportionate share of informal wage jobs, primarily in industrial sectors but also in services.

Informality rates are high, even in the non-subsistence economy. In this report, we define informal workers as those not covered by social security, and includes employers of and self-employed in unregistered businesses. Ninety-three percent of the 15.7 million workers employed in 2018 were informally employed. Among the 3.8 million wage workers in 2018, nearly 3.3 million were in informal wage jobs, 180,000 in formal private wage jobs, and 380,000 in formal public sector jobs.

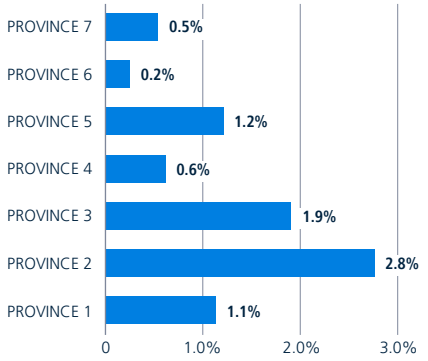
Geography affects work status. Nepal's mountainous topography and geographic diversity cause wide disparities in economic opportunities and labor market outcomes across regions and provinces. Agriculture dominates employment in all provinces except for province 3, where services and industry have made the largest inroads (Figure 2.9). The proportion of unpaid workers is also high in all provinces (Figure 2.10). The largest number of wage jobs—whether public or private, formal or informal—is located in province 3, as is the largest number of self-employed workers, both farmers and non-farmers. These data are consistent with the fact that province 3—which includes Kathmandu—accounts for the highest volume of economic activity, resulting in

Figure 2.10
Distribution of work status by province



Source: NLFS 2018.

Figure 2.11
Unemployment rate by province

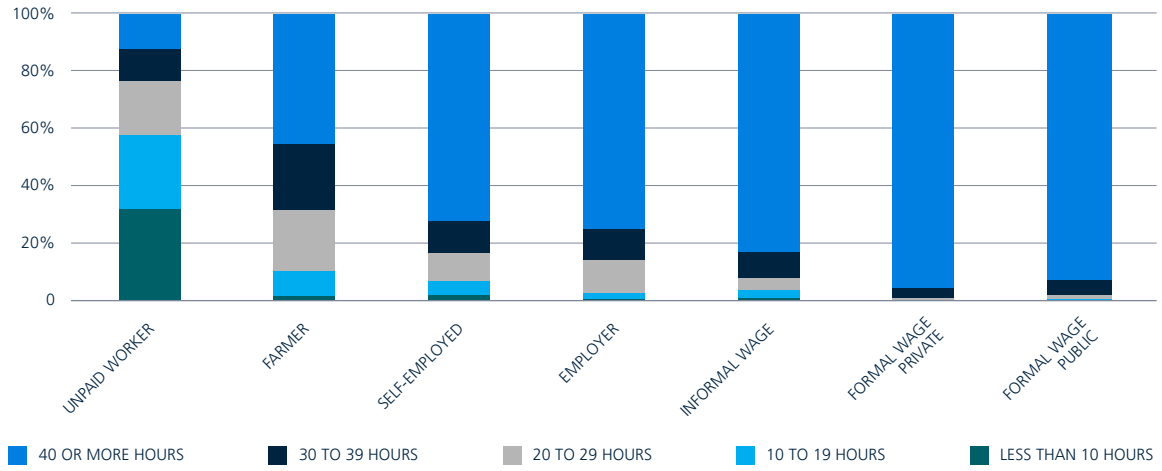


Source: NLFS 2018.

better labor market outcomes for its residents. Provinces 6 and 7 are the least connected with the rest of the country and have the smallest numbers of wage employees. They also have the lowest unemployment rates, as workers cannot afford not to work (Figure 2.11). In fact, unemployment is low in all provinces.

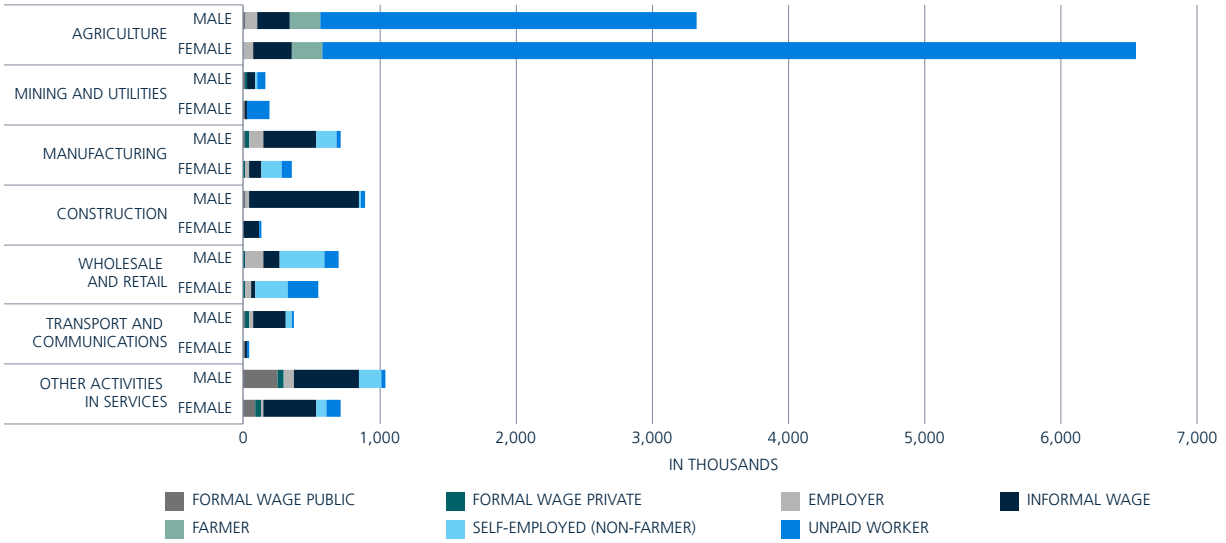
Nepal's high employment rate masks extensive underemployment and underutilization of human capital. The preponderance of unpaid work means that the returns to effort are low. This is especially the case for those with a secondary education who could qualify for skilled work but instead engage in unskilled agriculture. One-third of workers with secondary education are engaged in unpaid work. Nearly 9 in 10 unpaid workers are part-time, working less than 40 hours per week (60 percent work less than 20 hours per week; Figure 2.12). Over half of farmers and one-quarter of the self-employed also fall into the part-time category. Among those working for pay or profit, 17 percent desire to work more hours. This is especially the case for youth. About a million out-of-school youth aged 15 to 34 work less than 10 hours in a typical week, the vast majority in unpaid work. These workers have a tenuous connection to the labor market.

Figure 2.12
Hours worked by work status



Source: NLFS 2018.

Figure 2.13
Sectoral employment by work status and gender (2018)



Source: NLFS 2018.

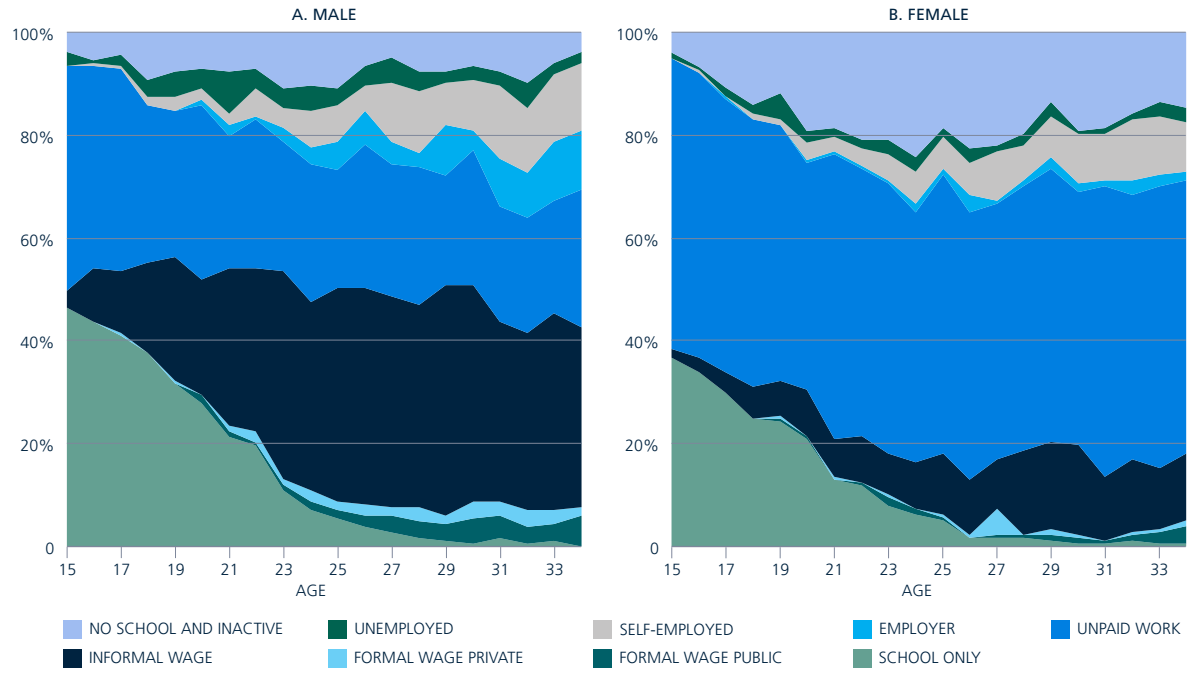
Accessing wage employment is difficult, and it is much more difficult for women. Sectoral employment patterns help explain these large gender differences. There are wide disparities in the degree to which men and women access wage employment. Although most women work, nearly 4 out of every 5 working women are engaged in unpaid work, compared to 2 in 5 working men. Only 13 percent of working women held wage jobs in 2018, in contrast to 38 percent of working men. This translates into 1 million women holding wage jobs, compared to 2.7 million men. Women are also much less likely to be employers or self-employed, whether as farmers or in other sectors. Men are most likely to access informal wage work in construction or other services, followed by manufacturing and transport and communications (Figure 2.13). Women, in contrast, struggle to find wage work in any sector, although most opportunities are in other services (includes public administration and health and education) and agriculture. These data contradict the general perception that many women are engaged in textile manufacturing.

Self-employment is less common in Nepal compared to other countries. The largest number of self-employed workers, both males and females, are in wholesale and retail trade. This sector also employs a significant number of unpaid females. This is also the sector with the largest number of establishments, based on the 2018 Economic Census, but most are small as nearly half are own account workers without regular paid employees (see Chapter 3 for more detailed discussion).

New labor force entrants have very limited access to wage employment although male youth gain access as they age. Female youth's access lags significantly. For youth remaining in Nepal,[11] most male youth over age 20 begin transitioning into informal wage employment, but significantly fewer female youth follow this route (Figure 2.14). Neither male nor female youth have much success in finding formal work, although again males fare better. As youth reach their mid-to-late twenties, some start their own businesses—more men than women—and some of these move from self-employment to become employers, but this happens much more often for men than for women: in 2018, there were 83,000 male employers aged 30–35, compared to 29,000 female employers in the same age group. Although female youth eventually increase their access to wage employment, reaching about 20 percent by their late-twenties, another 50 percent are still in unpaid work.

[11] Many workers migrate abroad for better job opportunities; this segment of the working-age population is addressed in Chapter 3.

Figure 2.14
Employment transition by age [12]



Source: NLFS 2018.

Rising educational attainment is not increasing access to well-paid wage work, at least for women, which helps explain their declining labor force attachment.

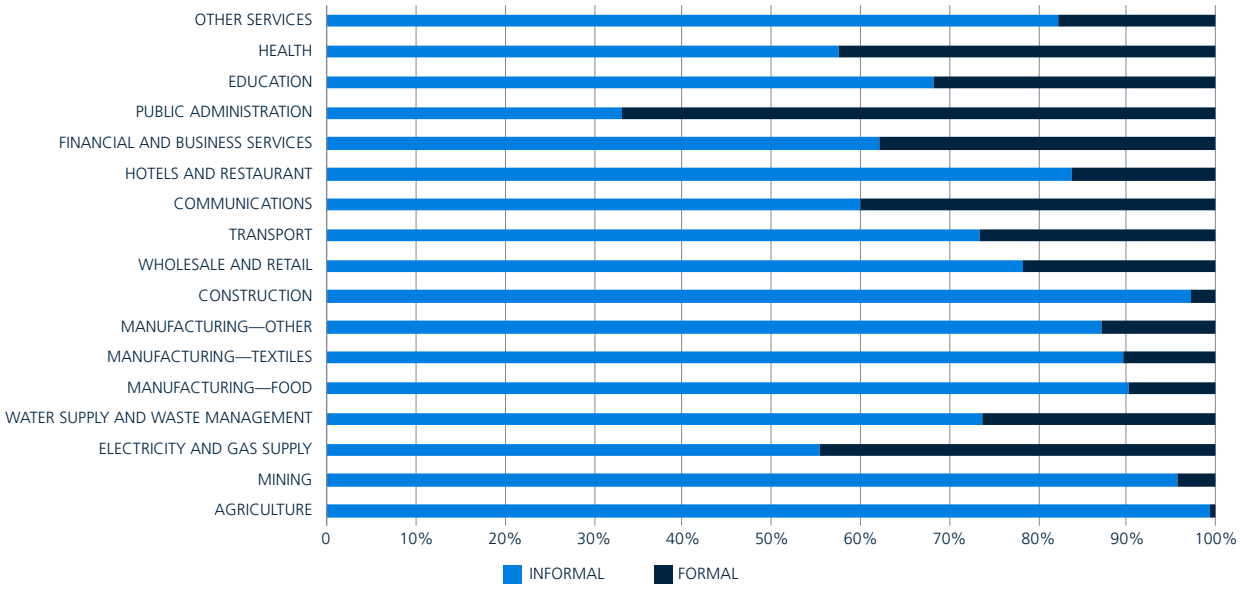
Formal employment is rare. Those labeled as formally employed are either (a) employees covered by social security or (b) employers of or self-employed in a registered business. Only 7 percent of employment in 2018 was formal: 1.2 percent private formal, 2.5 percent public formal, and the remainder employers or self-employed. This translates into 1.2 million formally employed individuals out of a total labor force of 16 million. Access to formal employment is even more restricted for women: 3.6 percent of women hold formal jobs, compared to 12.3 percent of men.

Formal employment concentrates in urban areas, in a small number of sectors—principally in government, and among more educated workers. Formality rates are highest in public administration, utilities, and the health and education sectors, and is driven by the large number of civil service and semi-public jobs in Nepal (Figure 2.15). People with higher levels of education are more likely to have a formal job, especially those with a tertiary degree (Figure 2.16).[13] Service sector jobs are 15 percent more likely to be formal compared to jobs in agriculture, while jobs in industry are 7 percent more likely to be formal. Women and youth are less likely to be formally employed.[14]

These observed features of Nepal's employment outcomes point to very low average job quality (see Box 2.2). Subsistence and unpaid work are inherently low quality and produce no income. They also lack the workplace protections—workplace safety, work hours, overtime, paid leave, and minimum wages—stipulated in the Labor Act. Self-employed, unpaid, and informal wage workers also lack income security and social security coverage, and must rely on private savings to respond to income-shocks from illness, injury, job loss or old age. Note that employees working in formally registered firms may still be informal, if they are not covered by social security and other provisions stipulated in the Labor Act.

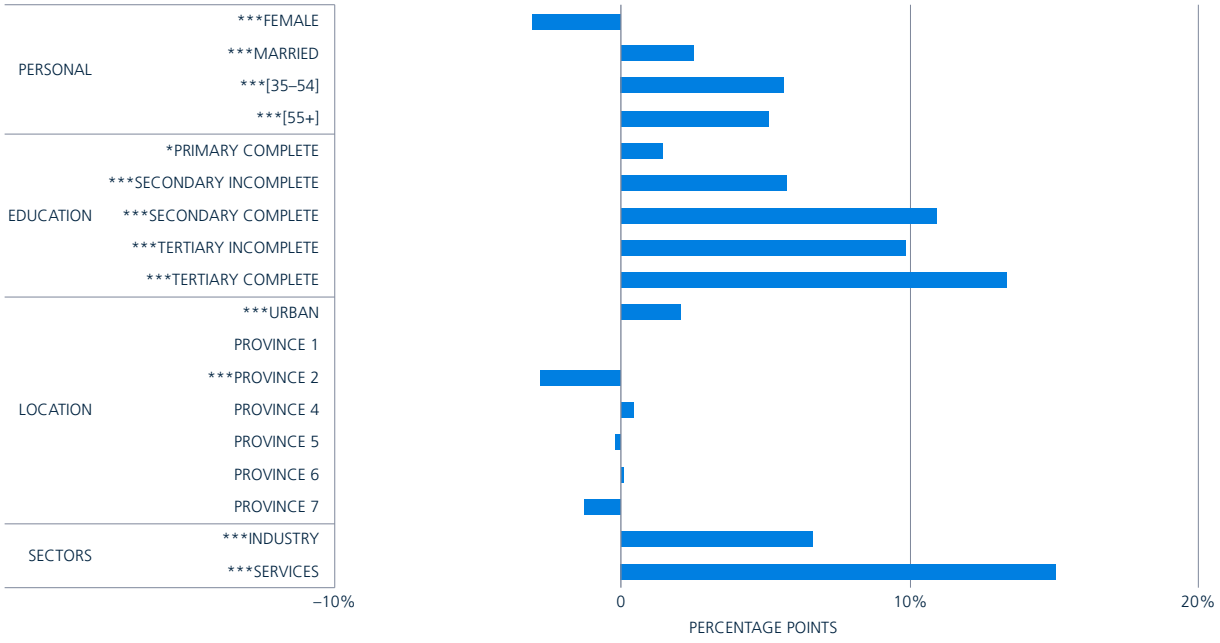
[12] This is not a dynamic analysis but a plot of the 2018 work status by age for youth between ages 15 and 34.
[13] Based on multinomial logit regressions to test which worker characteristics correlate with formal work status.
[14] Ibid.

Figure 2.15
Formal-informal breakdown by sector (% of sectoral employment)



Source: NLFS 2018.

Figure 2.16
Correlates of formal employment status



Notes: Logistic regression controlling for personal characteristics, location and sector. The bars indicate relative likelihood compared to base categories.
Reference categories: Male, unmarried, [15–34] for age, incomplete primary education, rural, province 3, and agriculture sector.
Level of significance: * p<0.05, ** p<0.01, *** p<0.001

Source: World Bank estimates using NLFS 2018.

BOX 2.2: WHAT DETERMINES JOB QUALITY?

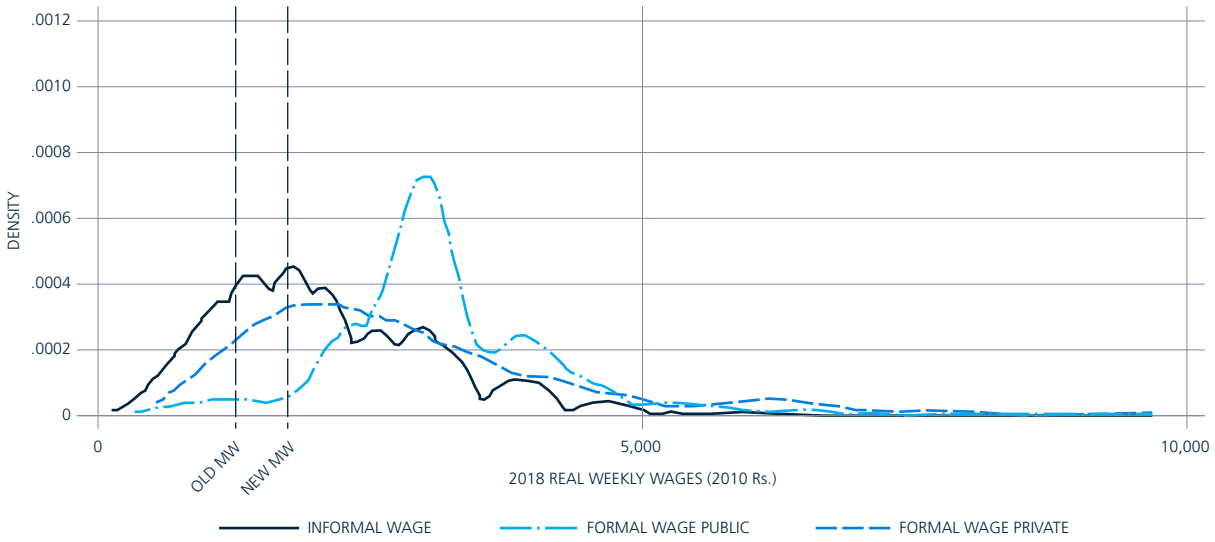
Defining job quality is subjective. Many factors feed into what is meant by a "good" job or a "good-quality" job. It depends on worker, family, and government's perspective. Workers may value high wages and decent working conditions more than they value productivity. Families may place more weight on sector of work or social status. Governments may care about safe working standards and social insurance coverage to ensure worker welfare and their capacity to weather income shocks.

From a development perspective, many of these job attributes are relevant for defining a good-quality job. For this analysis, the best jobs are formal (and thus covered by social insurance and labor protections), have above-average productivity, and pay a wage commensurate with labor productivity.

Formal jobs are typically better than informal jobs, based on associated benefits and higher wages and productivity. Comparing wages across work status indicates that, on average, formal public employment pays the highest wages, significantly more than the average formal private wage, which in turn is higher than the average informal wage (Figure 2.17). Formal private wages vary more than public wages. Informal wages also show a wide variation at the high end, but with notable concentration at the low end of the wage spectrum.[15]

In the private sector, higher wages may signify higher labor productivity. Jobs in the financial/business services sector pay the most, and typically require higher skills. But construction and manufacturing sector jobs are the next highest paid, despite their relatively low skill content. Rather than signaling high productivity, this clumping of average wages around Rs.2400–2700/week may reflect low average productivity across the economy, except vis-à-vis the very low productivity sectors of agriculture and hotels and restaurants (with an average wage around Rs.1600/week; Figure 2.18). The new minimum wage adopted in 2018 falls below the average wage in most sectors, with the exception of agriculture and hotels and restaurants.[16]

Figure 2.17
Distribution of wage by work status (wage employees only)



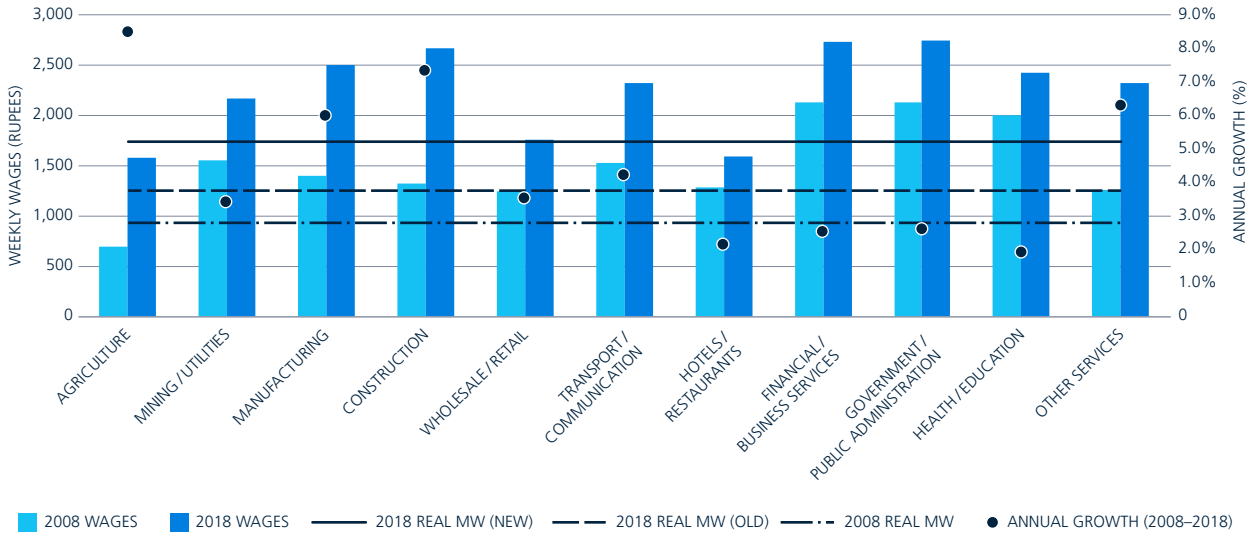
Note: Vertical line "Old MW" indicates the minimum wage in effect during survey period in 2018, and vertical line "New MW" indicates the revised minimum wage introduced in 2018 but with delayed implementation. Wage plots have been truncated at Rs.10,000.

Source: World Bank calculations using NLFS 2018.

[15] Earnings data are available for wage employees only, thereby precluding earnings comparisons across all work status categories.

[16] Under Nepal's new labor laws enacted in 2018, the monthly minimum wage was increased from Rs. 9700 to Rs. 13,450. See Chapter 5 for more detail.

Figure 2.18
Real weekly wages by sector (wage workers only, constant 2010 rupees)



Source: NLFS 2008, 2018.

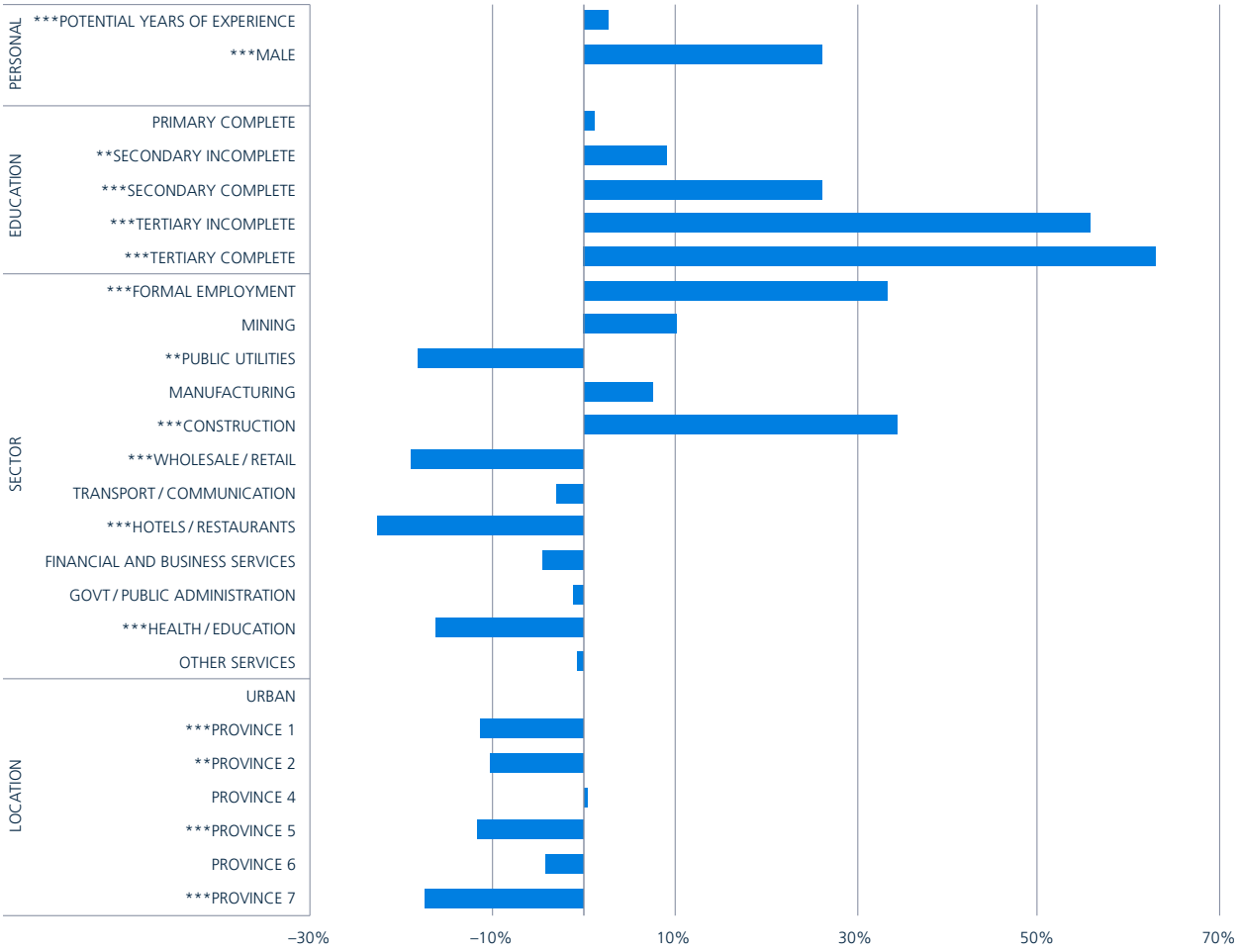
Education and formality status are key determinants of earnings; sector of work also matters, but to a lesser degree. Our regressions[17] (summarized in Figure 2.19) find positive and increasing returns to education, and a very large premium for tertiary-level schooling, even for incomplete tertiary studies. Construction sector workers earn high wages—about one third higher than similar wage employees in the agriculture sector, controlling for education and other factors. Hotel and restaurant workers and commerce sector employees, by contrast, earn significantly less. Formal workers earn a 33 percent premium over similar informal wage employees. This formality premium neutralizes any additional positive returns to working in government, due to the fact that two-thirds of formal jobs are in fact public. Regression analysis[18] also finds that jobs in province 3 earn a wage premium over jobs in most other provinces; this result is consistent with the higher density of activity and the higher cost of living in and around Kathmandu.

Men have a sizeable pay advantage over women, other things being equal. The unexplained monthly wage gap, when comparing otherwise identical men and women using wage regressions, is 26 percent. Shorter work hours partly explain women's lower monthly earnings; in 2018, women worked 9 fewer hours per week on average compared to men. But these fewer work-hours further highlight the unequal gender roles and relations in families that compel women to shoulder a disproportionate burden of household work, reducing their availability for wage employment. When taking account of hours of work, the gender wage gap narrows to 16 percent (Annex Table A.2). The average gender wage gap is large in most sectors, and narrowest in the government sector, where gender discrimination tends to be less severe. Formality status makes a bigger difference for women's pay than for men's pay; a formally employed woman earns 56 percent more than an otherwise equal woman in informal wage work, a formality premium for women more than twice that for men.

Several other factors—also at least partly rooted in gender inequality and implicit discrimination—contribute to women's inferior labor earnings. Women tend to select into particular sectors different than those men select. When estimating sectoral returns separately for men and women, we find more negative returns to commerce sector and hotel and restaurant jobs for women compared to men. This suggests that women working in these sectors either hold worse jobs in terms of productivity, or the jobs they hold are valued less.

[17] We use Mincer-type regressions to test for the correlates of earnings controlling for individual characteristics.
[18] Ibid.

Figure 2.19
Correlates of gross monthly wages (wage workers only, 2018)

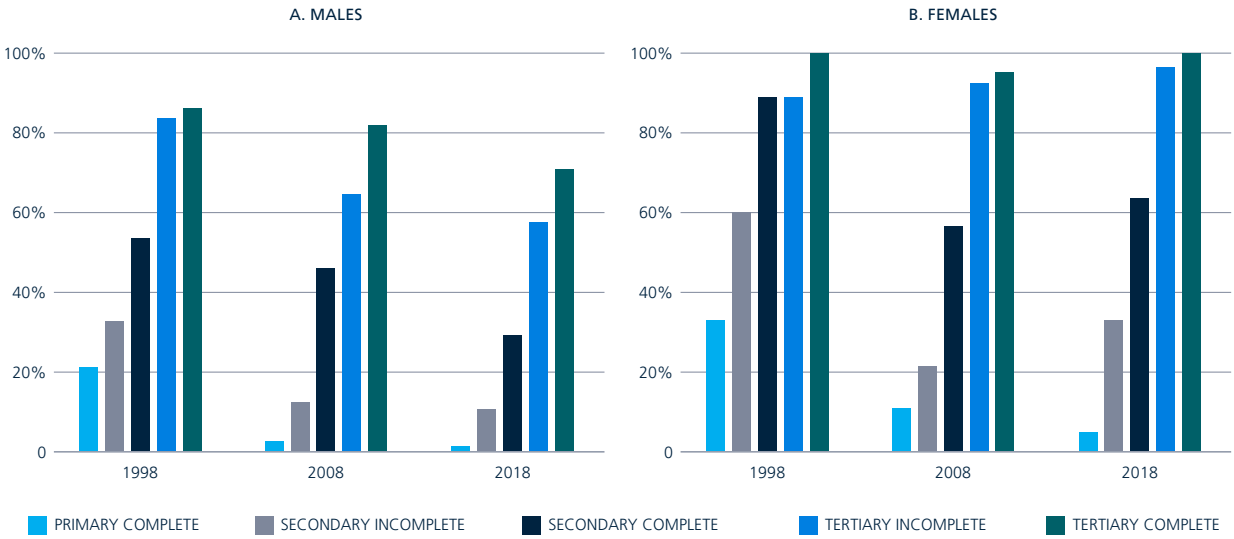


Note: Dependent variable is monthly gross wage excluding in-kind remuneration. Reference categories: female, incomplete primary education, informal wage employment, agriculture sector, province 3.
Level of significance: * p<0.05, ** p<0.01, *** p<0.001
See Annex Table A.1 for complete results.

Source: World Bank estimates using NLFS 2018.

Men attain higher education, but returns to education are higher for women. Men have more education on average, both at the secondary and post-secondary levels. Female returns to higher education are greater than male returns (Figure 2.20), however; a woman with a college degree, on average, earns double what a woman with incomplete primary earns, controlling for sector of work and other factors. The analogous return for men is 71 percent higher for a college degree. More educated workers are concentrated in the financial services and health and education sectors, and for women, also in public administration. These lower educational returns for men, especially at the secondary level, imply that men are less reliant on education qualifications to obtain a well-paid job. This is illustrated by construction work, which pays very well despite requiring low skills. For men, returns to education have slightly declined over time, whereas for women, education has become more valuable in terms of earnings, at least since 2008. Declining returns could be the result of an influx of men with higher education levels but no change in the wage structure or the jobs (that is, the same wage for the same job, despite workers having more education). Greater female returns to education provide a potential path to better jobs in more skilled occupations.

Figure 2.20
Returns to education by gender over time (wage workers)



Note: Coefficient values on education variables, controlling for age, formality status, sector and urban; detailed regression results are in Annex Table A.3.
Source: NLFS 1998, 2008, and 2018.

2.4 TRENDS IN JOB CREATION AND JOB QUALITY

How does the employment situation today compare to Nepal's labor market outcomes 10 years ago? Are workers better off, or have their employment prospects diminished since 2008?[19]

Despite the predominance of unpaid work and non-wage employment, the share of wage employment increased markedly during the past decade, mostly benefiting men. Wage jobs increased from 17 percent of total employment in 2008 to 24 percent in 2018, outstripping South Asian regional and global gains (Figure 2.21). Nepal's labor market added close to 4 million jobs in this period,[20] almost half of them wage jobs. But most added wage jobs were temporary and informal, and most were taken up by men (Figure 2.22).

At the same time, the share of unpaid workers and self-employed farmers[21] declined significantly, but due to different factors for men compared to women. The combined share of male farmers and unpaid workers fell from 60 percent in 2008 to 45 percent in 2018, consistent with economic growth, urbanization, and rapid construction expansion. For women, however, the decline was more modest—from 86 percent to 80 percent. Part of this decline is explained by a composition shift resulting from delayed female labor force entry due to schooling, and a small part is explained by a rising share of young women electing to remain outside the labor force. This rising share of female NEETs has a higher average level of education than the previous generation, and may be less willing to accept available work—very little of which is wage employment.

Only 115,000 of the 1.8 million wage jobs added were permanent (Table 2.3).[22] Figure 2.23 illustrates the sectoral distribution of added jobs by type of contract: permanent wage job, temporary wage job, and non-wage work. The construction sector added the most wage jobs (over 640,000 temporary wage jobs) followed by health and education (350,000), manufacturing (216,000) and financial and business services (160,000), mostly temporary wage jobs. The agriculture and commerce sectors also grew, but these primarily absorbed workers into unpaid work or self-employment rather than creating wage jobs.

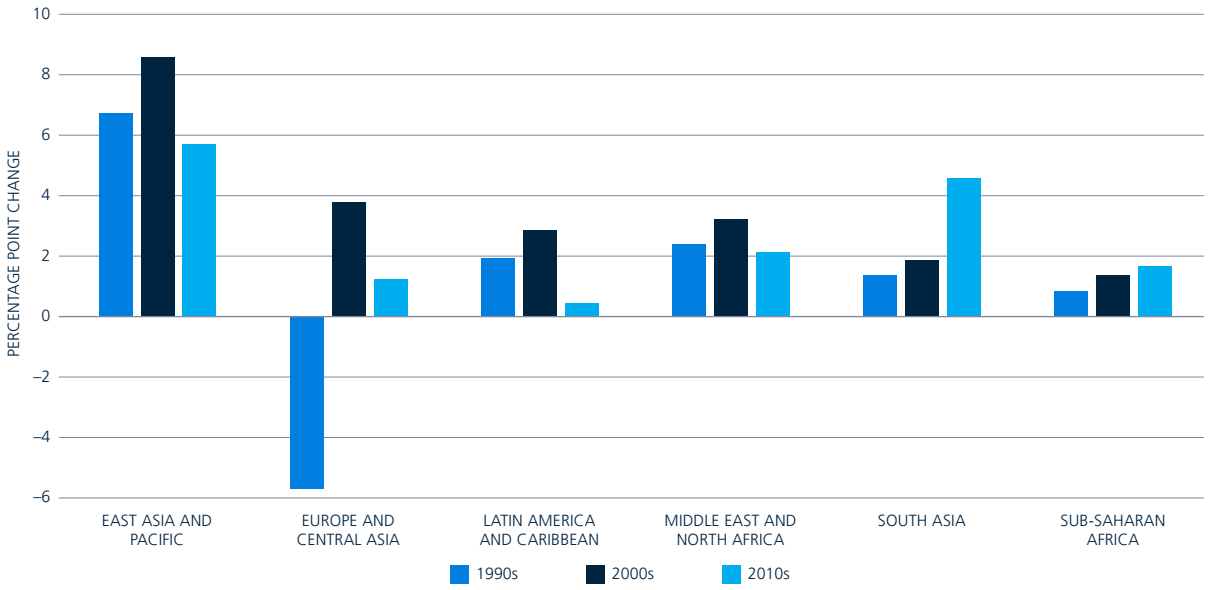
[19] Note that the temporal analysis below focuses on the 2008–2018 period due to data quality and comparability issues.
[20] All figures refer to net job creation, the sum of total new jobs minus the number of jobs destroyed.
[21] Note that the change in the NLFS survey questionnaire precludes a precise comparison of unpaid workers over time, as many of those reported as self-employed farmers in 2008 are captured as unpaid workers in 2018.
[22] We cannot establish the number of formal jobs created due to data limitations in comparing 2008 and 2018.

Table 2.3
Net job creation by sector 2008–2018

		2008	2018	Net job creation	Share of total net job creation (%)
Agriculture	Permanent wage	26,315	6,908	(19,406)	–0.5%
	Temporary wage	495,786	527,844	32,058	0.8%
	Non-wage	8,182,453	9,375,351	1,192,898	30.2%
Mining	Permanent wage	83	529	447	0.0%
	Temporary wage	11,570	42,540	30,970	0.8%
	Non-wage	15,507	15,706	199	0.0%
Public utilities	Permanent wage	11,217	17,228	6,011	0.2%
	Temporary wage	16,317	38,207	21,889	0.6%
	Non-wage	93,879	239,698	145,818	3.7%
Manufacturing	Permanent wage	45,856	72,585	26,729	0.7%
	Temporary wage	277,459	466,612	189,154	4.8%
	Non-wage	437,509	532,649	95,140	2.4%
Construction	Permanent wage	13,823	6,842	(6,981)	–0.2%
	Temporary wage	271,820	914,801	642,981	16.3%
	Non-wage	81,274	94,962	13,688	0.3%
Wholesale and Retail	Permanent wage	6,675	11,325	4,650	0.1%
	Temporary wage	58,223	147,924	89,701	2.3%
	Non-wage	626,817	1,080,651	453,834	11.5%
Transport and Communications	Permanent wage	32,280	21,472	(10,807)	–0.3%
	Temporary wage	123,182	255,788	132,606	3.4%
	Non-wage	64,881	105,382	40,500	1.0%
Hotels and Restaurant	Permanent wage	4,874	10,622	5,748	0.1%
	Temporary wage	26,147	86,569	60,422	1.5%
	Non-wage	166,084	273,733	107,650	2.7%
Financial and Business Services	Permanent wage	18,449	77,055	58,606	1.5%
	Temporary wage	25,371	129,252	103,881	2.6%
	Non-wage	49,233	36,127	(13,107)	–0.3%
Public Administration	Permanent wage	82,995	86,191	3,197	0.1%
	Temporary wage	21,854	46,642	24,788	0.6%
	Non-wage	4,007	379	(3,627)	–0.1%
Health and Education	Permanent wage	169,147	217,847	48,700	1.2%
	Temporary wage	168,855	472,264	303,408	7.7%
	Non-wage	24,414	38,807	14,394	0.4%
Other Services	Permanent wage	12,234	10,295	(1,939)	0.0%
	Temporary wage	70,913	150,977	80,064	2.0%
	Non-wage	41,369	118,856	77,487	2.0%
All sectors	Permanent wage	423,947	538,902	114,955	2.9%
	Temporary wage	1,567,497	3,279,418	1,711,921	43.3%
	Non-wage	9,787,425	11,912,299	2,124,874	53.8%
Total		**11,778,869**	**15,730,619**	**3,951,750**	**100.0%**

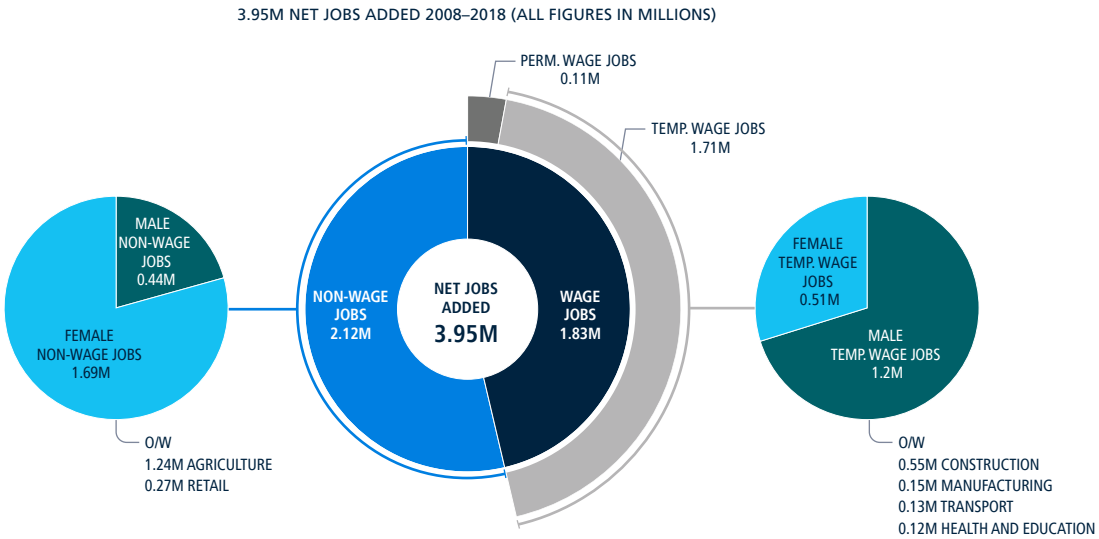
Source: Staff calculations based on NLFS 2008, 2018.

Figure 2.21
Global comparison of the change in wage employment share (percent of total employment)



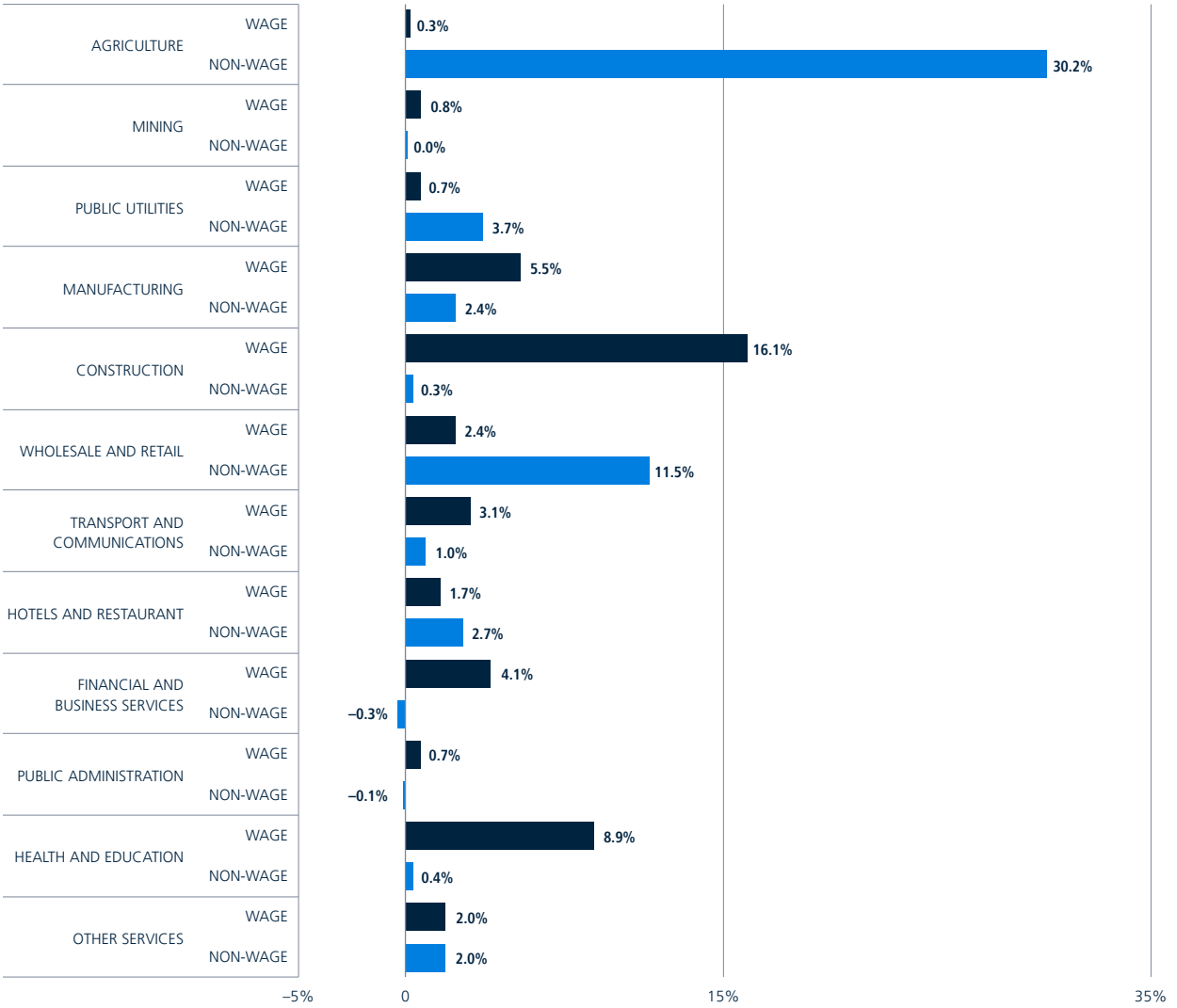
Source: IDA (2020).

Figure 2.22
Decomposition of net jobs added between 2008 and 2018



Source: Staff calculations based on NLFS 2008, 2018.

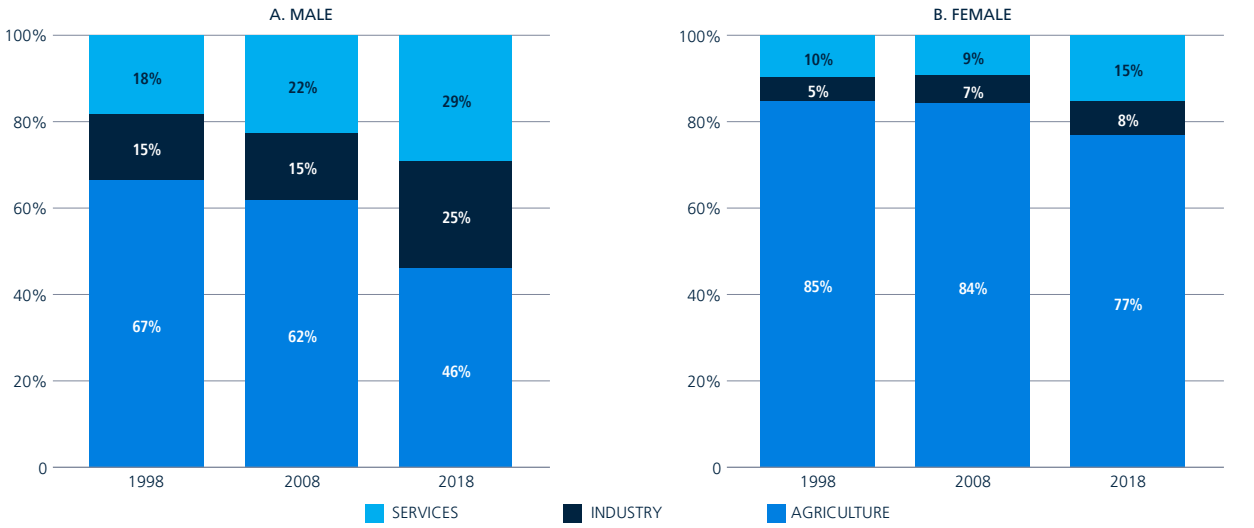
Figure 2.23
Share of wage and non-wage jobs added since 2008 (by sector)



Source: NLFS 2008, 2018.

Nepal's ongoing structural transformation has not yet created significant formal jobs, and the modest progress has accrued disproportionately to men, leaving women further behind. The economy has shifted decidedly towards industrial and services activities, as large numbers of men have taken construction, manufacturing, commerce and transportation jobs, among others. Even though most of these are informal or temporary wage jobs, they nevertheless provide improved livelihoods compared to farm work. But agriculture-based activities remain central, especially for women, who as a group have been slower to transition (Figure 2.24). More than half of new jobs taken up by women in the last decade were in non-wage agriculture. Women also moved into non-wage wholesale and retail jobs (12 percent), followed by temporary wage jobs in health and education (8 percent). In contrast, the sector distribution of added male jobs was much more diverse. One-third of new jobs taken by men were temporary wage jobs in construction. Men also entered informal wage work in manufacturing (9 percent), transport and communications (8 percent), and health and education (7 percent), and non-wage jobs in wholesale and retail trade (11 percent; Annex Tables A.4 and A.5).

Figure 2.24
Shifts in sectoral employment shares by gender, 1998–2018



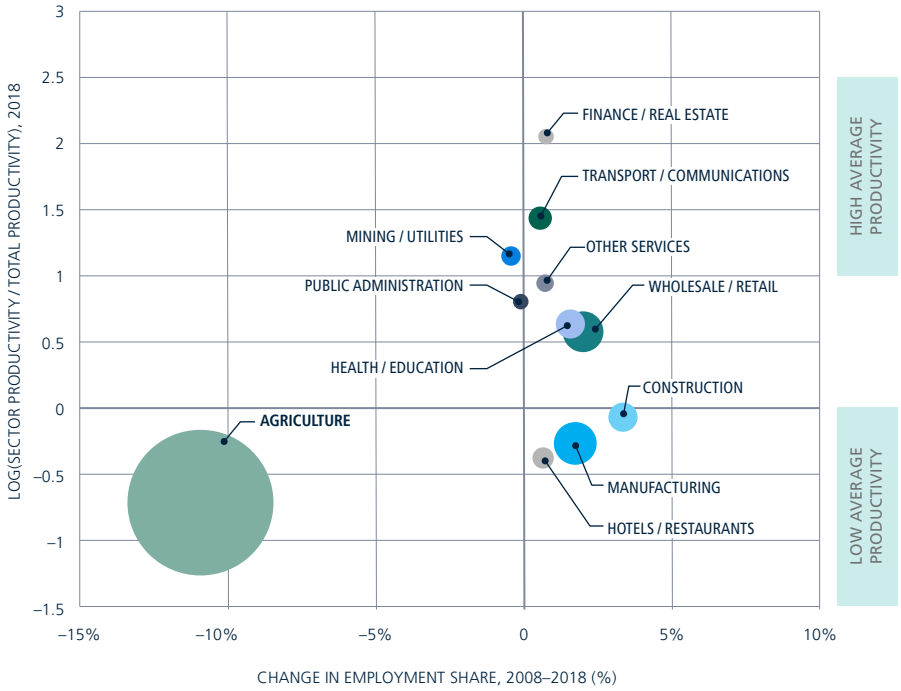
Source: NLFS 1998, 2008, and 2018.

Other than agriculture, whose large employment share contracted, job creation occurred across a mix of low-productivity and high-productivity sectors (Figure 2.24). Nepal's private sector is creating some higher productivity jobs, but not enough to sustain robust economic growth or compete in the global marketplace. Economic development and poverty reduction are typically accompanied by a shift from primary activities into wage jobs; we see clear evidence of this pattern in Nepal, but progress is slow. Construction, manufacturing and hotels and restaurants increased their shares of total employment, but they have below average productivity (appearing in the bottom right quadrant of Figure 2.25). Finance and real estate and transport and communications had the highest average productivity levels, and both added jobs (top right quadrant). Wholesale and retail (employing low-skilled workers) and health and education (employing more educated workers) both increased their shares of total employment. Although educational attainment increased sharply over the past two decades, its impact in the labor market is muted, in part because workers with less than a complete secondary education still dominate the labor force (only 10 percent of workers in 2018 had completed secondary school; Figure 2.26).

Real wages rose across all sectors and in all wage categories, reflecting significant improvement in job quality and worker welfare. Although most jobs in Nepal are informal and in low productivity sectors, as we have described, economic growth was sufficient to generate large real wage gains. Among wage employees, wages grew fastest in agriculture (8 percent annual growth between 2008 and 2018), construction (7 percent) and other services (6 percent; Figure 2.18). Wage growth was weakest in the hotels and restaurants and health and education sectors, although wages grew by 2 percent per year in real terms even in these sectors. Informal wage employees benefited from faster wage growth than their formal counterparts: informal wages grew by 6.5 percent annually in real terms, compared to 5.6 percent annual growth for formal private wage earners, and 3.3 percent growth for formal public employees.

Regional wage gaps have narrowed since 2008. Jobs in Kathmandu and province 3 still pay higher wages on average, but wages in most other provinces are catching up. Wage growth was fastest in province 2 (7 percent annual growth between 2008 and 2018), followed by provinces 1 and 6 (both at 6 percent; Figure 2.27). Only province 7 lost ground in relative terms. In 2018, the average wage in province 6 was comparable to that in province 3, and province 4 was not far behind. Province 2 is lagging in terms of the skill level of its workforce and the availability of good quality jobs, which is reflected in its still low average wage.

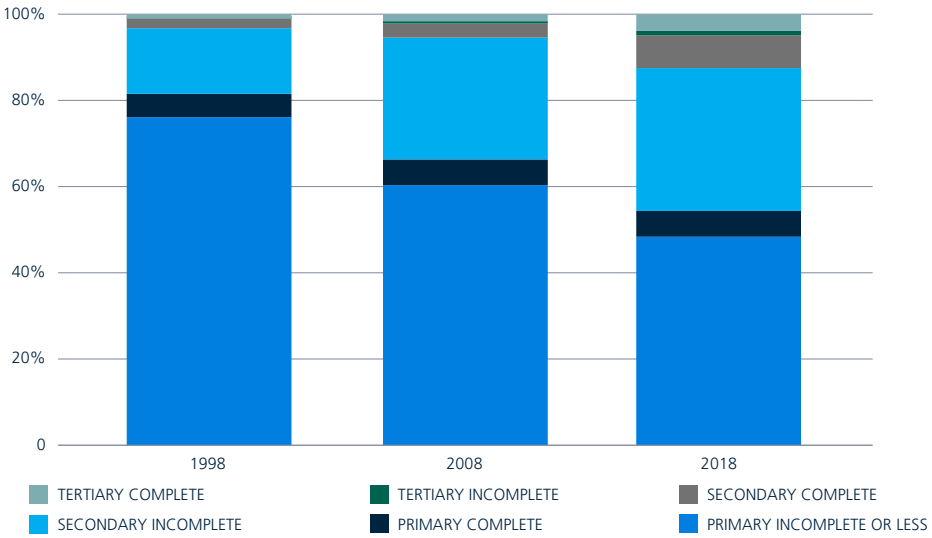
Figure 2.25
Both low- and high-productivity sectors gained employment share



Note: Bubble size reflects sector employment level in 2008; productivity measured as sector-level value added per worker.

Source: World Bank calculations based on NLFS 2008 and 2018 and national accounts data,

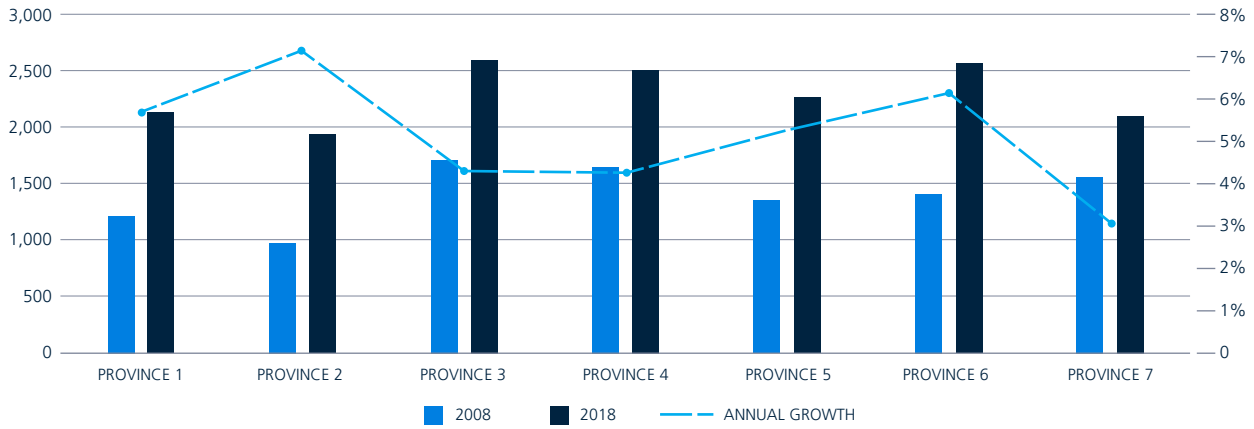
Figure 2.26
Gradual change in the education composition of the labor force



Note: Education categories are defined as follows: primary incomplete or less is never enrolled or completed grade 4 or less, primary complete is grade 5 completed, secondary incomplete is completed between grades 6 and 11, secondary complete is completed grade 12, tertiary incomplete is currently enrolled in bachelors or masters or professional degree, tertiary complete is bachelors or masters or professional degree completed.

Source: NLFS 1998, 2008, and 2018.

Figure 2.27
Real weekly wages by province (constant 2010 rupees)



Source: NLFS 2008 and 2018.

Despite job growth, many workers take a dim view of their domestic employment prospects. The rising prevalence of wage jobs and strong wage growth over the last decade suggests broad improvement in job quality and labor market outcomes. However, a large share of the labor force is underemployed, engaging in part-time, unpaid farm work. According to surveys conducted during the Systematic Country Diagnostic 2018, youth reported 'lack of job opportunities' as the biggest challenge facing Nepal today (World Bank 2018b). Many Nepalese therefore prefer to migrate abroad for work, as addressed in Chapter 3.

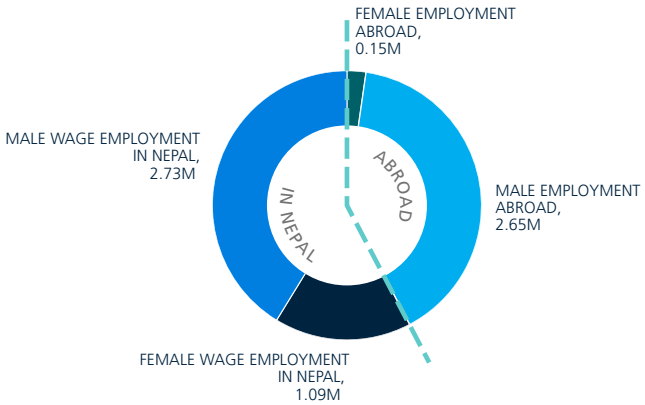
3. INTERNATIONAL MIGRATION

Migration is a central factor affecting Nepal's economy and labor force outcomes. According to the 2011 population census, when including those studying or working, 7.3 percent of Nepal's population lived abroad. The 2018 NLFS data indicate that 27 percent of households had at least one person working abroad, equivalent to more than 2.8 million working-age Nepalese,[23] three-fourths of the 3.8 million wage employees working within Nepal (Figure 3.1).

Foreign employment is an attractive alternative for many men struggling to find good jobs in Nepal. In addition to "push" factors such as inadequate job creation to meet household consumption needs across Nepal, "pull" factors also contribute to large-scale outmigration. Strong demand for cheaper foreign labor by employers in the Gulf Cooperation Council (GCC)[24] countries and in advanced economies attract Nepalese workers, who can earn significantly higher wages abroad even in basic occupations. Many job opportunities exist in the much larger Indian economy just across the border. In fact, the open border between India and Nepal has led to a degree of integration of the two countries' markets including their labor markets, with a steady flow of people back and forth over the centuries.

Migration is not an option for most women. Only 5 percent of external migrants are women. This gender gap is driven by various factors: social norms around female care activities; higher safety concerns including gender-based violence or exploitation of female migrants; and norms around occupations considered "acceptable" for women in sending and receiving countries.[25] Because family-care responsibilities fall disproportionately on women, child- and elder-care activities as well as subsistence farming constrain female labor mobility.

Figure 3.1
Wage employment in Nepal and abroad



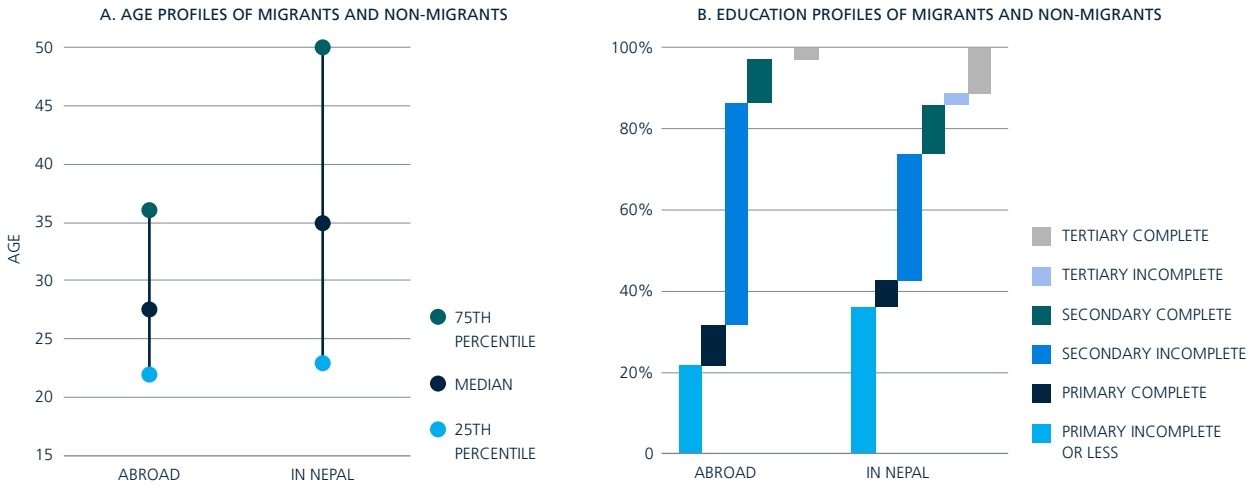
Source: NLFS 2018.

[23] Some households had an absentee living abroad but not working, many of whom were students; in 2018, an estimated 323,000 Nepalese were living but not working abroad.

[24] The Gulf Cooperation Council (GCC) is a political and economic alliance of six Middle Eastern countries—Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain, and Oman.

[25] The Government imposed restrictions on young women migrating for domestic work.

Figure 3.2
Age and education profiles of migrants and non-migrants



Source: NLFS 2018.

Incomplete measurement of worker flows[26] and the open border with India complicate understanding the magnitude of international migration. No record-keeping tracks labor flows between India and Nepal. A large portion of this is seasonal migration, and primarily from districts bordering India. Migration to other countries is documented through work permits issued by the Department of Foreign Employment and through study-abroad permission issued by the Ministry of Education. But these administrative measures cannot accurately capture informal migration. The Central Bureau of Statistics' household-based surveys and censuses collect information on the number of family members abroad and remittances received, but this information is not detailed enough to inform key migration policies.

Migrant workers have different profiles compared to wage workers in Nepal. Migrant workers are predominantly men (95 percent, compared to 72 percent of domestic wage employees).[27] Migrant workers are considerably younger than non-migrants; only a quarter of migrants are over 35 years old, compared to half of domestically-employed wage workers (Figure 3.2). The education profiles of the two groups also differ: a majority of migrant workers have an incomplete secondary education (Figure 3.2).

India is the dominant receiving country, but the Middle East and Malaysia are important destinations for documented labor migration. One third of Nepali workers abroad are in India, and 1 in every 6 households has at least 1 absent family member in India. Malaysia and Qatar account for 17 and 16 percent of Nepal's migrant workers, respectively, followed by Saudi Arabia (13 percent) and UAE (8 percent).

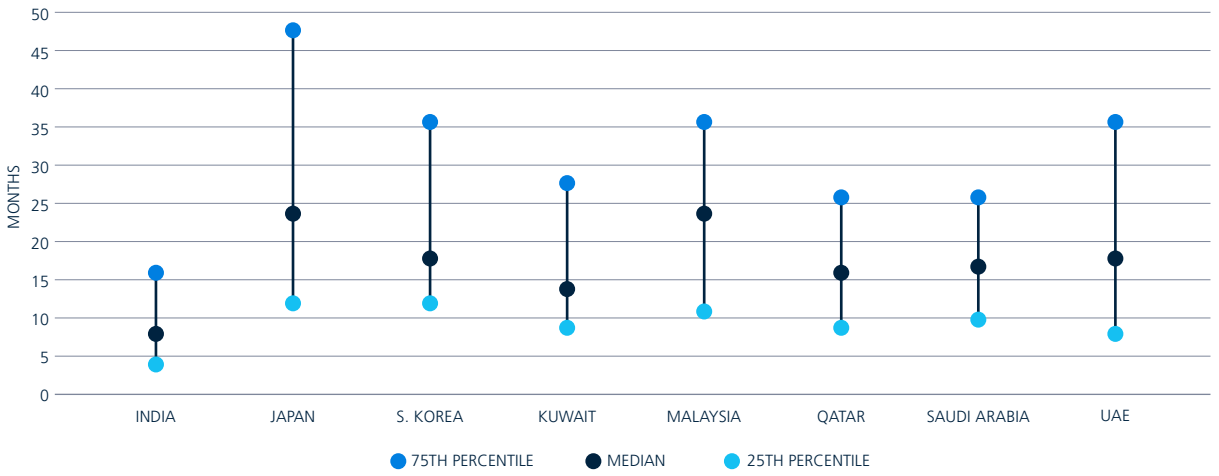
The length of time abroad varies by destination: under 1 year in India; close to 2 years elsewhere. Migrants to India have much shorter spells abroad compared to those migrating to other destinations. Around three-fourths of migrants in India are absent for one year or less. Seasonal migration to India is common, administratively and geographically easier to access, and allows for frequent returns home. In contrast, migration spells are much longer in other destinations, especially in Japan and Malaysia (Figure 3.3).

Formal (non-India) out-migration is high, but has diminished in recent years. According to labor permit data from the Department of Foreign Employment (DoFE), permitted labor migrants peaked at about one-half million new migrants in fiscal years 2013/14 and 2014/15 (Figure 3.4, left panel). Labor permits tend to be for 2 or 4 years' duration, and migrants can request permit renewals. New permits have been declining for 4 years, and dropped 33 percent in the last fiscal year alone, returning to levels from a decade ago. This decline is likely

[26] Whether through administrative or survey-based data.

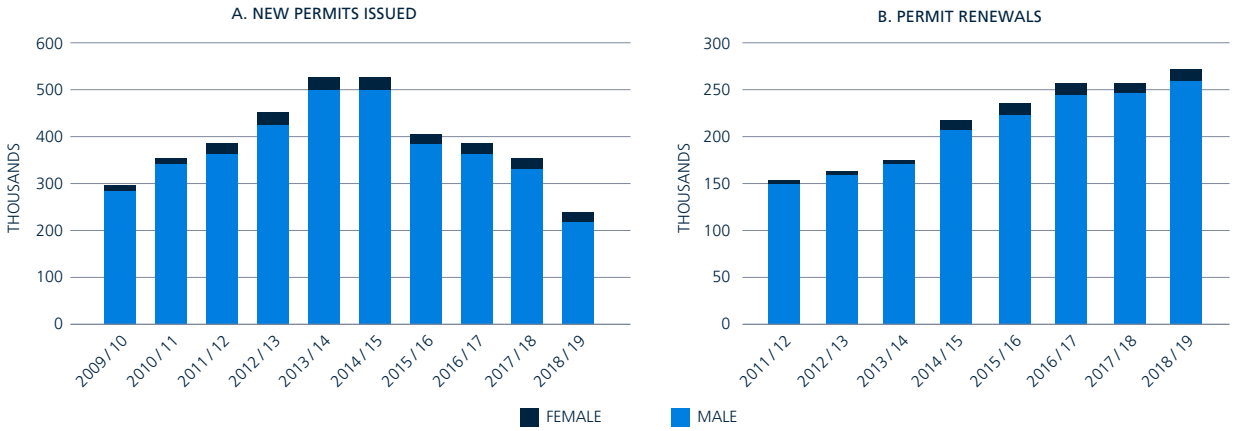
[27] Note that for legal migrants to countries other than India, women accounted for 9 percent of permitted migrants in FY 2018/19, up from 3 percent a decade ago. Women accounted for only 4 percent labor permit renewals in FY 2018/19.

Figure 3.3
Duration of absences by destination country



Source: NLFS 2018.

Figure 3.4
Annual number of labor permits issued by Department of Foreign Employment, 2009–2019



Source: DoFE.

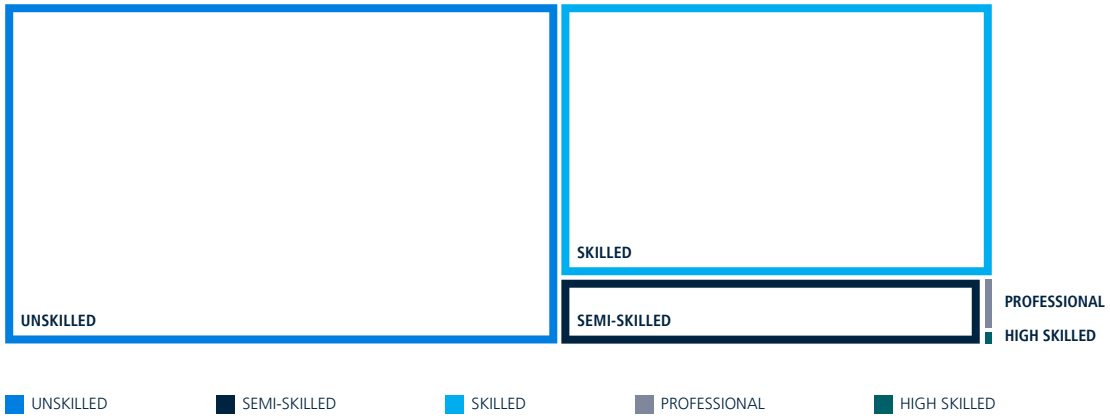
the combined result of external factors, such as lower demand from the main destination countries, and internal policy factors, such as recent migration restrictions to Malaysia due to exploitation concerns, and abolition of recruitment fees, which may have interfered with private recruiting arrangements.[28] Permit renewals have been steadily increasing, however (Figure 3.4, right panel).

The stock of migrants is significantly higher than a decade ago. Migration affects just over a quarter of all households—similar to 2008—but the number of migrants has risen. Comparing household survey evidence on the number of absentees working abroad, the data indicate that the stock of migrants increased markedly between 2008 and 2018, from 1.7 million to 2.8 million, representing a 5 percent annual growth rate (NLFS 2008, 2018).

Since Nepal opened its economy in the early 1990s, the most frequent destination countries have been Kuwait, Qatar, Saudi Arabia, UAE, and Malaysia. From FY1993/94 to FY2007/08, these countries received

[28] https://www.nepalitimes.com/latest/malaysia-wants-ban-lifted/; http://mfasia.org/migrantforumasia/wp-content/uploads/2017/01/6-Call-to-Action-Zero-Fees-in-Nepal.pdf

Figure 3.5
Skill distribution of permitted labor migrants in 2018/19



Source: DoFE.

nearly 97 percent of all Nepalese labor migrants (Government of Nepal Ministry of Labor and Employment 2014). By FY2018/19, Nepal was sending labor migrants to 136 countries, but these five countries still accounted for 89 percent of total permitted out-migration.

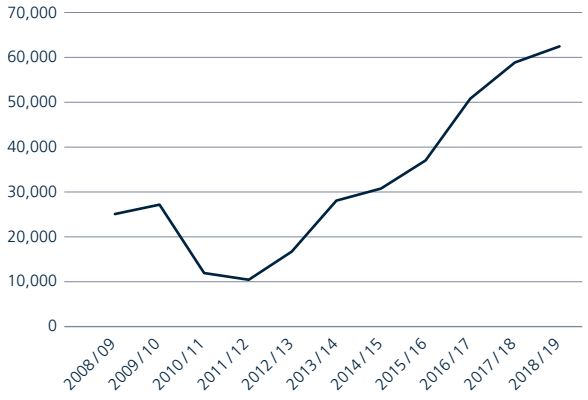
As a result of this concentration of destination markets, migration outflows are vulnerable to political or economic shocks in a small number of receiving countries. This is evidenced by disrupted worker flows during the recent crisis in Qatar in 2017, and Nepal's Government ban on Malaysia-bound migrants in mid-2018 following a crackdown on agencies levying excess charges on Nepalese migrants. Weaker oil prices in general have dampened the demand for foreign labor in the oil-producing economies of the Middle East, notably in the GCC countries.[29] Saudi Arabia imposed higher fees on foreigners, increasing the cost of migration for Nepalese. Together these external shocks decreased labor permit issuance by 50 percent umber of since the peak 5 years ago.

Foreign jobs concentrate in unskilled occupations. In 2018/19, 56 percent of total permitted migrants worked as construction workers, laborers, cleaners and helpers; only 0.2 percent were hired into professional or high-skilled occupations (Figure 3.5). Most Nepalese labor migrants can therefore be easily replaced by other unskilled workers, whether from Nepal or other countries. With respect to skills acquisition, workers returning to Nepal are unlikely to have acquired highly technical skills transferable to the Nepali context; on the other hand, many have gained valuable work experience and soft skills that contribute to better job outcomes post-migration.

Although most migration is unskilled, skilled Nepalis are also migrating, but rely primarily on education channels. The magnitude of skilled migration is reflected by the number of no objection letters (NOC) the Ministry of Education issues for Nepalis to study abroad. The NOC letter is required to obtain foreign currency in Nepal to pay tuition fees overseas. In most cases, migrants work while studying abroad, and some remain abroad to work after graduation. For instance, many Nepalese students in Australia end up in the Australian General Skilled Migration (GSM) program; this involves getting one of the degrees listed in the Skilled Occupation List (SOL) and earning points for the Skillselect system to qualify for permanent residency (PR). In 2018/19 alone, Nepal issued 62,000 NOC letters, and the numbers have increased every year since 2011/12 (Figure 3.6). The declining trend from 2009/10 to 2011/12 was due to the sharp drop in students going to the UK following the UK Border Agency crackdown and closure of hundreds of private colleges and tighter

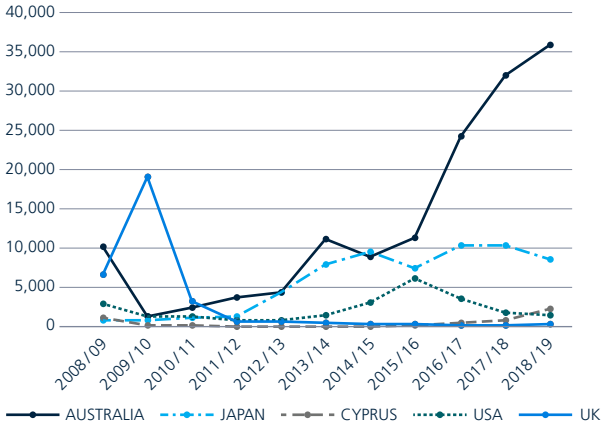
[29] Raju and Rajbhandary (2018).

Figure 3.6
NOC letters issued for study abroad



Source: Ministry of Education, Science and Technology.

Figure 3.7
NOC letters for popular destination countries



Source: Ministry of Education, Science and Technology.

restrictions for international students.[30] Although Nepal sends students to study in over 80 countries worldwide, the flow is concentrated in relatively few destinations. Australia far outstrips other countries as the most popular overseas study destination, accounting for half of students requesting NOC letters in 2018/19 (Figure 3.7).

South Korea is one of the most sought-after destinations for migration. Since 2008, Nepalese workers have migrated to South Korea through its official Employment Permit System (EPS). Migration to South Korea is highly competitive; in 2019, there were over 92,000 applications for 7,100 jobs. Selected migrants must meet rigorous qualifications including Korean language proficiency and other skills. The quality of work, working conditions and pay are very high, significantly higher than elsewhere, making South Korea the preferred destination for unskilled Nepali youth. The monthly minimum wage for workers entering under EPS was $1,307 as of 2017,[31] compared to Nepal's minimum wage of $93.[32] The number of migrants into South Korea is subject to Korean Government quota, which has gradually increased over the past decade (Figure 3.8). Almost exclusively male, these workers are recruited for jobs in agriculture or manufacturing, mostly in elementary occupations despite often having much higher qualifications.[33] According to Embassy of Nepal in Seoul estimates, nearly 26,000 documented Nepalese were working in South Korea in FY 2016/17.[34]

Other coveted migration opportunities are through enrollment in the British Army (as Gurkhas), the Singapore Police, or the Indian Army. Nepalese have served in the British Army since 1815, originally under contract to the East India Company. Nepalese form the Brigade of Gurkhas in the British Army, numbering 3,430 as of April 1, 2019.[35] Around 400 serve in the Singapore police.[36] Over 25,000 Nepalese served in the Indian Army and another 20,000 in Indian paramilitary in 2012.[37]

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30 British immigration authorities closed an estimated 500 illegitimate colleges operating in the country over 18 months in 2011 and 2012, stranding thousands of international students.
https://www.bbc.com/news/10106279;
https://www.theguardian.com/education/2013/jan/08/immigration-foreign-students-universities;
https://www.dailymail.co.uk/news/article-2320465/Colleges-report-106-000-bogus-foreign-students--deport-153-MPs-crackdown-abuse-immigration-system.html

31 South Korea Migration Factsheet CESLAM.

32 Minimum wage in Nepal is 9700 NPR and $1=104.51 in 2017.

33 Cho et al. (2018).

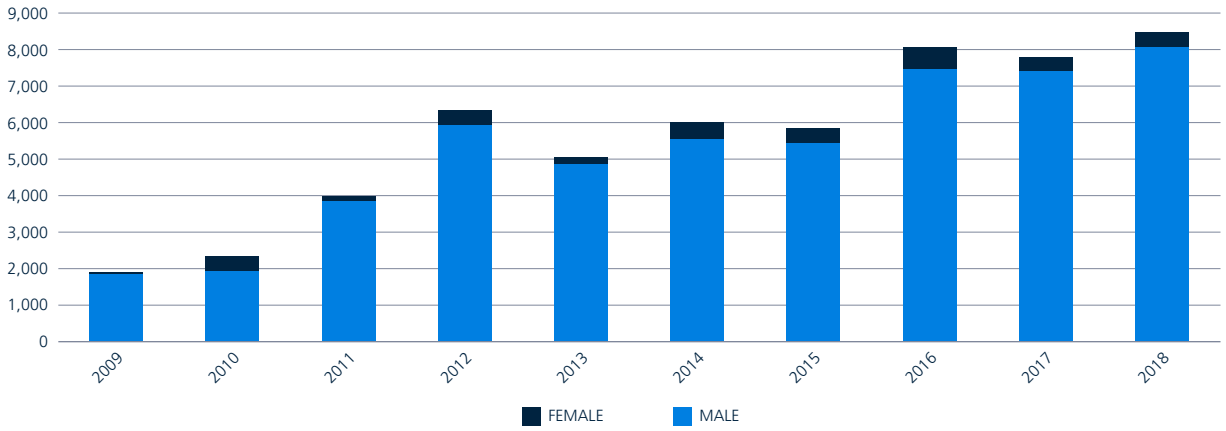
34 Annual Report (2072/73) of Embassy of Nepal in Korea.

35 British Army's Quarterly Service Personnel Statistics, April 2019.

36 Bar Nepalis from Joining foreign armies: Left alliance, The Himalayan Times.
https://thehimalayantimes.com/nepal/bar-nepalis-from-foreign-armies-left-alliance/

37 Nepal may bar Gorkhas from Indian Army. Times of India.
https://timesofindia.indiatimes.com/india/Nepal-may-bar-Gorkhas-from-Indian-Army/articleshow/12334603.cms

Figure 3.8
Annual Nepalese migrants to South Korea through EPS, 2008–2018

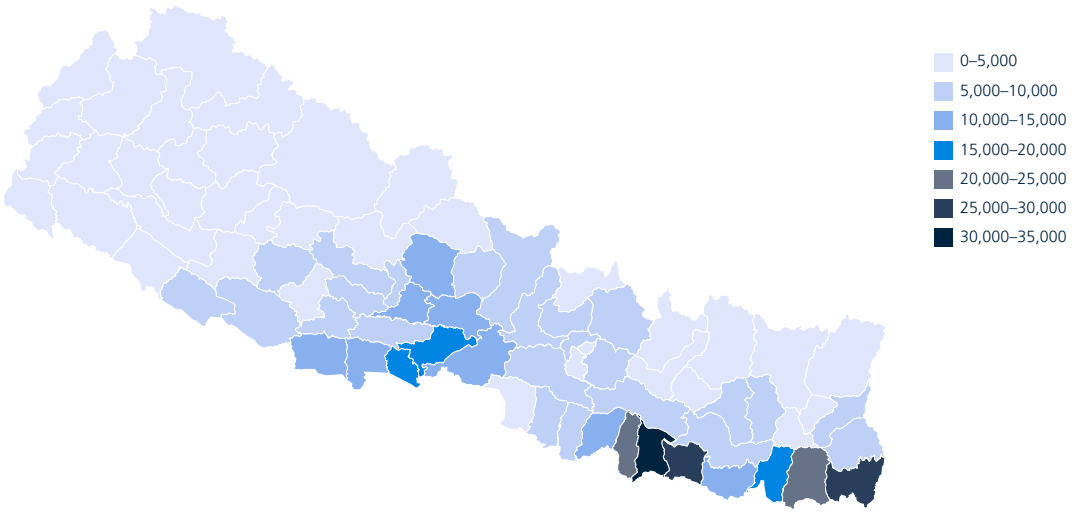


Source: EPS Korea.

Regions from which Nepal's workers migrate are relatively concentrated, mostly along the Indian border, even for documented migrants to countries other than India (Figure 3.9). This concentration suggests significant network effects. For example, 40 percent of documented migrants to GCC countries and Malaysia originated in only 10 districts, while relatively few originated in Nepal's mountain or western districts. The largest number of migrants originated in Eastern Terai (data excludes migrants to India). Using information from migrant-sending households, whether documented or undocumented, migrants from provinces 5, 6 and especially 7 are much more likely to work in India, whereas workers from provinces 1 and 2 are more likely to migrate to Malaysia, Qatar and Saudi Arabia (NLFS 2018 data).

The relatively low educational attainment of Nepali migrants reflects the nature of unmet labor demand in destination countries. Most external demand for Nepali migrants is in unskilled elementary

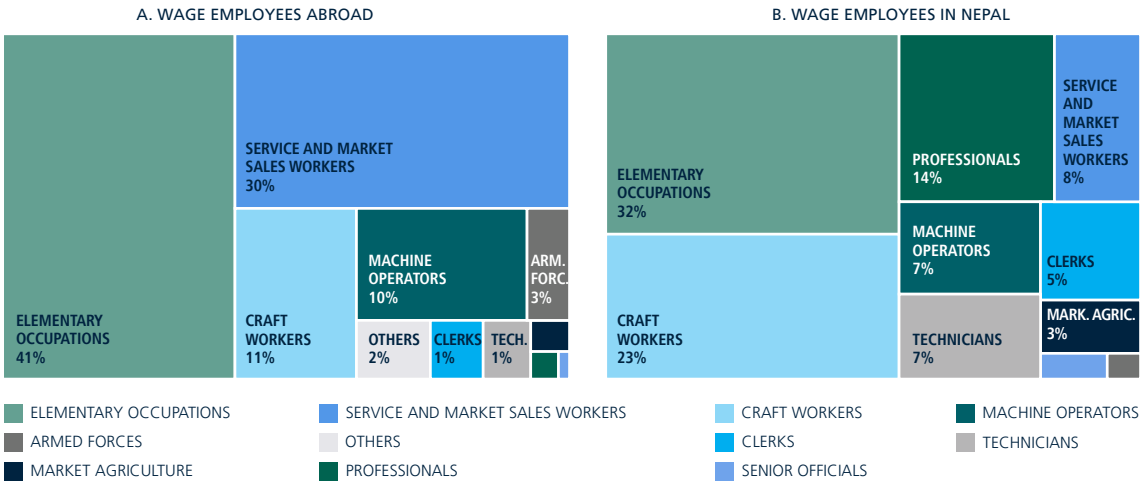
Figure 3.9
Origin districts of new and repeat out-migrants through legal channels (FY 2018/19)



Note: Data excludes migrants to India.

Source: DoFE.

Figure 3.10
Occupation profile of wage-workers abroad vs. those employed in Nepal (2018)



Source: NLFS 2018.

occupations, services and market sales; less than 1 percent of migrant workers are employed abroad as senior officials or professionals (Figure 3.10). Despite the low skill content, the work nevertheless pays very well. For example, a cleaner in Qatar earns at least Rs.28,000 (900 QR) per month, more than twice the new minimum wage in Nepal and more than the average salaries of many professionals employed in Nepal such as school teachers or civil engineers. In economic terms, domestic returns to education are very low compared to external returns; for youth willing to migrate, there is little incentive to continue their studies in Nepal.

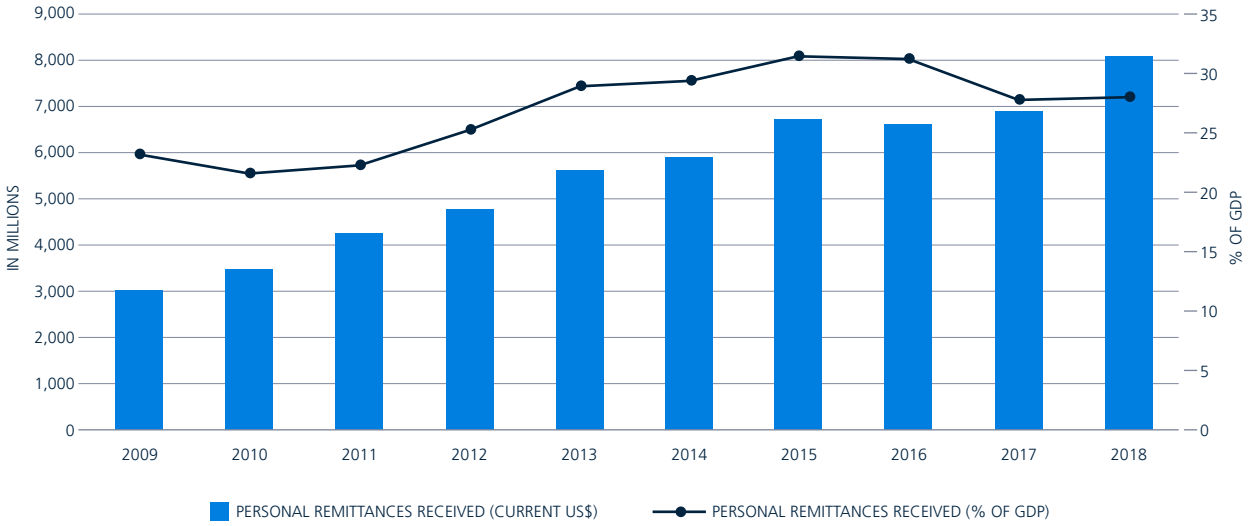
The millions of Nepalis working abroad are adding value to foreign economies, representing foregone Nepali economic production. But remittance inflows also prop up domestic consumption and family incomes. The inherent transfer of labor resources and human capital away from Nepal implies that Nepal is losing some talent. On the other hand, international migration is providing steady income for many workers with poor job prospects at home, and propping up household income and spending through remittances. Some of this increased spending enhances both welfare and human capital, such as through housing upgrades (contributing to the construction boom) as well as for education and health services. Shrestha (2017) estimates that out-migration explains 40 percent of the decline in poverty between 2001 and 2011, contributed to increased school enrollment, and improved labor market outcomes for households with an absent migrant. Remittances make a very large contribution to the Nepali economy.[38] Official remittances have increased steadily over the last decade, accounting for up to 30 percent of GDP (Figure 3.11). These figures exclude remittances flowing through informal sources.

Remittances are the main source of foreign currency, just covering the foreign currency demand of import-heavy Nepal. But there are associated downside risks. Households may spend remittances disproportionately on consumption of imported goods and local goods and services, both of which have modest spillovers for domestic job creation, rather than on capital investment that directly generates jobs or improves productivity. Moreover, remittance-financed imports drive up domestic prices, putting upward pressure on the real exchange rate, which undermines Nepal's competitiveness. Nepal's heavy reliance on remittance transfers makes the economy vulnerable to negative shocks in destination markets such as the Gulf countries and Malaysia. Most migrants are aged between 20 to 44 years, potentially generating labor shortages in rural areas that push up real wages.[39]

[38] Note that the average cost of remittances to Nepal is relatively competitive at 4.1 percent, which is below the global average (7 percent), but still slightly above the SDG target (3 percent).

[39] Shrestha (2011), Cosic et al. (2017).

Figure 3.11
Aggregate remittances received into Nepal



Source: World Bank, WDI.

Despite these downsides, external migration will remain an important channel for enhancing labor outcomes and the welfare of Nepali households. For the foreseeable future, employment opportunities abroad will be essential for absorbing excess labor supply and supporting household income levels. It will therefore be important to balance the benefits and risks of large-scale migration as part of a broader jobs strategy to support better job quality at home and abroad, and maximize the long-term utility of remittances through productive investments that foster domestic economic growth.

4. PRIVATE SECTOR DEMAND FOR LABOR

Limited availability of good jobs noted in this report implies that Nepal's private sector is not sufficiently dynamic to create the numbers of firm-based wage jobs needed to absorb the available labor supply. The analysis that follows examines the patterns of private sector demand for labor using several firm-based datasets (Box 4.1).

BOX 4.1: FIRM-LEVEL DATA SOURCES

Nepal carried out its first comprehensive National Economic Census in April-June 2018. It reflects a full enumeration of existing establishments during the survey period, including 1-person firms (that is, self-employed). An establishment is a single economic unit. Businesses may comprise more than one establishment but located in different locations; this is the case for only 2 percent of establishments. The Economic Census excludes unregistered firms in agriculture, forestry and fisheries, firms within public administration, defense and compulsory social security, the activities of households as employers (as distinct from firms based in households), household production for own-use, and extraterritorial organizations. The analysis below draws from the Central Bureau of Statistics' published census results to provide a snapshot of Nepal's private sector firms (2019).

We complement this information with data from two earlier manufacturing surveys conducted by the Central Bureau of Statistics, the 2007 and 2012 National Census of Manufacturing Establishments. These surveys cover manufacturing establishments employing 10 or more workers. Sample sizes were 3,446 in 2007 and 4,076 in 2012 (Annex Table A.10).

Information on SME activities and labor demand is drawn from a 2019 SME survey of 932 firms in 6 districts: Chitwan, Kaski, Kathmandu, Morang, Parsa and Rupandehi. This survey—described in detail in section 4.2—was commissioned by the World Bank to inform this Jobs Diagnostic analysis.

4.1 SNAPSHOT OF THE PRIVATE SECTOR

There are 923,000 establishments in Nepal, including single-person firms (self-employed) but excluding public administration, household employers and extraterritorial organizations, according to the 2018 Economic Census.[40] The Economic Census includes both registered and unregistered firms, except in the agriculture, forestry and fisheries sector, where only registered businesses are counted (Central Bureau of Statistics 2019). Half of all establishments are registered, and 40 percent are home-based.

Kathmandu valley and surrounding province 3 has the highest concentration of firms and employment. Nearly one-third of all establishments captured in the Economic Census are in province 3, and largely in Kathmandu. Moreover, medium-sized and especially large firms are disproportionately located in province 3 (Table 4.1). Firm-based employment is similarly concentrated in Kathmandu, followed by provinces 1 and 5, albeit at a distant second and third. When we consider the number of businesses per 1,000 population (Figure 4.1), Kathmandu has a very high density at 72 establishments per 1,000 population, more

[40] An establishment is a single economic unit. Businesses may comprise more than one establishment but located in different locations; this is the case for only 2 percent of establishments. In this report, we will use the terms "establishment" and "firm" interchangeably.

than double the national average of 32.[41] Manang has an even higher density at 74 establishments per 1,000 population, followed by Kathmandu, Bhaktapur (64), and Kaski (62). It is notable that firm density appears higher in the middle third of the country, especially in Gandaki Province (province 4) in addition to province 3. The highest physical concentration of firms per square kilometer is also in and around Kathmandu. This geographic measure is important because it is an indicator of how easily businesses can work with or trade with one another.

Table 4.1
Firms and firm-based employment by region (2018, all sectors)

	% of firms (by firm size)					
	All	Self-Empl.	2–9	10–49	50–99	100+
Province 1	18%	40%	56%	4%	0.2%	0.2%
Province 2	13%	42%	55%	3%	0.2%	0.2%
Province 3	31%	34%	60%	6%	0.4%	0.3%
o/w Kathmandu	14%	33%	60%	6%	0.4%	0.4%
Gandaki Province (4)	11%	35%	61%	4%	0.2%	0.1%
Province 5	16%	39%	57%	4%	0.2%	0.2%
Karnali Province (6)	5%	36%	60%	3%	0.1%	0.0%
Sudurpashchim Province (7)	7%	42%	54%	4%	0.2%	0.1%
Total	**100%**					
	% of firm-based employment (by firm size)					
	All	Self-Empl.	2–9	10–49	50–99	100+
Province 1	17%	12%	49%	21%	4%	14%
Province 2	11%	14%	50%	16%	4%	16%
Province 3	38%	8%	42%	24%	6%	21%
o/w Kathmandu	18%	7%	39%	22%	6%	25%
Gandaki Province (4)	10%	11%	53%	21%	4%	11%
Province 5	15%	12%	51%	20%	4%	13%
Karnali Province (6)	4%	13%	60%	20%	3%	4%
Sudurpashchim Province (7)	6%	14%	53%	23%	3%	6%
Total	**100%**					

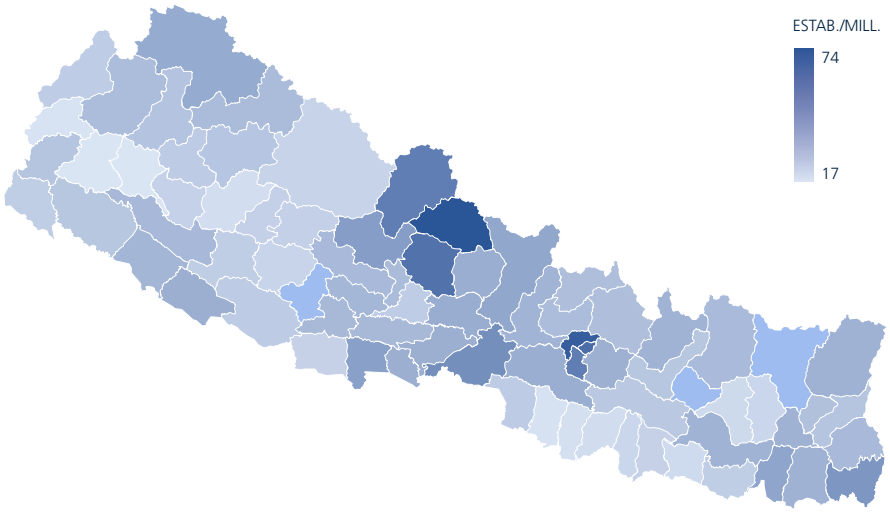
Source: Central Bureau of Statistics (2019).

The great majority of firms are micro-sized. Thirty-eight percent of firms captured in the Economic Census are self-employed owners with no employees, and another 58 percent have 2–9 employees; together these account for three-fifths of all firm-based employment (Table 4.2). Over 27,000 firms (3 percent) have 10–19 employees, and employ nearly 353,000 workers. Although there are only 1600 firms with 100–499 employees and 171 firms with over 500 employees, these account for 9 and 6 percent of total employment in the firm sector, respectively.

The size distribution of manufacturing firms was similar to that of the entire economy, albeit with more large and very large firms. Ninety-five percent of manufacturing firms had 1–9 employees whereas less than 1 percent of firms employ more than 100 workers but account for one-third of manufacturing employment (bottom of Table 4.2). This distribution is unchanged compared to the 2012 manufacturing

[41] By way of comparison, the UK has a business density of around 107 per 1,000 population.
[42] Includes one-person establishments.

Figure 4.1
Establishment density (per 1,000 population)[42]



Source: Central Bureau of Statistics (2019).

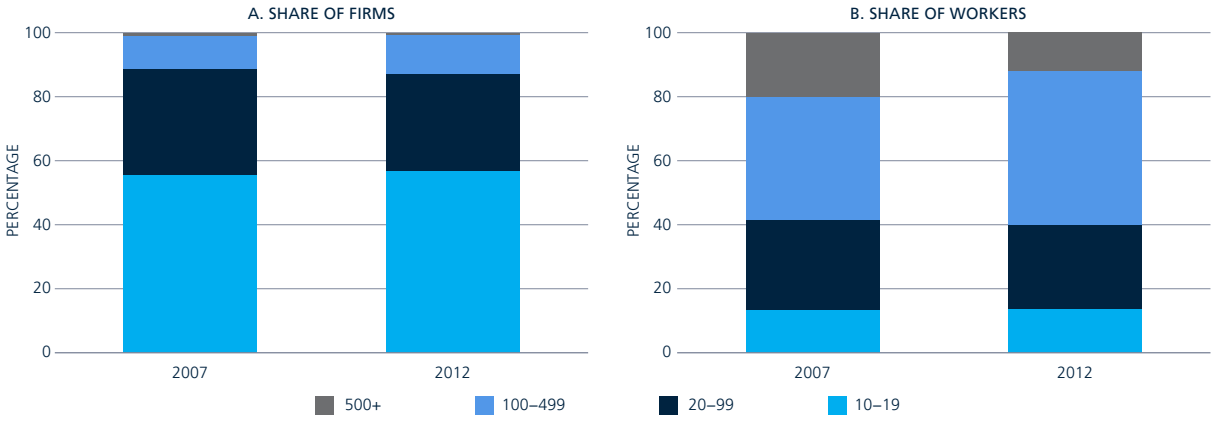
survey (for firms with 10+ employees), although there was some expansion in the employment share of large firms employing 100–499 workers between 2007 and 2012, and a comparable reduction in the employment share of firms with over 500 workers (Figure 4.2).

Table 4.2
Distribution of firms and employment by firm size (2018)

	Entire economy					
	Establishments	% of ≥10	% of all firms	Employees	% of ≥10	% of all firms
Self–employed	346,100		37.5%	346,100		11%
2–9	534,442		57.9%	1,549,750		48%
10–19	27,035	63%	2.9%	352,775	26%	11%
20–99	13,992	33%	1.5%	486,113	37%	15%
100–499	1,616	4%	0.2%	302,568	23%	9%
500+	171	0.4%	0.0%	190,151	14%	6%
Total	**923,356**		**100.0%**	**3,227,457**		**100%**
	Manufacturing sector only					
	Establishments	% of ≥10	% of all firms	Employees	% of ≥10	% of all firms
Self–employed	36,065		34.7%	36,065		7%
2–9	62,918		60.5%	197,816		39%
10–19	2,714	53%	2.6%	34,902	13%	7%
20–99	1,629	32%	1.6%	66,250	24%	13%
100–499	686	14%	0.7%	132,393	48%	26%
500+	46	1%	0.0%	43,097	16%	8%
Total	**104,058**		**100.0%**	**510,523**		**100%**

Source: Central Bureau of Statistics (2019).

Figure 4.2
Distribution of manufacturing firms with 10+ workers (by firm size, 2007 and 2012)



Source: National Census of Manufacturing Establishments 2007, 2012.

Over half of all firms are in wholesale and retail trade, which employ the largest share of workers, mostly in micro firms. The nearly 500,000 wholesale and retail trade firms in Nepal employed close to a million workers in 2018, equivalent to nearly one-third of all firm-based employment, paid and unpaid (Figures 4.3 and 4.4). But one-fifth of this was in self-employment and another 42 percent was in firms with only 2 employees (Figure 4.5). Restaurants and hotels are the next most important sector in terms of number of establishments, but here, too, most firms are micro (44 percent have 1–2 employees).

The manufacturing sector has a significant share of micro-firms and an equivalent share of large firms. As shown in Figure 4.4, manufacturing firms employed 16 percent of all firm-based workers in Nepal in 2018. One-third of these manufacturing workers were in firms with less than 5 employees, one-third were in SMEs with 5–99 employees, and one-third were in large and very large firms (100+ workers). Considering manufacturing subsectors, the survey data for 2012 show that non-metal manufacturing employed 4 in 10 manufacturing workers in 2012. For firms with 10 or more workers, there was an increase in the employment share of non-metal manufacturing between 2007 and 2012, concurrent with a contraction in textile manufacturing employment (Figure 4.6).

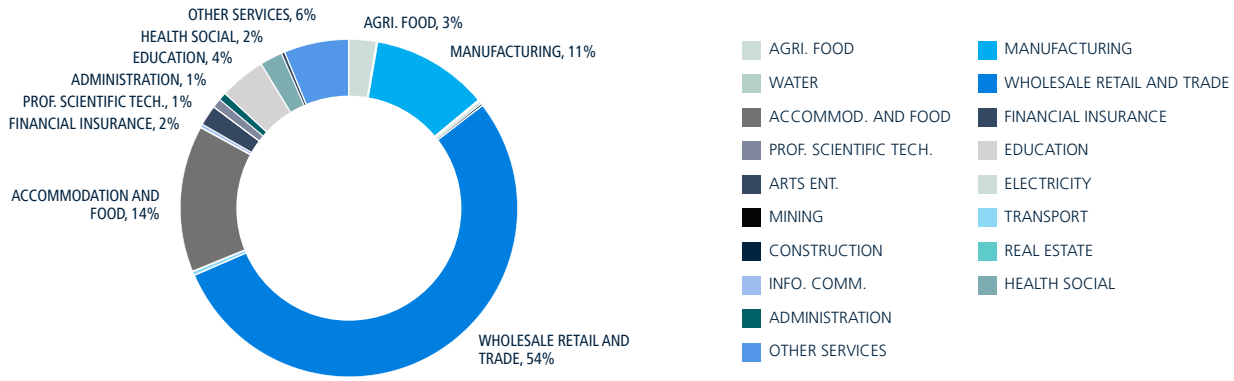
Micro and small firms tend to have lower productivity than large firms, but there is a weaker association between firm size and productivity at the large end of the spectrum in Nepal's manufacturing sector.[43] Many of the very large manufacturing firms have low productivity, as illustrated in Figure 4.7 (note the large amount of variation as firms get larger).[44]

Gender imbalances are pervasive in the firm sector. Men hold more firm-based jobs than women, consistent with the high proportion of women in unpaid agriculture. The share of women in total firm-based employment is 38 percent, and is relatively constant across firm size (Figure 4.8). Beyond small firms, women have a limited presence as owners. In 2018, there were 120,000 female firm owners with at least one employee (excludes self-employed), compared to 387,000 male firm owners, equivalent to a male-to-female ratio of 3.2 (slightly higher than the 2.9 male-to-female employer ratio reflected in the NLFS data). When we consider the gender ownership ratio by firm size, however, starker differences emerge: among firms with 10–19 employees, male owners outweigh female owners by a ratio of 8:1, and the ratio rises as firms get larger, surpassing 16:1 for firms employing 100 workers or more.

[43] We measure firm productivity as value added per worker.

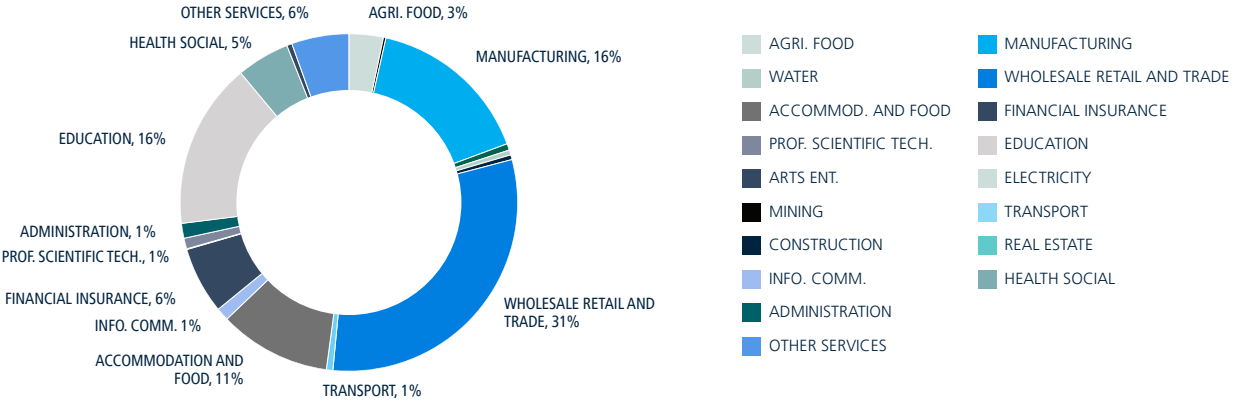
[44] Regression analysis confirms that very large firms tend to be more productive, but once controls such as foreign ownership and capital assets are included—themselves associated with higher productivity and larger firm size—the positive effect of size is diminished (Annex Table A.6). This result is consistent with the regression in Annex Table A.7 in which we estimate the correlates of firm size and find a negative correlation with firm productivity (measured in productivity quartiles).

Figure 4.3
Sector breakdown of firms (2018)



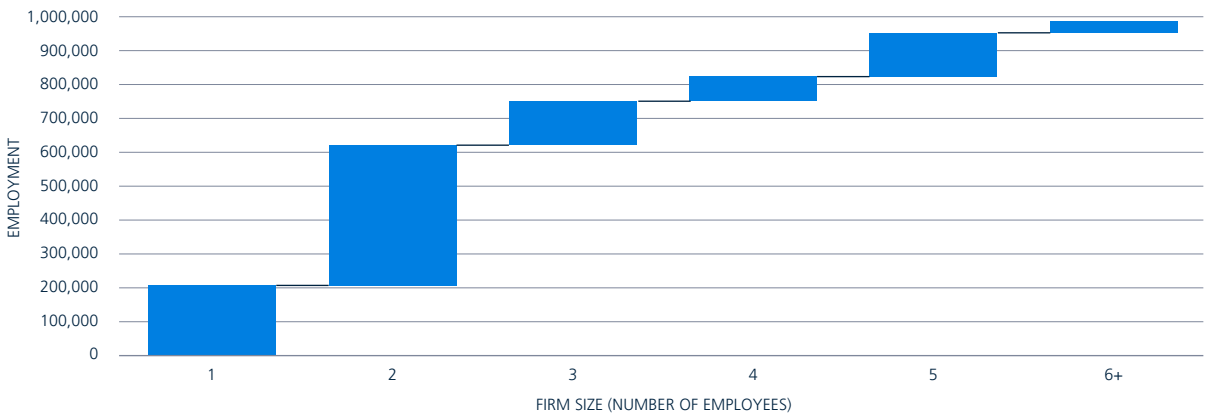
Source: Central Bureau of Statistics (2019).

Figure 4.4
Sector breakdown of employment (2018)



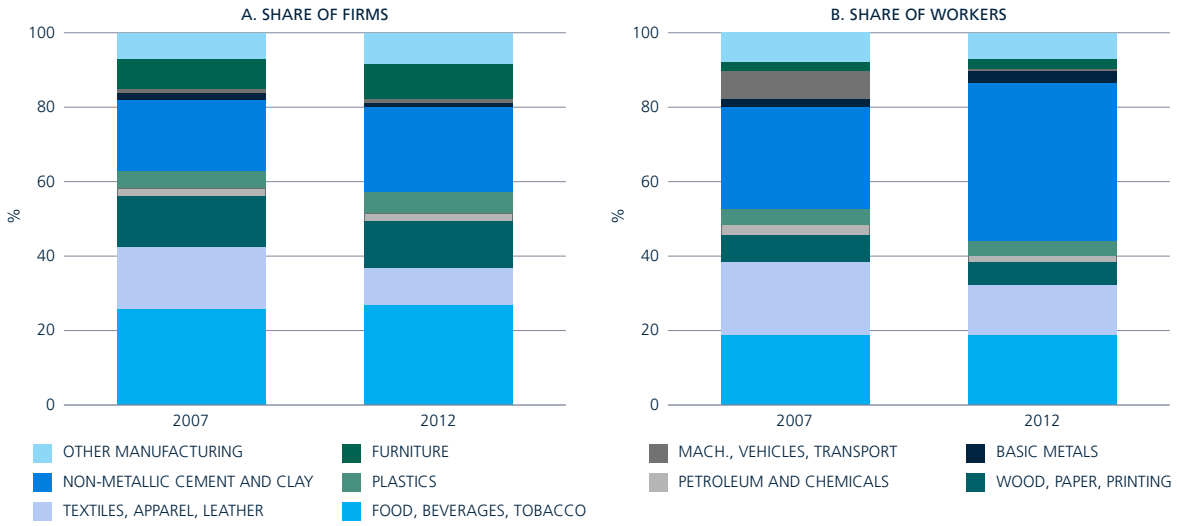
Source: Central Bureau of Statistics (2019).

Figure 4.5
Employment in wholesale and retail trade by firm size (2018)



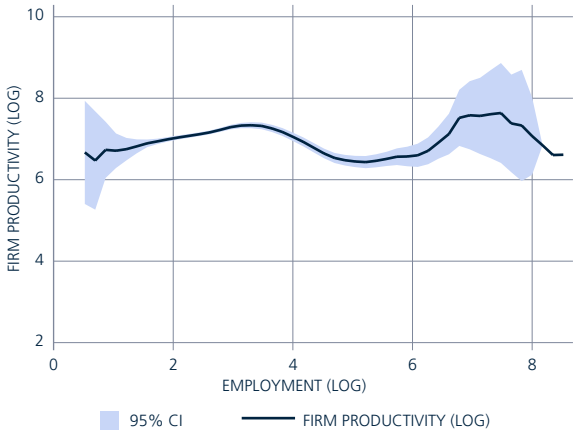
Source: Central Bureau of Statistics (2019).

Figure 4.6
Firm and employment breakdown of manufacturing subsectors, 2007 and 2012



Source: National Census of Manufacturing Establishments 2007, 2012.

Figure 4.7
Distribution of manufacturing firm productivity by firm size (log employment, 2012)



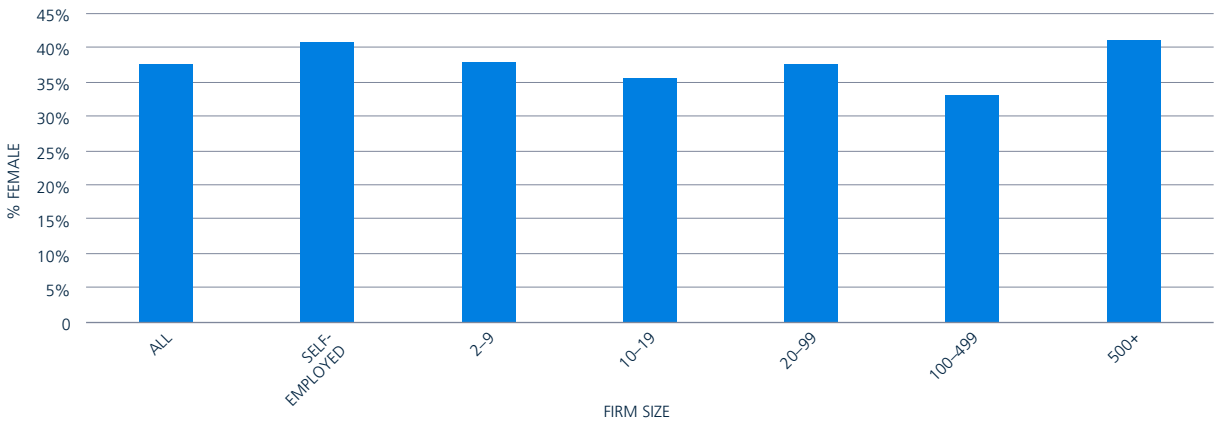
Source: World Bank estimates using 2012 National Census of Manufacturing Establishments data.

Why are most firms small? What factors enable firms to be productive and generate wage employment? The analysis that follows tests for the correlates of firm size and productivity in the manufacturing sector to help identify impediments to creating more firm-based jobs.[45]

The vast majority of young firms are micro-sized. The Economic Census notes that 58 percent of all firms documented in 2018 began operations during the last 5 years, namely between April 2015 and April 2018. Nearly 200,000 new firms were launched in 2018 and the first two months of 2019, but 44 percent of these were own-account workers, and another 38 percent had 2 employees. Only 1,800 new start-ups in 2018 had 10–19 employees, and these created nearly 15,000 new jobs. Among young firms—defined as 1–5 years in

[45] Without access to the 2018 Economic Census dataset, our analysis relies on older datasets from 2012 and 2007 to analyze the correlates of firm productivity, firm size and average firm wages in manufacturing firms. Whereas the results will not necessarily hold in 2018 for the entire population of firms—i.e., all firm sizes and from all sectors—it provides additional insight that may be relevant at least for manufacturing firms with 10+ employees.

Figure 4.8
Female employment share in firms (%, by firm size, 2018)



Source: Central Bureau of Statistics (2019).

age—there are about 35,000 that have 5–99 employees, and were responsible for adding 346,000 jobs to the economy. These data suggest a relatively high degree of firm entry, but very much dominated by 1- and 2-person firms; this finding is consistent with the conclusion of the labor supply analysis that labor demand is inadequate to absorb job seekers into good jobs.

Larger manufacturing firms are likely to employ a higher share of women, other things being equal (including controlling for sub-sector; Annex Table A.7). Foreign ownership and public ownership are also positively associated with firm size.

Larger firms pay higher wages, except those employing more women, and more productive firms pay higher wages. The positive association between firm size and wages strengthens for larger firms vis-à-vis the reference category of 10–19 employees,[46] even when additional firm characteristics are considered; Annex Tables A.8 and A.9). Between 2007 and 2012, the wage gaps between smaller and larger firms increase. When we control for sector, firms with higher shares of female workers pay significantly less, on average. Controlling for the level of capital assets and firm productivity reduces this negative association, but it nevertheless remains large and statistically significant. There is a positive correlation between average firm wage and firm productivity, and the size of these positive returns increases with productivity. These results imply that the best-paid manufacturing jobs are found in larger firms and those with higher productivity levels.

Unlike some countries, exporting or foreign-owned firms in Nepal do not pay higher wages. In 2018, just one percent of firms were foreign-owned, although this share rises to nearly 5 percent for firms employing more than 500 workers. The regression analysis on the 2012 manufacturing survey data finds no evidence that foreign firms or exporting firms pay higher wages, other things being equal (Annex Table A.8).[47]

High industry concentration may be inhibiting competition and growth. Between 2007 and 2012, the composition of the top grossing manufacturing activities changed, as some industries became more concentrated. In 2007, the top grossing manufacturing subsector was structural metal products (ISIC rev. 4 industry 2511). By 2012 the industry had dropped to third place, concurrent with the industry becoming more concentrated; the share of sales controlled by the top 4 firms rose from 69 percent to 91 percent (Table 4.3). Sales of manufactured grain mill products (1061) ascended from third to first place, although this sector's production is dispersed among a larger number of firms. The manufacture of basic iron and steel (2410) jumped into the top 3, controlled by a small number of dominant firms (the top 4 firms account for 62 percent of all sales). New sectors that appeared in the top 10 in 2012 include the manufacture of refractory products (2391) and prepared animal feeds (1080).

[46] Recall that the dataset excludes firms with fewer than 10 workers.

[47] Although foreign firms export at a higher rate, not all exporting firms are foreign and not all foreign firms export.

Table 4.3
Industries with the largest market shares and the extent of concentration (2007, 2012)

	Four-digit Industry Code	Share of manuf. sales	Share of manuf. labor force	Share of subsector sales by top 4 firms
2007	Manufacture of structural metal products (2511)	11%	3%	69%
	Manufacture of vegetable and animal oils and fats (1040)	9%	2%	46%
	Manufacture of grain mill products (1061)	8%	4%	10%
2012	Manufacture of grain mill products (1061)	11%	5%	9%
	Manufacture of basic iron and steel (2410)	10%	2%	62%
	Manufacture of structural metal products (2511)	9%	2%	91%

Source: World Bank staff estimates using 2007 2012 National Census of Manufacturing Establishments data.

The analysis that follows takes a closer look at Nepal's SME sector to provide insights into the factors that affect smaller firms' capacity to survive and grow.

4.2 SMES: OPPORTUNITIES AND CHALLENGES FOR CREATING JOBS

The predominance of micro and small firms suggests that not all segments of the private sector are able to expand production and add jobs. Whereas the largest firms create a lot of jobs, as in many countries, the challenge is fostering more firms to grow and become large, thereby generating employment. Nepal's small firms must be struggling to expand production and sales.

We studied[48] **Nepal's small and medium-sized enterprise (SME) sector to understand the role it plays in Nepal's labor market and diagnose constraints that deter entrepreneurs from expanding their businesses.** The study was based primarily on a survey of 932 firms carried out during June-August 2019 (details of the survey are in Box 4.2). The survey was complemented by a set of in-depth interviews with a small subset of surveyed firms, a broad canvassing of business support organizations nationwide, and interviews with key private sector agents including employers' associations, investors, incubators and financial institutions. The discussion here reflects the survey findings, and therefore does not perfectly reflect the full population of Nepal's SMEs. Nevertheless, the survey sample is sufficiently large and diverse to provide relevant insights for understanding some key constraints to private sector development.

The survey focuses on firms with 5–49 employees, although it includes firms with less than 5 and more than 99 employees. Over a quarter of firms in the sample (28 per cent) employ fewer than 5 salaried staff, and two-thirds employ 5–49 salaried staff (Table 4.5).[49] Note that some firms in the 1–4 employee category had fewer than 5 **salaried** employees but more that 5 **total** employees. With respect to firm ownership, 13 percent of firms in the survey are women-owned, and a further 4 percent have women owning more than half the business.

[48] The Jobs Group of the World Bank commissioned a study on the job growth potential of Nepal's SMEs. The study was led by IMC Worldwide, in conjunction with local partners Antarprerana and FACTS.

[49] The survey focuses on firms with 5–49 employees, although it includes firms with less than 5 and more than 99 employees. Over a quarter of firms in the sample (28 per cent) employ fewer than 5 salaried staff, and two-thirds employ 5–49 salaried staff (Table 4.5). Note that some firms in the 1–4 employee category had fewer than 5 salaried employees but more that 5 total employees. With respect to firm ownership, 13 percent of firms in the survey are women-owned, and a further 4 percent have women owning more than half the business.

BOX 4.2: SME SURVEY

A survey of 932 micro, small and medium-sized firms, excluding self-employment, was conducted in 6 districts of Nepal—Chitwan, Kaski, Kathmandu, Morang, Parsa and Rupandehi—from June to August 2019. These districts were selected to capture the main commercial centers of economic activity as well as a sample of more rural districts. The survey is not statistically representative, and focuses on 4 sectors: agri-processing (mostly food processing but includes some agricultural firms producing livestock, crops, and honey), manufacturing, tourism (including hospitality), and other services (including retail firms and technology and software firms). The face-to-face survey covered questions on firm characteristics such as employment, capital and other inputs, sales volume, main clients, and constraints to expanding operations.

Table 4.4
Survey population

	Agribusiness	Manufacturing	Tourism	Services	Total
Kathmandu	28	47	75	90	**240**
Chitwan	37	52	52	60	**201**
Morang	45	64	26	49	**184**
Parsa	19	10	14	25	**68**
Kaski	35	32	18	38	**123**
Rupandehi	35	35	17	29	**116**
Total	**199**	**240**	**202**	**291**	**932**

The survey was complemented by in-depth semi-structured firm interviews (3–4 in most districts) and a small focus group discussion, with the aim of exploring some underlying challenges in more detail and gain additional insights.

Source: IMC Worldwide (2019).

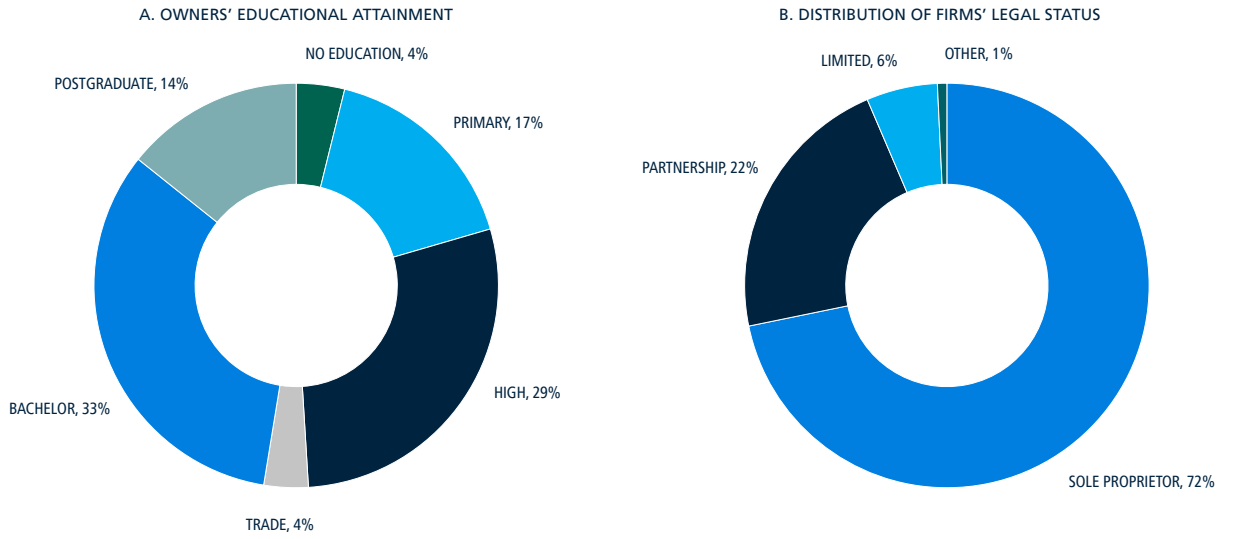
Table 4.5
Sample decomposition by firm size

Permanent Staff	Percentage
0–4	28%
5–9	30%
10–49	38%
50–99	3%
100+	1%

Source: IMC Worldwide (2019).

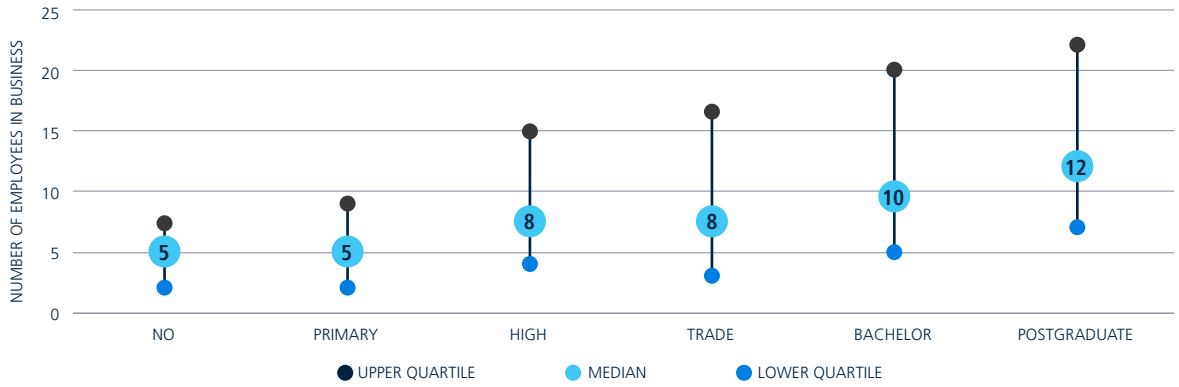
The education level of SME owners spans from low to high, but entrepreneurs with higher education seem to have larger firms, higher revenues and higher investment. About one-third of firm owners in the sample have a secondary or trade school/vocational education, another one-third have a university degree, and another 14 per cent have a post graduate qualification (Figure 4.9). The median firm size for those with no or only primary education is 5 employees, and rises to 12 for those with a postgraduate qualification (Figure 4.10).

Figure 4.9
Owners' educational attainment and distribution of firms' legal status



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.10
Employment by educational attainment (based on salaried staff)



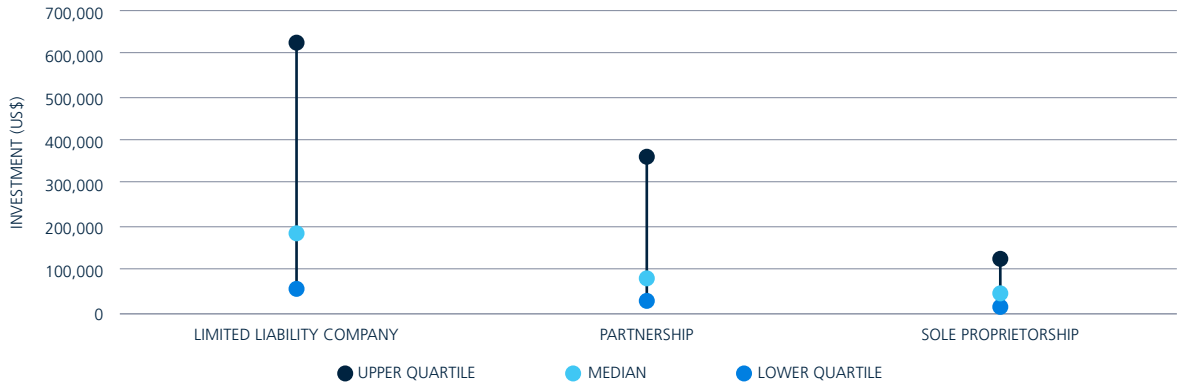
Source: SME survey 2019 (IMC Worldwide 2019).

Firm revenue rises with the education level of the firm owner (this result was confirmed through regression analysis).[50] Investment largely follows the same pattern; owners with a postgraduate degree have the highest median investment level. This positive link between firm size and owner's education could mean that more educated owners start bigger firms, or that more educated owners are more successful in growing their firms (explored further below).

Most firms are sole proprietors. Nearly three-quarters of firms are sole proprietorships,[51] even some very large firms. Only 22 percent are partnerships and 6 percent are limited liability companies (LLCs). This may suggest that owners perceive moderately low risk and do not need the protection conferred by limited liability, or may not be aware of the benefits of limited liability. Limited liability companies and partnerships are much larger, on average, compared to sole proprietors, and have fewer unpaid family members working in them. LLCs

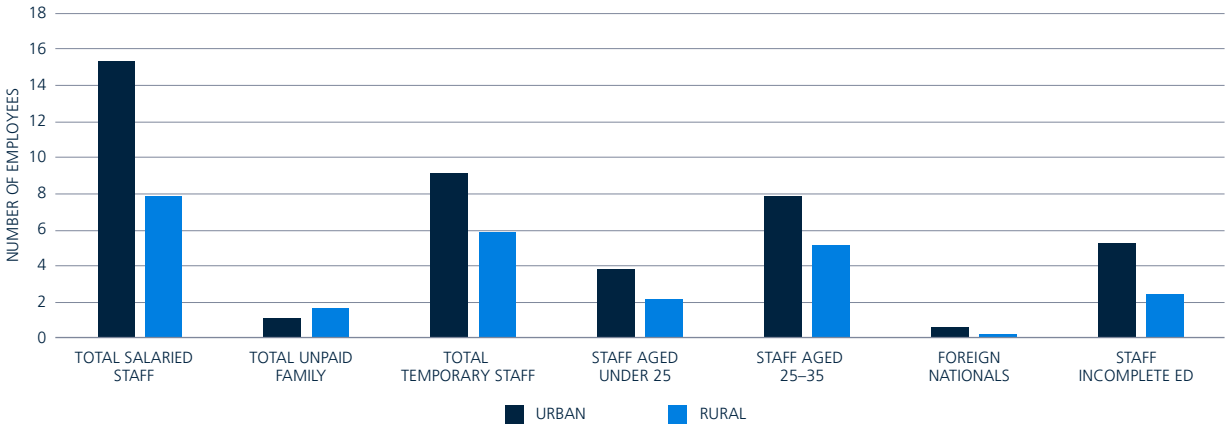
[50] Results reported in IMC Worldwide (2019), appendix 10.
[51] This share is comparable to that in the World Bank Enterprise Survey (World Bank 2013).

Figure 4.11
Investment by legal status



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.12
Workforce profiles of urban vs. rural firms



Source: SME survey 2019 (IMC Worldwide 2019).

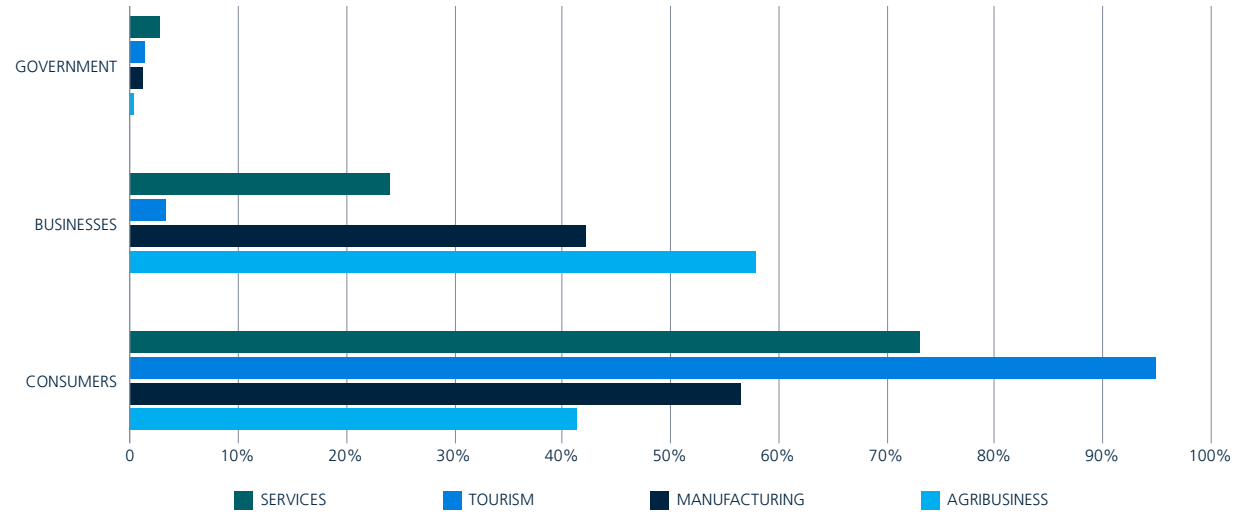
have significantly higher levels of investment compared to sole proprietorships, both in terms of median and upper quartile investment levels, followed by partnerships (Figure 4.11). While not surprising, this implies that businesses are more likely to incorporate if they need to raise high levels of capital.

Urban firms are larger than rural firms. Urban businesses in our survey employ almost twice as many people on average—15 salaried staff in urban locations versus 8 in rural locations. Urban firms have significantly fewer unpaid family members (1 vs. 1.7) and employ more foreigners and a higher share of staff with only basic education (Figure 4.12).

SMEs do not rely much on foreign workers. Just 3 percent of the total workforce of surveyed firms were foreigners. When we compare "opportunity" entrepreneurs with "necessity" entrepreneurs,[52] opportunity entrepreneurs averaged slightly more foreign staff (0.7 foreign staff out of an average of 16.5 employees).

[52] Entrepreneurs are motivated by different reasons to start a business, varying from necessity to perceived opportunities. Based on responses to a survey question on motivations, we classified entrepreneurs as "necessity" entrepreneurs if they stared their business as the only employment option or to supplement other income. We classified them as "opportunity" entrepreneurs if they started their business to solve a problem or to seize a perceived opportunity in the market.

Figure 4.13
Main customer groups by sector

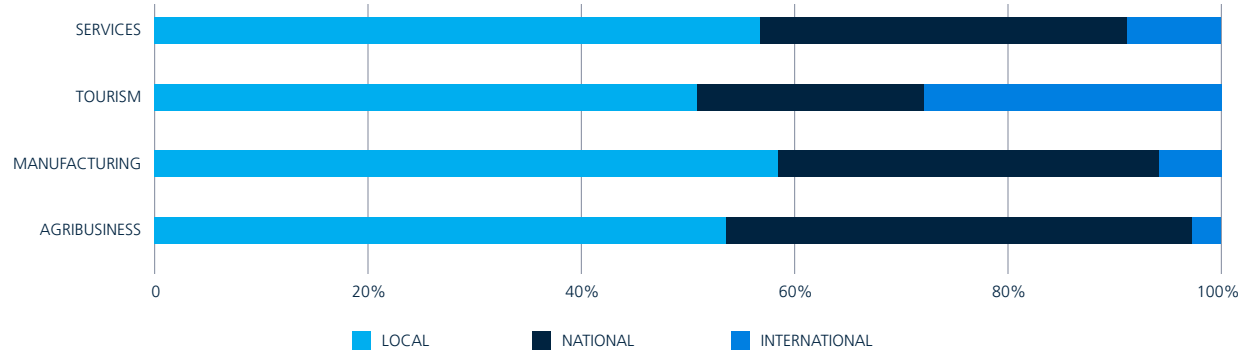


Source: SME survey 2019 (IMC Worldwide 2019).

Manufacturing firms were likely to employ more foreign workers compared to SMEs in other sectors, averaging 1 foreign staff out of a total staff of 14.6.

Most SMEs are oriented to meeting domestic consumer demand. A majority of surveyed businesses primarily sells directly to consumers rather than to other businesses or to government. This is almost exclusively the case for tourism firms, but also largely for service sector firms (Figure 4.13). Urban firms are particularly oriented to consumers while rural businesses, especially rural agribusiness, mostly sell to other businesses, including food products wholesalers and retailers. Over half of firms sell mainly to a local client base and around one-third sell nationally; only 11 percent of surveyed SMEs export.[53] Among those that export, a median of 40 percent of their total production is destined for foreign markets. After tourism, manufacturing firms are the biggest exporters in our survey (Figure 4.14). Exported products include silk, felt, garments, ginger, spices,

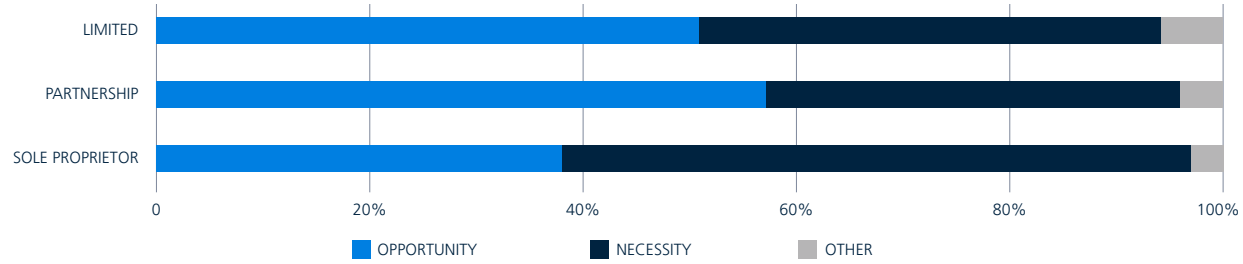
Figure 4.14
Comparing domestic and export destination markets



Source: SME survey 2019 (IMC Worldwide 2019).

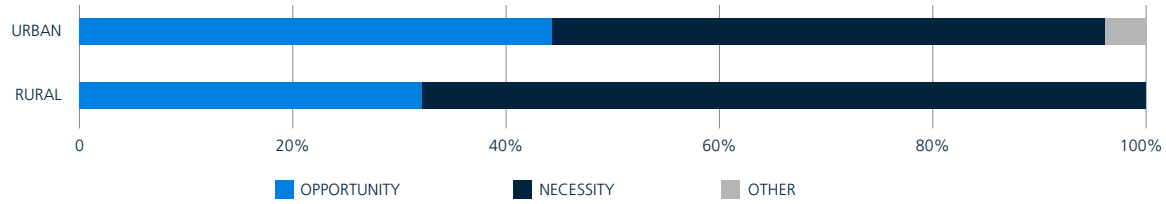
[53] This is likely to be understated because the export rate for tourism firms is reported to be very low, suggesting an error in the survey questionnaire wording or implementation. The majority of tourists in Nepal are from other countries; tourism services sold to this audience should be classified as exports. In the SME survey, 52 of respondents in Chitwan were reported to be in the tourism sector, but none claimed to be selling to foreign tourists. Overall, 56 of the 202 businesses in the tourism sector (28 per cent) see themselves as selling internationally.

Figure 4.15
Reason to be in business by legal status



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.16
Reason to be in business by urban vs. rural location



Source: SME survey 2019 (IMC Worldwide 2019).

handmade bags, furniture, software, pickles and carpets.[54] Seven in 10 rural businesses mainly sell locally and almost none sell internationally. The many reasons for this include transport challenges, difficulty in accessing markets, knowledge about markets, or lack of capacity. Firms in Kathmandu are the most likely to export; 29 percent of Kathmandu-based firms in the survey mainly target foreign markets.

More than half of surveyed SMEs came about due to "necessity" entrepreneurship, while 43 percent were "opportunity" entrepreneurs. These shares do not vary much by sector, although slightly more than half of service sector firms are opportunity entrepreneurs, but this may be due to lower perceived risks of service activities. We find a higher proportion (59 per cent) of sole proprietors are necessity entrepreneurs, whereas partnerships and LLCs are more likely to be opportunity entrepreneurs (Figure 4.15).

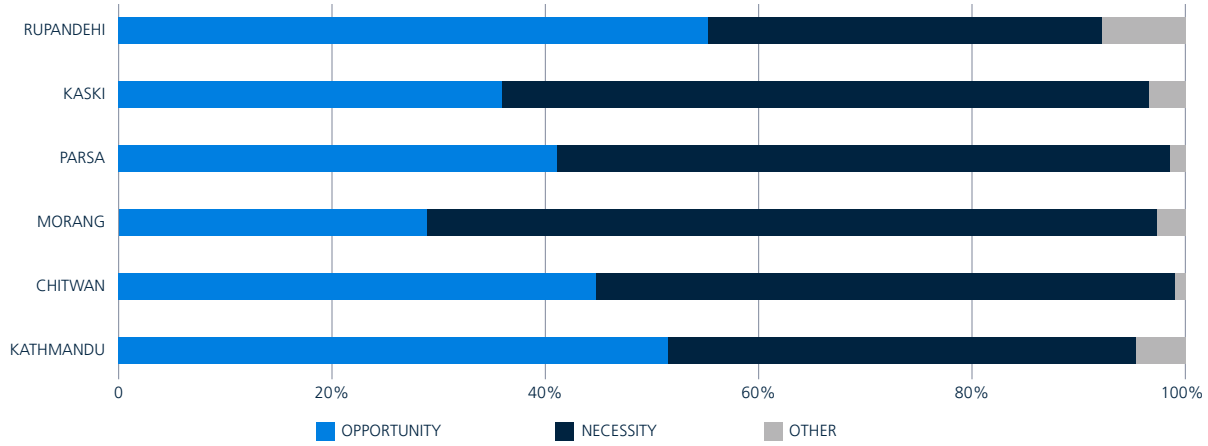
Rural firms are more likely to be necessity entrepreneurs. Over two-thirds of rural entrepreneurs started because it was the only way to find employment or to supplement their income (Figure 4.16). This observation is consistent with the limited employment opportunities available in rural settings, as well as the greater ease of reaching consumers in large urban markets. Some 50 percent of respondents in Kathmandu and 55 percent in Rupandehi were opportunity entrepreneurs. In Morang and Kaski, by contrast, more firms were launched out of necessity. This may be because Rupandehi has experienced significant development recently in terms of infrastructure, local development, and diversifying businesses, whereas Morang (dominated by trading and industry) and Kaski (dominated by tourism) have not changed much (Figure 4.17).

Women are more likely to start a business because they lack other employment options. Recall from the labor supply analysis above that the share of female employers is very low. The SME survey found that 45 percent of men are opportunity entrepreneurs, compared to only 36 percent of women.

Opportunity entrepreneurs are more likely to export and grow. Although a small number of firms in our sample sell internationally, it is predominantly opportunity entrepreneurs that export. Among medium-sized and

[54] The largest single sub-sector in our survey was carpets; of the 14 manufacturers that said that they export, six (43 per cent) were carpet manufacturers.

Figure 4.17
Reason to be in business by district

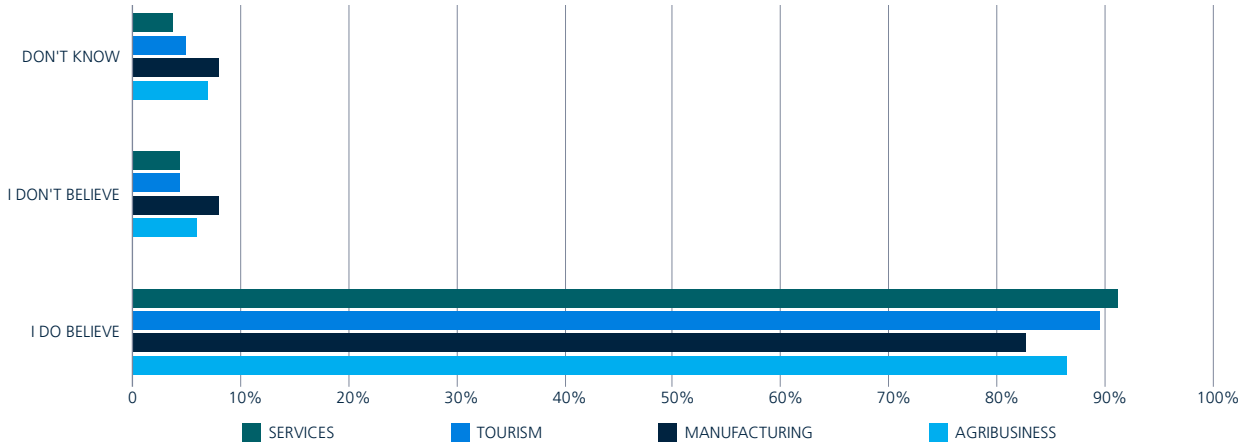


Source: SME survey 2019 (IMC Worldwide 2019).

larger firms—those employing 10–99 employees and above—owners are more likely to have entered the market because they perceived an opportunity. Compared to necessity entrepreneurs, opportunity entrepreneurs—especially those entering to solve a problem—employ more workers (both salaried and temporary), employ more young workers (under 25 years, and 25–35 years), and employ less skilled staff. The latter may be because they need to hire staff but not many skilled staff are available. It is notable that a disproportionate share of these temporary staff, especially within businesses motivated to solve a problem, are trainees.

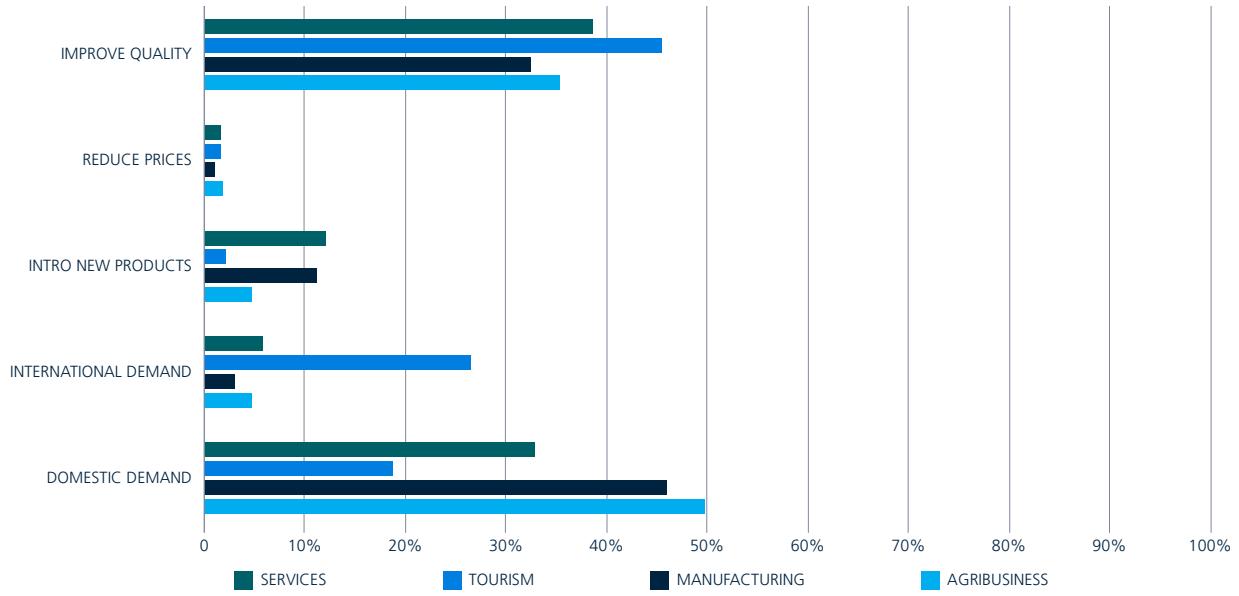
Despite a mixed record of sales growth over the preceding year, most firms are optimistic about their prospects for future growth. About 4 in 10 surveyed SMEs increased sales last year, about 3 in 10 saw flat sales, and the remainder experienced a decline in sales. No strong patterns emerge for this 1 year observation. Those that grew offered many explanations, including product quality improvements, expansion into new markets, and most importantly, growth in existing customer demand. When asked about future growth, the response was overwhelmingly positive and similar across sectors (Figure 4.18). Over one-third of SMEs indicated that future growth would come from increased domestic demand, and a slightly higher proportion cited the need to improve their product quality.

Figure 4.18
"Is there scope to grow your business?" (by sector)



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.19
How to grow successfully (by sector)



Source: SME survey 2019 (IMC Worldwide 2019).

But firms' optimism does not seem well-founded, because it reflects a passive attitude that assumes consumer demand will continue to grow. Given the mixed record of sales growth, we would expect firms to focus on introducing new products or look for new markets as ways to increase demand, especially in external markets, but these key aspects are not reflected in the data. About 1 in 3 firms acknowledges the need to improve quality, even more so among services and tourism firms; but fewer than 10 percent planned to introduce new products or target external markets[55] (Figure 4.19). Agribusiness and manufacturing are relatively more concerned with domestic consumers. The results do not vary much when comparing necessity and opportunity entrepreneurs (even though we might expect the latter to be focused on new markets or new products).

The top constraints to future growth relate to financing and skills. When asked what was needed to expand their operations, entrepreneurs were most constrained by insufficient working capital, followed closely by inadequate skills among their staff, and especially a lack of high-level skills (Figure 4.20). Agribusiness firms have the greatest need for additional working capital, while tourism firms most need to upskill their existing work force. Firms also express a need for equipment (except for tourism sector firms), but there is little demand for low skilled labor. The patterns of constraints are similar when compared across necessity and opportunity entrepreneurs, although firms seeking to solve a problem are most in need of highly skilled labor.[56]

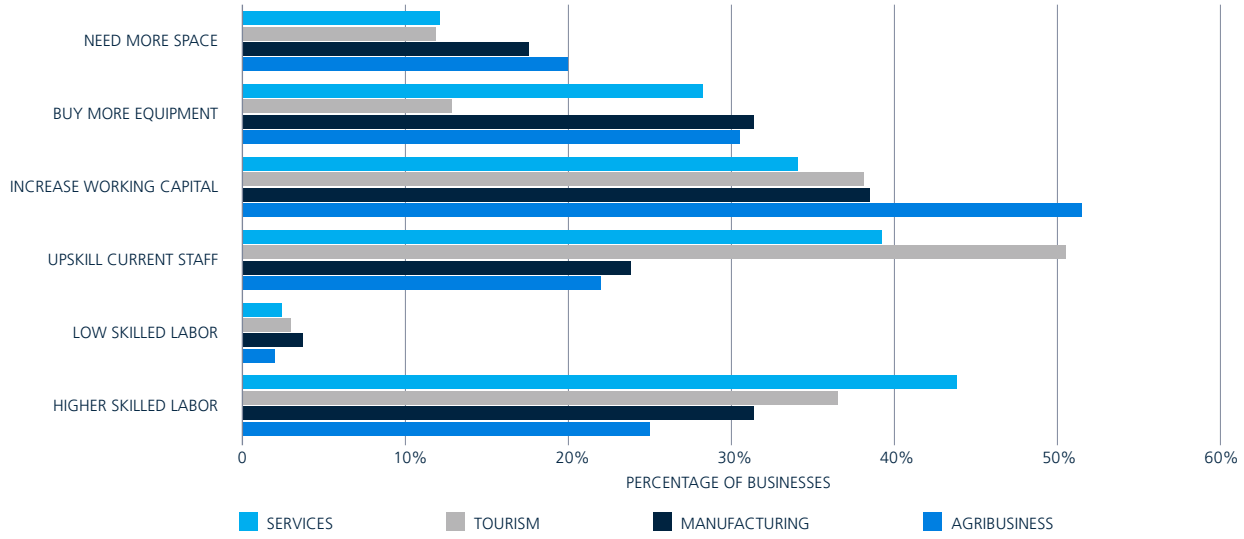
For surveyed firms expecting to grow, three-quarters plan to hire additional labor, but the projections appear optimistic. The desire to create new jobs spans all firm sizes and sectors. The number of anticipated new hires over the next 3 years varies as a share of current employment; the median number of additional workers is close to 7 for manufacturing firms and 5 for the other sectors. Aggregated across the entire sample of 932 surveyed firms, expected new hires would generate 4,600 new jobs, a 34 percent increase in just 3 years. The skills that employers are missing vary across the sample and by sector.[57] The most common response was "training" (given by 11 percent of respondents), followed by "technical" (10 percent), "communications and marketing" (5 percent), and "management skills" (2 percent). Most respondents did not specify the types of skills missing.

[55] Tourism firms were more likely to target international clients.

[56] Refer to IMC Worldwide (2019) for more detail.

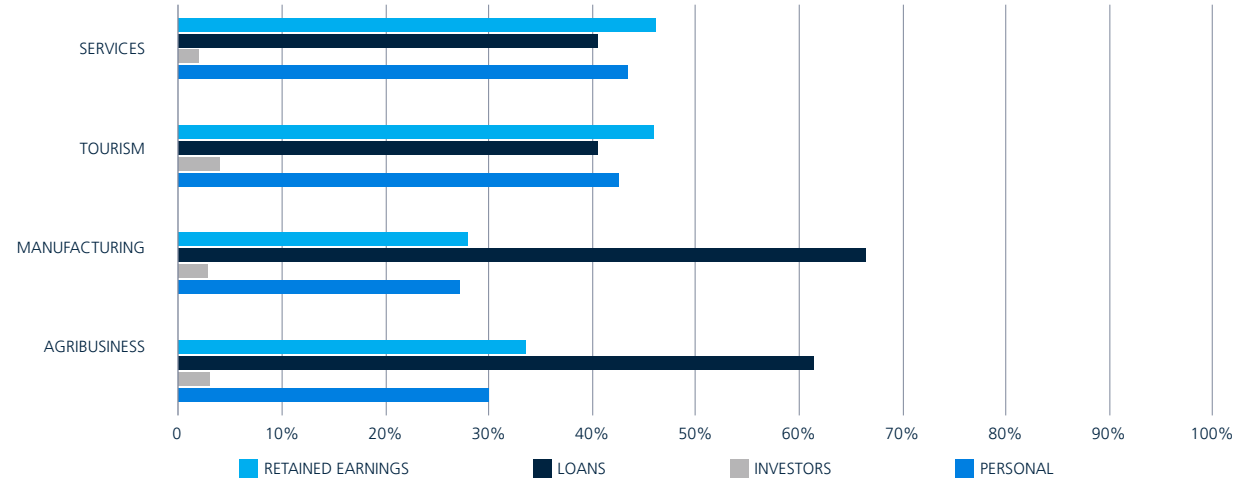
[57] For example, manufacturing firms have a higher need for people with technical skills; tourism firms do not. Agribusiness firms do not need much by way of communications.

Figure 4.20
Requirements to grow business



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.21
Financing sources to fund expansion

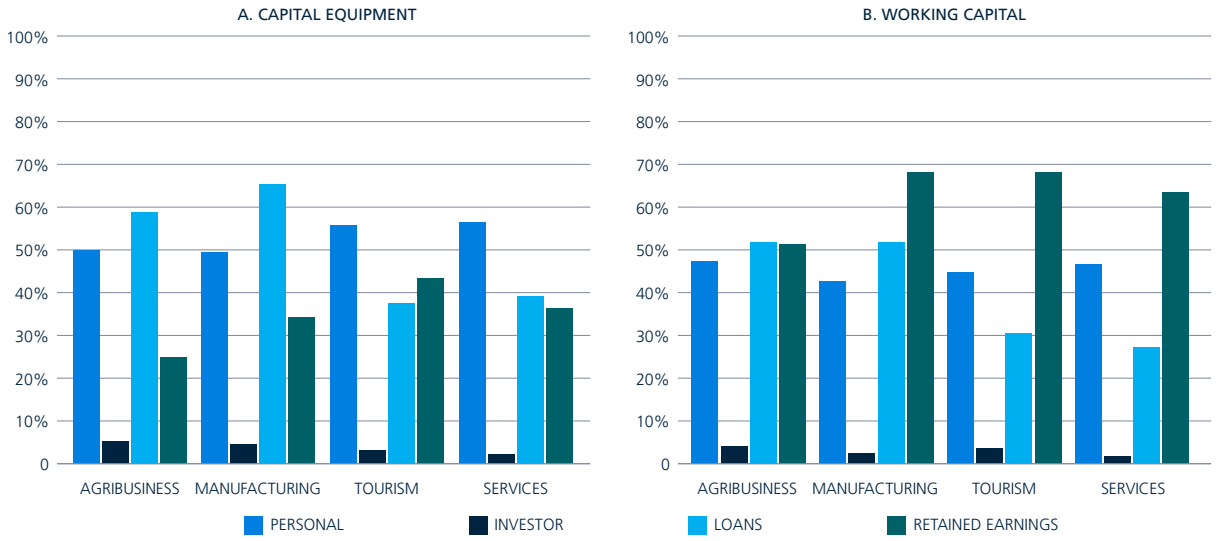


Note: Shares do not add to 100 percent because firms indicate multiple sources.

Source: SME survey 2019 (IMC Worldwide 2019).

Financing SMEs' future expansion is likely to prove challenging. Most surveyed entrepreneurs plan to seek loans to finance future expansion (Figure 4.21). But this appears inconsistent with the reality that few entrepreneurs rely solely, or even mostly, on formal loans to finance their operations. Most SMEs report using multiple sources of finance. For capital equipment, loans play a role—especially for agribusiness and manufacturing firms that rely on expensive machinery—but most firms also use their personal savings and retained earnings (Figure 4.22, left panel). For working capital, firms are more likely to rely on retained earnings, especially in the tourism and service sectors (Figure 4.22, right panel). Given that entrepreneurs report that working capital is already constrained, it is unrealistic to expect that retained earnings will increase adequately to

Figure 4.22
Sources of current finance for capital equipment and working capital



Note: Shares do not add to 100 percent because firms indicate multiple sources.

Source: SME survey 2019 (IMC Worldwide 2019).

finance future growth, especially for firms needing to invest substantial sums. This projected reliance on retained earnings suggests that firm growth will be slower than if firms were willing and able to take on more debt.

SMEs' use of third-party equity investment is limited. It is notable that most businesses do not consider approaching equity investors beyond their family members. This may be because they do not know how to find them, or it could reflect an unwillingness to dilute their ownership. Although we would expect LLCs to make more use of third-party equity investment, the survey results indicate this is not the case. In fact, financing preferences do not vary much by firms' legal status.

Nepal has a large network of subsidized micro-finance offerings by government and donors, but these mostly only serve micro-sized firms and are not a viable source for financing SME expansion. The Government of Nepal recognizes its role in subsidizing credit to private agents to stimulate new firm entry and growth, key to generating employment and fostering dynamic economic production.[58] Subsidized credit can be structured to support specific objectives such as increasing incomes in lagging regions and reducing poverty; indeed, the Government has focused much of its effort on rural and women-targeted micro-finance schemes which have extensive reach, especially in western Nepal. The list of banks and financial institutions licensed by the Nepal Rastra Bank (NRB), Nepal's central bank, includes 54 micro-finance institutions (MFIs), but their maximum loan size tends to be too low for most businesses, especially once firms start to grow.

SMEs can turn to some commercial lenders for finance, but potential borrowers often find them too expensive or cannot meet the creditworthiness and collateral requirements. To address this market failure, the Government has attempted to direct bank lending to specified priority sectors, which include agriculture and tourism, and to SMEs generally. Banks are supposed to allocate 25 percent of lending to businesses in priority sectors, but in reality, banks have little appetite for risk (consistent with their business model to lend depositors' savings while guaranteeing a small return on deposits) and thus charge interest and fees and require collateral to reduce their risk (Antarprerana 2018). Low levels of capital assets—notably land ownership—make it hard for entrepreneurs to qualify for loans, especially women because they typically lack

[58] MFIs, NGOs, savings and credit cooperatives (SCC) and the Agriculture Development Bank (ADB) can secure long-term loans of up to Rs.3,500,000 at an interest rate equivalent to the refinancing facility rate fixed by Nepal Rastra Bank. In turn, they can provide long-term loans to eligible individuals at an interest rate not more than four points higher.

property titles.[59] Banks will only lend to formally registered firms; as a result, banks lend very little to SMEs and commonly fail to reach their lending targets. Kamana Development Bank, which offers loans based on innovation, experience of the entrepreneur and the availability of collateral, struggles to find innovative firms to lend to, given the abundance of "copy-cat" start-ups—that is, firms that are simply duplicating what others are already doing, rather than innovating and doing it better.[60] Kamana Development Bank also asserts that most entrepreneurs have inadequate knowledge or experience and that most borrowers hope to have their loans written off rather than repaying.

Addressing collateral requirements is one pathway to improving creditworthiness, and the Government has taken some important initial steps. The recent passage of the new Credit Information Reporting Act and planned amendments to the 2006 Secured Financing Act are key to opening access to finance for collateral-constrained micro, small, and medium-sized enterprises (MSMEs), but the benefits given current market practices will take time to materialize. Increasing the market response to these reforms will require a robust communications strategy and accompanying technical assistance to counter market players' risk aversion to change current lending practices. The Government must address fiduciary and governance weaknesses in the existing credit guarantee program to accommodate demand and meet its obligations to creditors in the case of borrower default. At least one bank, State Bank of India (SBI), has stopped using the program, and is piloting its own innovative program, with donor support, to lend based on cashflow rather than on the balance sheet (that is, based on expected sales and profitability rather than on assets).

A small amount of non-bank commercial and impact investment targets emerging businesses. Just 7 local investment firms offer private equity or venture capital: BO2, Dolma, One to Watch, True North Associates, Jaguar Investments, Safal Partners and iCapital (Divakaran et al. 2018; IMC Worldwide 2019). They are all hampered to some extent by Nepalese legislation that makes investing quite hard. Development finance institutions provided the bulk of the funds' capital, including IFC and DFID. One to Watch aims for an internal rate of return (IRR) of 15 percent at the deal level; BO2, Dolma and True North Associates target an IRR of at least 20 percent (see IMC Worldwide (2019) for a detailed description). Financing provided by these firms tends to be in the range of US$100,00–500,000, which is beyond the means of many small firms but serves an important segment of the market—small and medium-sized growth entrepreneurs. Here, again, benefits to-date have been limited because of the small number of firms receiving support. Some of the constraints cited by potential investors include firms' low capacity to attract highly-skilled staff—since the best potential candidates tend to work elsewhere such as Delhi—and burdensome regulation—even registering a company name is not easy. The 2019 enactment of the Special Investment Fund (SIF) legislation—for which regulations are now being finalized—will support growth and development of the Venture Capital and Private Equity market. This growth would be strengthened by additional efforts to reduce existing constraints to foreign investment in SIFs, including, but not limited to, interest rate caps, cumbersome investment approval processes and current investment thresholds (the minimum foreign investment requirement is Rs. 50 million).

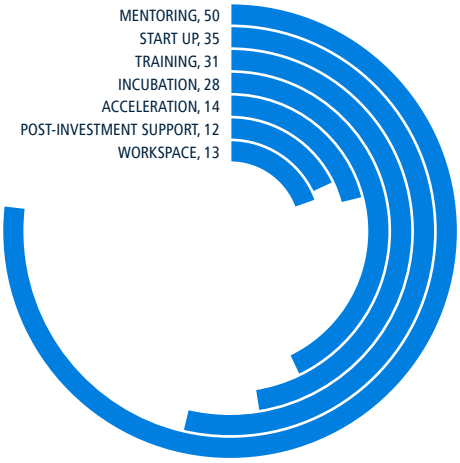
4.3 THE ROLE OF BUSINESS SUPPORT ORGANIZATIONS IN SUPPORTING SME PERFORMANCE

The extensive network of business support organizations in Nepal provides a wide array of services to help SMEs grow. The SME study commissioned for this report identified 76 local or national organizations that offer one or more of the following services: mentoring, start-up advice, training, incubation, acceleration, post-investment support, work space, and investor finance (Figure 4.23). These business support organizations (BSOs) span non-profit entities and for-profit firms that are self-financed and/or donor-financed through specific programs or projects. Most organizations serve Kathmandu and its immediate surroundings, but there is fairly even coverage over the rest of the country. Donor-funded enterprise and farmer support projects, concentrated in the west of the country, have been undertaken in partnership with Government ministries, including the

[59] Government is currently working to improve land administration through more updated cadastral maps.

[60] The presence of many similar firms is problematic because it creates significant cost competition, which in turn makes it harder for businesses to innovate since they have fewer spare resources, thereby reducing their sustainability.

Figure 4.23
Business support services (number of firms offering each service; excludes finance)



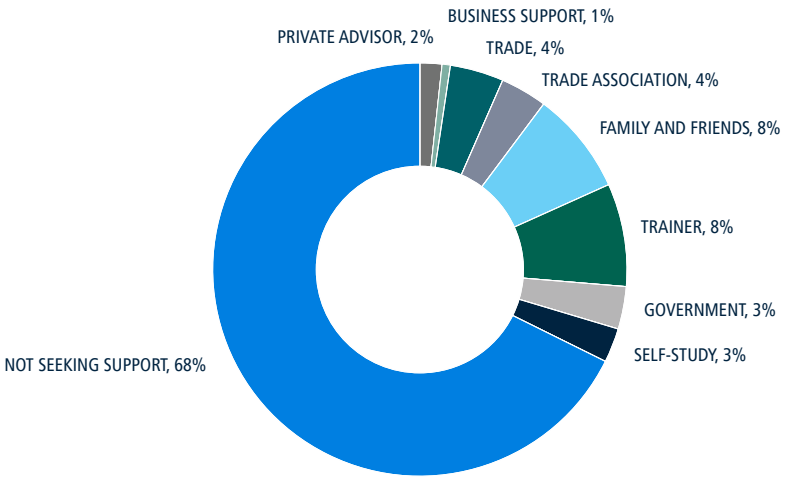
Source: SME survey 2019 (IMC Worldwide 2019).

Ministries of Industry, Agriculture Development, Tourism, Federal Affairs and others. Sometimes donor-funded projects work through existing BSO networks, but some projects support the creation of new BSOs.

The availability of business advice does not guarantee that firms will seek it. Take-up, especially via BSOs, has been relatively limited. Ensuring that advice and guidance are available is only part of the story. Businesses need to be willing to take advice, and the advice must be of good quality. One third of surveyed firms had received some form of advice, but in most cases this advice came from informal sources such as family, friends, government officials, other businesses, trade associations or personal research such as on the internet. Only 2 percent of sample firms sought advice from a private adviser, and only 1 per cent sought advice from a BSO (Figure 4.24).

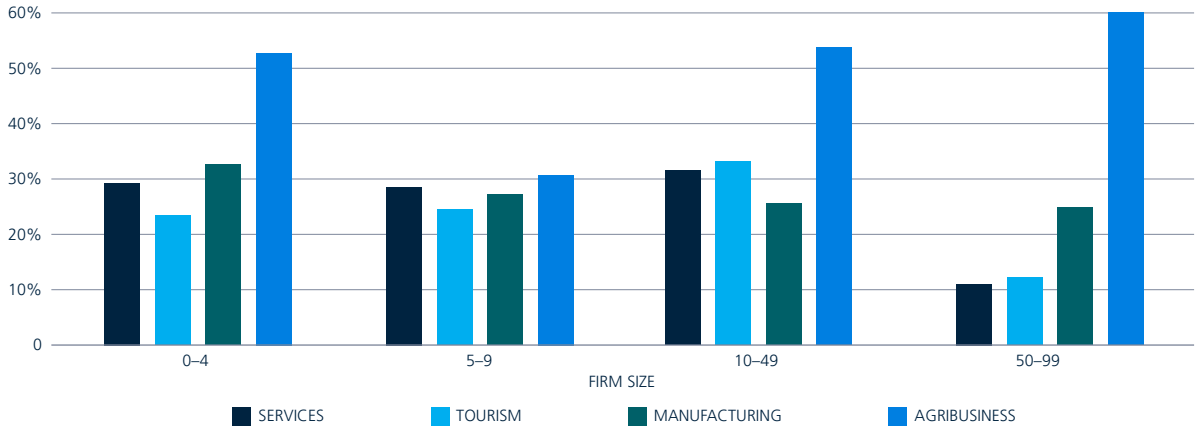
No strong patterns emerge related to the types of firms that seek advice. Firms of all sizes desire advice, although once firms move from small to medium-sized, take-up declines somewhat (Figure 4.25). Age of

Figure 4.24
Sources of advice and support



Source: SME survey 2019 (IMC Worldwide 2019).

Figure 4.25
Desire for advice by firm size and sector

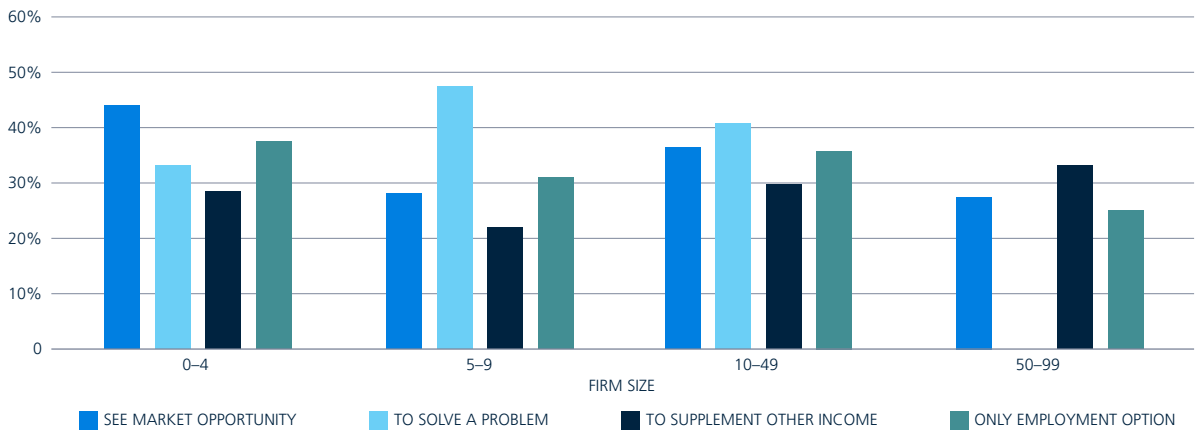


Source: SME survey 2019 (IMC Worldwide 2019).

the business and gender of the principal do not seem to make a difference to the propensity to seek advice. Agribusinesses are more likely to seek advice compared to firms in other sectors. More educated entrepreneurs are somewhat more likely to seek advice, mainly among those with a trade degree or bachelor's degree. Opportunity entrepreneurs who launched their firms to capture a market opportunity or solve a problem are more eager for advice, at least in the early stages of growing their business. This then tails off as firms grow (Figure 4.26).

SME survey results identify a disconnect between the need for advice and actual take-up rates. The low propensity of firms that have sought business support services contrasts with firms' acknowledgment of their need for advice. Nine in 10 SMEs surveyed indicated that advice was "somewhat necessary" for improving financial control (93 percent), or for branding and marketing (93 percent), or for securing finance (91 percent), but few firms have been proactive in finding solutions. The disconnect is particularly clear when we consider that only 1 percent of businesses thought they needed accounting skills, and only 5 percent of firms thought they lacked branding and marketing skills.

Figure 4.26
Desire for advice by firm size and reason to start



Source: SME survey 2019 (IMC Worldwide 2019).

BSO impact is also limited by the fact that most donor-financed BSOs and programs support a very small number of clients. Many programs are effective in supporting people to start a firm and to grow, but they operate at a scale that is too low to make a significant difference in the level of start-ups in Nepal. This is exacerbated by the low level of funding available to cover the cost of business support services, especially general advice. Potential entrepreneurs who have not yet started—and even entrepreneurs in the early stages of development—are unlikely to have the funds available to pay for business advice—a challenge observed all over the world. One non-profit BSO, Nepal Communitere (NC), offers workspace and access to a MakerSpace and an incubation program. Last year, they recruited 8 new clients, of whom 3 started a business; they have 16 workspace units of which 14 are occupied. Some business and trade associations offer business support programs or less formal mentoring and advice, as do a number of universities and colleges. A small number of commercial BSOs also targets new and growing firms. Business advisers, such as Antarprerana, provide pro bono support, but can only do so for 1 or 2 clients per year. It therefore will take a long time for these various efforts to add up to a tangible shift to a dynamic SME sector. There is also a risk of duplicating benefits, such as when donor-funded programs use existing networks to identify potential clients and end up all supporting the same business (see the example in Box 4.3).

BOX 4.3: R&D INNOVATIVE SOLUTION PVT LTD

R & D Innovative Solution is a private business services firm that aims to empower rural farmers, especially women, through providing information and training programs. It supports a network of 15,000 farmers and more than 300 agro-entrepreneurs. The company itself has received support over several years from multiple sources: Rockstart Impact (on business shaping and pitching), SPRING Accelerator (on learning and implementing human-centred design), Antarprerana (business partnership), Connect to Grow (digital platform development and enhancement), Safal Partners (day-to-day business operation and scale-up planning), Oxfam (scaling up and opening the way to a subsidised bank loan), Horticulture Innovation Lab, UC Davis (extension of low cost post-harvest loss management technologies) and M&S (local partnership & networking). The result is that R&D is growing strongly.

Source: IMC Worldwide (2019).

Some support targets non-micro firms that have demonstrated growth potential and therefore present a lower risk. Many BSOs and programs require businesses to achieve some minimum performance threshold before qualifying for support. For example, the Nepal Agri Business Innovation Centre (NABIC) requires its clients to have annual sales revenue of at least US$100,000 and a projected growth rate of 30 percent per year. In 2018, NABIC attracted 284 clients and currently supports 79 firms.[61]

Nepal does have programs that have succeeded at scale, such as the Ministry of Industry's Micro-Enterprise Development Programme and later Micro-Enterprise Development for Poverty Alleviation, which supported creation of 142,000 businesses and helped many thousands more to grow. The Rural Enterprises and Remittances Project has plans to support 60,000 businesses and create 90,000 jobs.

Challenges facing Nepal's SMEs are many, including those not specific to Nepal. Better SME performance requires multiple types of support from 1 or more complementary entities to help entrepreneurs meet these challenges. Advice and guidance are needed not only in the early stages of start-up but throughout a firm's lifecycle, including the growth stage, precisely to foster firm growth and job creation.

[61] NABIC has received seed funding towards the cost of its establishment and first 18 months of operation from the World Bank's InfoDev program via the Project for Agricultural Commercialization and Trade (PACT) under the Ministry of Agricultural Development.


CHINA APPLES
REYAZ
CHINA

5. BUSINESS ENVIRONMENT AND LABOR REGULATIONS

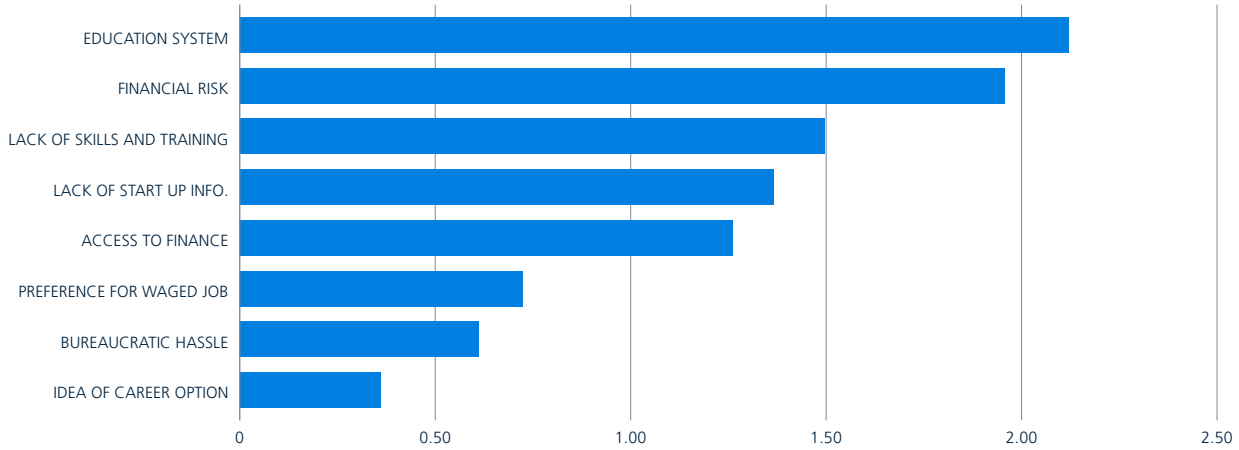
5.1 BUSINESS ENVIRONMENT

Businesses do not exist in a vacuum but operate within an environment shaped by government policies and regulations. Predictable and stable policies encourage investment, while instability tends to discourage or at least delay investment. Policies also affect firms' performance and competitiveness, and hence their capacity to grow and create employment. With respect to trade policy, for example, tariff rates affect the price of imported inputs; Nepal's high import tariffs on many intermediate and capital goods raise the cost of doing business. The Government's overarching policy objective stated in the recent budget is rapid economic development with social justice (ICAN 2019). Jobless growth will not achieve targeted social or human development goals, however. The private sector plays a central role by adding value to the economy and creating jobs.

There are several approaches to characterizing a country's business enabling environment. Multiple organizations, including the World Bank and the World Economic Forum (WEF), which undertake annual assessments, as well as the International Labour Organization (ILO) and the German Corporation for International Cooperation (GIZ), both of which conducted related analysis on Nepal. We present selected findings below.[62]

Lack of skills, information and finance are hurdles to launching a business in Nepal. According to an ILO (2018) survey of 622 firms, the greatest deterrents to starting a business they perceived were inadequate skills and training, financial risk, limited access to finance, and lack of start-up information (Figure 5.1). The latter is consistent with low penetration of business advisory services, either public or private. With respect to business operations, infrastructure and low market demand were among the most constraining factors.

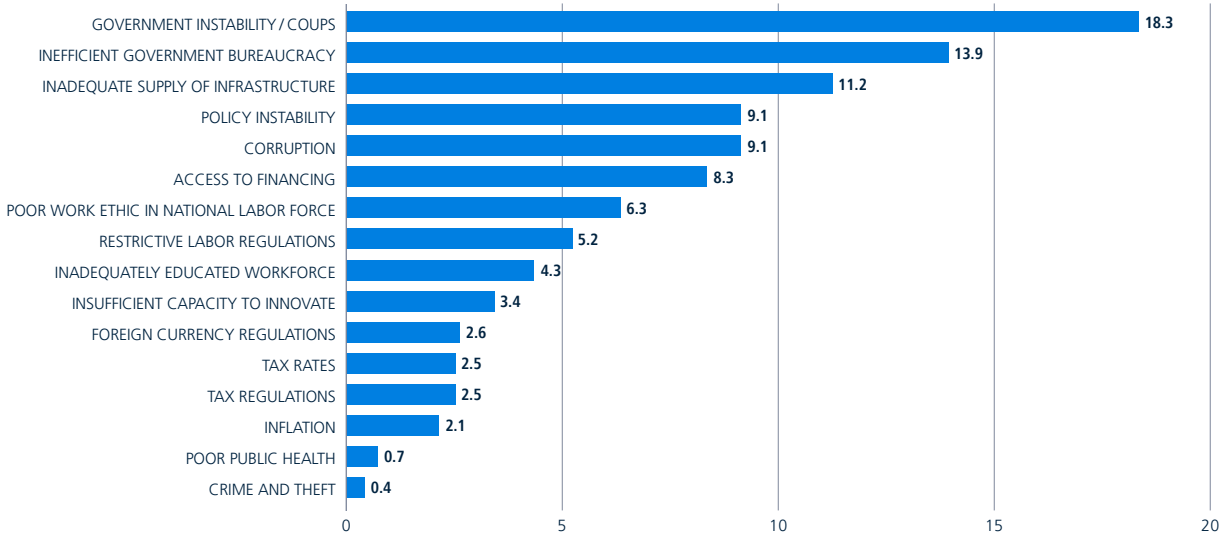
Figure 5.1
Factors perceived to deter starting a business in Nepal



Source: ILO (2018).

[62] For more detail, refer to IMC Worldwide (2019).

Figure 5.2
Most problematic factors for doing business in Nepal

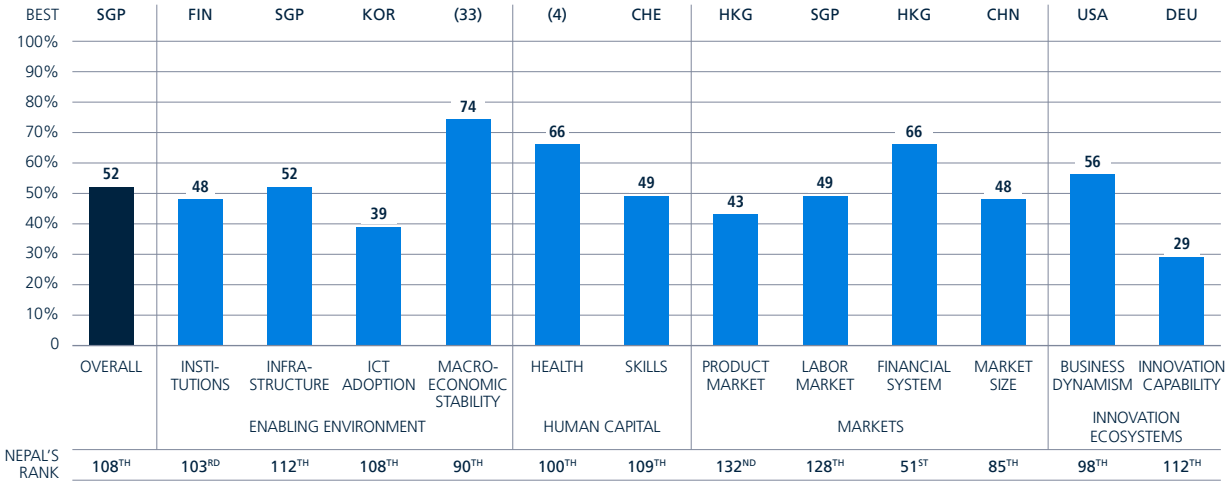


Source: World Economic Forum's Executive Opinion Survey 2017.

In a similar 2017 WEF survey, government instability and bureaucratic inefficiency ranked highest (note that this survey was undertaken during a period of policy uncertainty before election of the current government). WEF's Executive Opinion Survey respondents ranked the most challenging factors to operating their business. The results, summarized in Figure 5.2, indicate that government instability tops the list, followed by inefficient government bureaucracy, inadequate infrastructure, policy instability, corruption, and access to finance. Corruption scores relatively lower in both the ILO survey and our own MSME survey. The ILO (2018) survey results suggest that firms question the government's commitment to reducing corruption, although more than two-thirds of respondents were optimistic that the new federal structure would be helpful to growth.

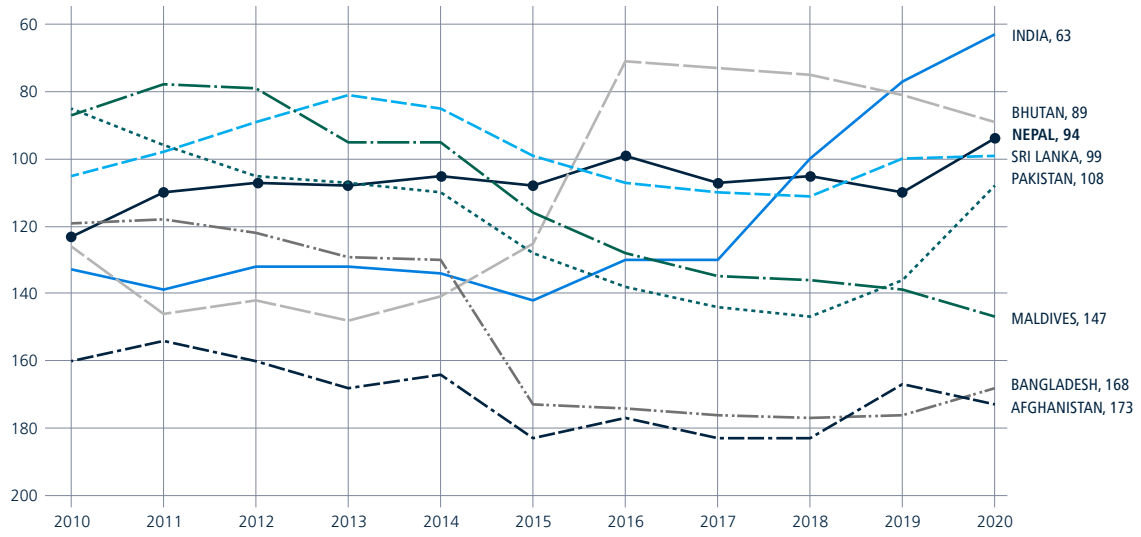
The WEF's Global Competitiveness Index ranks Nepal at 108 out of 141 countries surveyed (Figure 5.3). Nepal struggles most in relation to the enabling environment, where it scores low in 3 of the 4 sub-indicators:

Figure 5.3
Nepal's WEF competitiveness index rankings



Source: World Economic Forum (2019).

Figure 5.4
Doing Business rankings



Source: World Bank Doing Business reports 2010–2019; www.doingbusiness.org.

institutions, infrastructure and ICT adoption. Nepal also scores relatively low in product and labor markets and in terms of market size, and scores particularly poorly in innovation capability. Trenkmann (2018) asserts that very few firms have the creativity and knowledge to pursue opportunities in emerging sectors such as information technology (IT). Moreover, the education system is not oriented to teaching creative and abstract thinking.

Nepal also ranks relatively low in the World Banks's Doing Business indicators, although it improved markedly last year. Nepal ranked 94th in Doing Business FY2020,[63] up from 110th in FY2019 (Figure 5.4). Several sub-indicators improved, such as credit access, construction permits, trading across borders, and enforcing contracts. Some sub-indicators deteriorated, mainly with respect to paying taxes and registering a property. Considering the region as a whole, most countries are devoting more effort to improving their business environment. Several of Nepal's neighbors rank higher, reflecting a more appealing setting in which to invest, notably India (63rd) and Bhutan (89th).

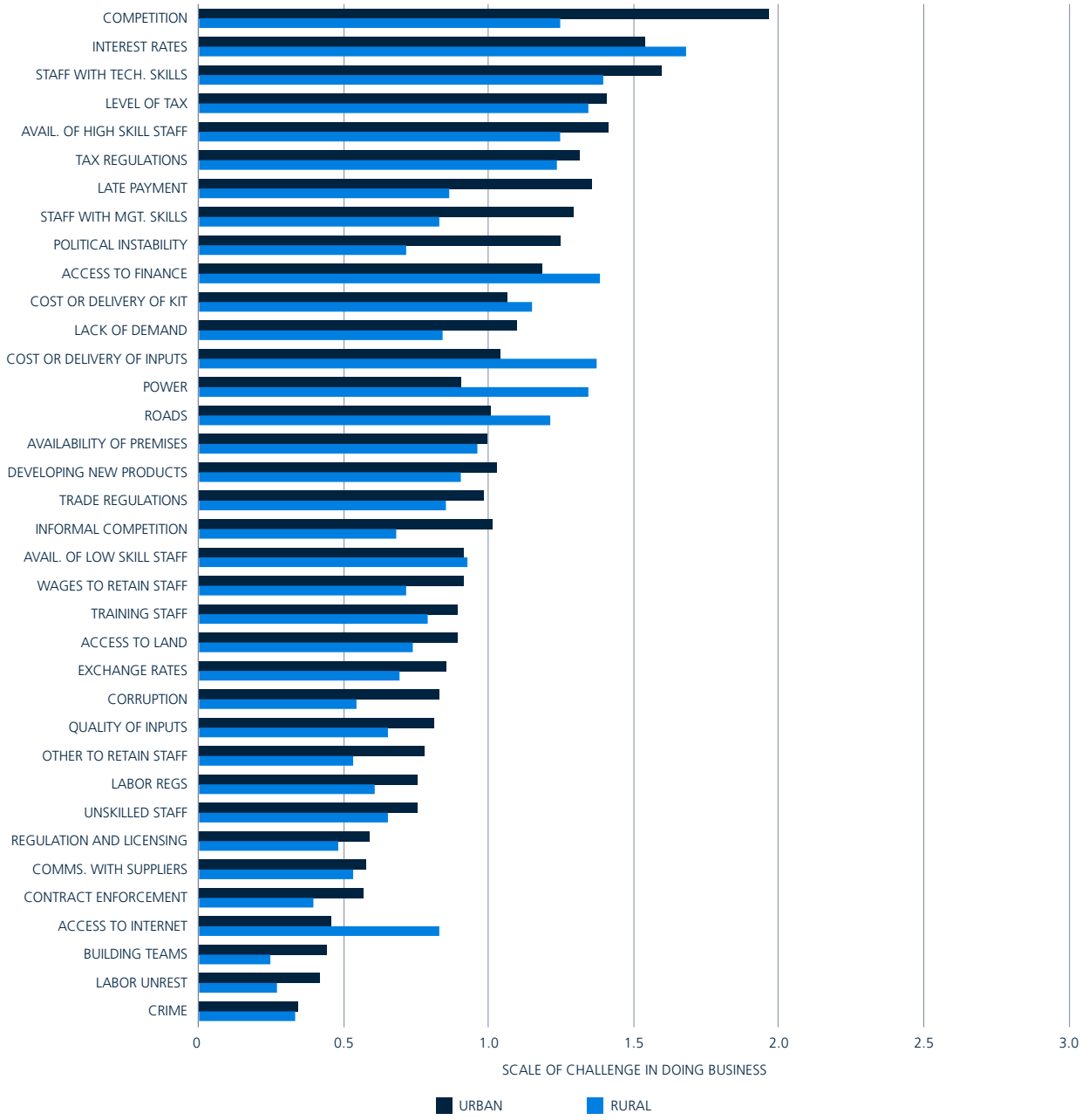
According to our SME survey,[64] firms point to financing, competition, skills, and taxes as the most problematic factors (Figure 5.5). Competition and late payment by customers are seen as much more important for firms based in urban areas. Electricity is an impediment in rural locations, as is the cost of delivery of inputs. Finding staff with management skills is more difficult in urban areas, which may be because larger businesses also tend to be in urban areas. Internet access is more problematic in rural areas. When we look at differences by gender of the entrepreneur, we see it is notably harder for women to access finance. These rankings are not dissimilar to the main ILO, WEF and GIZ findings, with the exception of corruption, a factor that may have received more public attention in 2018 compared to 2019 when we conducted our survey.

Firms' perceptions vary slightly across education levels and reasons for starting a business. Principals—that is, owners or managers—with a high school education complain most about competition. Entrepreneurs with a trade qualification complain most about late payment, access to finance and roads. Entrepreneurs with an incomplete education are highly constrained in accessing finance.

63 Data collection completed in May 2019 (World Bank 2020).

64 As part of our survey, we asked respondents to score 36 factors that might affect their ease of doing business. Respondents stated whether each factor was "not a problem", was "a small problem", was "challenging" or was "very challenging". We scored answers from 0 for not a problem to 3 for very challenging, and then averaged across the sample to give an overall score between 0 and 3. For more detail, refer to IMC Worldwide (2019).

Figure 5.5
Most challenging factors impacting SMEs (comparing urban and rural firms)

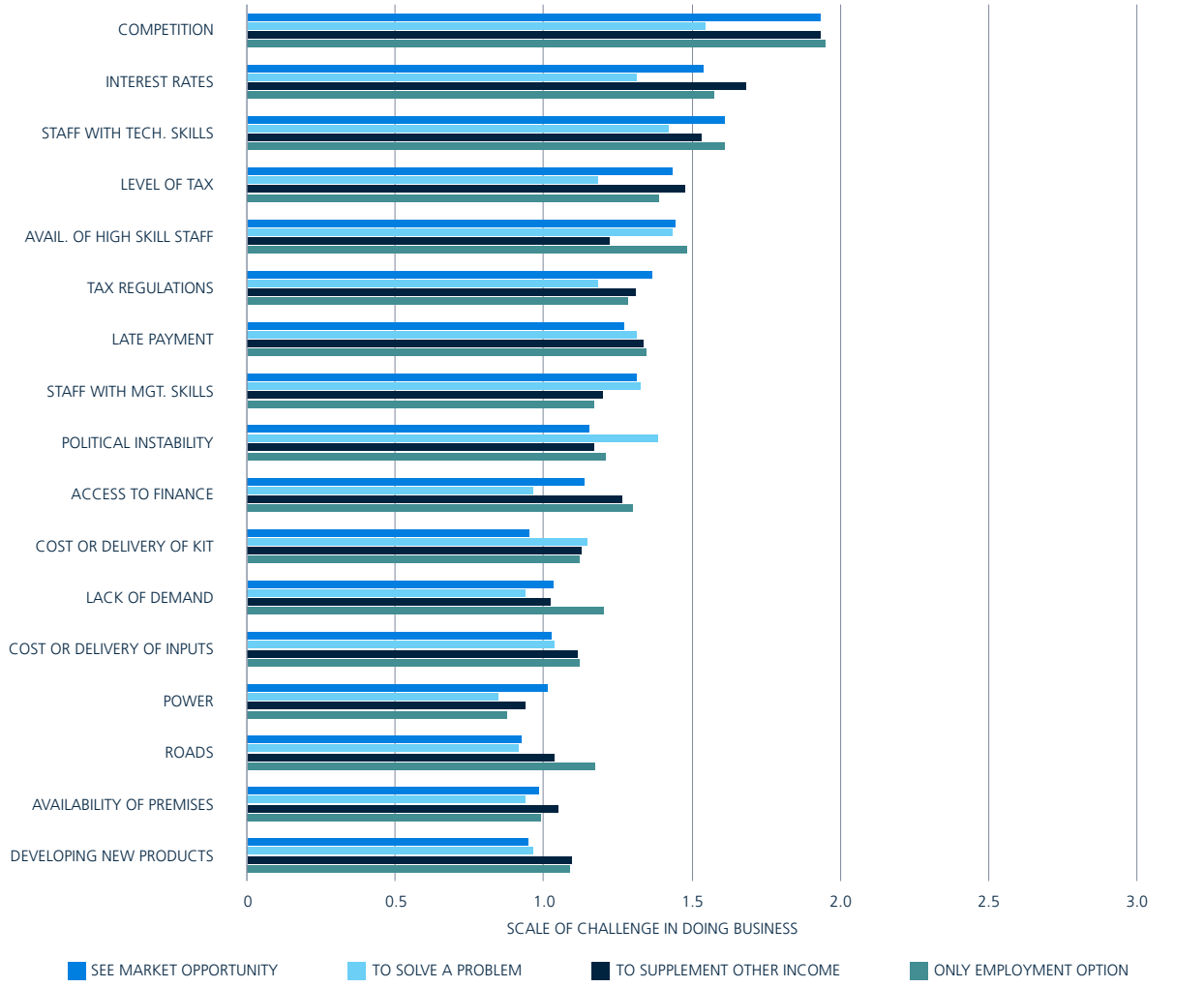


Source: SME survey 2019 (IMC Worldwide 2019).

When comparing necessity and opportunity entrepreneurs, we did not find a great deal of difference between the factors that make business difficult, although those who started a business because it was the only employment option worry relatively more about skills and lack of demand, and those who started a business to solve a problem worry relatively less about competition, interest rates or tax (Figure 5.6).

These rankings suggest an environment that is unfriendly to firms trying to expand their operations. The findings described above are consistent with the assessment in the World Bank's Systematic Country Diagnostic for Nepal (World Bank 2018b), which found significant gaps in access to finance: two-fifths of firms

Figure 5.6
Main challenges facing SMEs (by reason for starting a business)



Source: SME survey 2019 (IMC Worldwide 2019).

report access to finance as a major constraint, with a higher incidence among smaller firms, female-owned firms and geographically remote firms. Interest rates in Nepal are effectively capped, which reduces commercial lenders' risk appetite; collateral requirements can be as high as 400 percent of loan value. Most banks still rely heavily on collateral (Berger 2014). In this respect, female entrepreneurs are particularly disadvantaged given their unequal property rights. Firms that have rented land in industrial zones also find it particularly difficult to access finance due to insufficient collateral (Trenkmann 2018). Moreover, banks are finding that tight availability of lending funds is raising the cost of capital (World Bank 2018a). The combined effect is to restrict lending to those who already own property. The Government has introduced several initiatives to counteract this effect, such as the Women Entrepreneurship Development Fund, which provides collateral-free loans at low interest rates, and the Micro-Enterprise Development Program (MEDEP), which was recently handed over to provincial governments for implementation (Trenkmann 2018).

Problems accessing finance in rural areas have led to development of a second financial ecosystem through cooperatives. Over 34,000 cooperatives in Nepal provide financing opportunities for their members, typically very poor households. But cooperatives also charge high interest rates, and their loans are often used

to finance household consumption. Moreover, cooperative funds have become a source of corruption, given their inadequate regulation.

Lack of policy clarity and complex procedures are also a major deterrent to firm growth and foreign direct investment (FDI) (World Bank 2018b). Firms find procedures complex, and potential foreign investors are dissuaded by political instability. Given the importance of land as collateral, the complicated policies on land acquisition[65] represent another obstacle, especially for foreign investors. Further impediments include a long negative sector list and exclusion from Nepal's Stock Exchange (Trenkmann 2018:23). Following the new 2015 constitution, the new federal structure left unclear the roles of the different levels of government—national, provincial, and local—particularly in relation to business registration. Businesses with fixed assets worth at least Rs.100 million are required to register with central government, whereas firms below this threshold register with provincial governments and district offices of the Department of Cottage and Small Industries.[66] Trading businesses of all sizes, however, are still required to register with central government regardless of location or area of operation in Nepal.

In-depth interviews and the validation workshop conducted as part of our SME study yielded some useful insights related to the effects of key regulations. For example, the bankruptcy law can lead to blacklisting directors. The Foreign Investment and Technology Transfer Act imposes a minimum investment of Rs. 50 million which constrains foreign investment in SMEs and makes repatriation of earnings difficult. The Electronic Transaction Act makes it hard to transfer funds out of Nepal. And the Company Registration Act makes it hard to close a company.

The Government, keen to support new and growing businesses, is focused on the World Bank's Doing Business indicators. As mentioned above, Nepal posted significant improvement in ranking for the 2020 Doing business report, from 110th to 94th. This was achieved with reforms registered in 5 key areas of the investment climate—all important for the SME sector: obtaining construction permits, getting credit, trading across borders, enforcing contracts and registering a property. These areas relate directly to some major constraints the SME survey identified, including "access to finance", "cost and delivery" of materials (e.g., imported inputs), "late payment" and "availability of premises". Notwithstanding this progress, more is needed, not just in these areas but with respect to other factors important to SMEs.

To achieve the pace and scope of investment climate changes needed for robust SME growth, more inter-ministerial coordination and cooperation is required, as well as more systematic private sector input on regulations and policies. In 2010, the Government established the Nepal Business Forum, funded by DANIDA through its UNNATI program, as a public-private dialogue mechanism to offer advice to government on ways to reform public policy to improve the business environment. The Prime Minister chairs a High-Level Business Forum responsible for policy formulation. The Ministry for Industry chairs a steering committee, which meets every two months. The GoN Chief Secretary chairs a private sector development committee, which meets every two months and focuses on policy and implementation of recommendations from the working groups. The Industry Secretary chairs a permanent management committee, which manages day-to-day operations. Working groups are established as required, co-chaired by a Ministry Secretary and business membership organization presidents, to undertake work on specific themes or sectors. A more recent signal of GoN's commitment to improve the investment climate is the Cabinet's approval to establish an Investment Climate Coordination\Delivery Unit. Housed in the Office of the Prime Minister and the Council of Ministers, this entails a new partnership across 7 ministries. Along with renewing the partnership with the private sector, which the Government is currently exploring, this holds promise for establishing a stronger, systematic approach to address hurdles to a more dynamic SME sector.

Development partners can do more to promote private sector development in Nepal. Development partner programs are not always sustained or well-coordinated. One current example is the Economic Policy Incubator (EPI) launched in 2016, sponsored jointly by the UK Department for International Development (DFID)

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[65] The land market is highly inefficient due to poorly developed land market institutions and regulations (Trenkmann 2018).

[66] A new law recently submitted to Parliament would require all businesses to register at the provincial level.

and Nepal's Ministry of Finance, and implemented by Palladium in partnership with South Asia Watch on Trade, Economics & Environment (SAWTEE) and the Overseas Development Institute (ODI). EPI's main objective is to strengthen economic policies and policy processes, support a better regulatory environment and harness investment to create quality jobs and achieve higher and sustainable economic growth. EPI has, for example, set out ideas to simplify business registration (EPI 2017). Renewed development partner cooperation in support of the Government's investment climate initiatives could play a significant role in ensuring their success.

5.2 LABOR REGULATIONS [67]

Nepal enacted a new labor law in 2018 to increase worker protections, increase employers' flexibility in hiring, and reduce the incidence industrial action. The new Labor Act 2074 introduced significant changes with respect to Labor Act 2048. The most important change is that it applies to firms of all sizes, not just to those with 10+ employees.[68] The degree to which the new law and accompanying social security reform achieve these objectives is uncertain. The protections cover a larger share of the labor force, but implementation and compliance are lagging due to challenges in motivating firms to comply, register their firms and employees, and pay the new associated taxes. The new Labor Act rules are more affordable for larger firms, for which the new rules increase their hiring flexibility and potentially reduce severance costs, but in exchange for a net rise in the effective labor tax. The new rules are, however, costly and administratively burdensome to micro and small firms.

All workers are required to have a written contract that lays out basic terms of employment and specifies the type of contract. Under the new Labor Act, workers can be hired on regular (open-ended) or fixed-term contracts, piece-rate (for a specific piece of work), on a casual employment contract (less than 7 days per month) or for part-time employment (less than 36 hours per week). The Act prohibits outsourcing of core functions. With the increased flexibility of contract type, the probation period was reduced from 1 year to 6 months. Limits on regular work hours increased to 48 hours per week, and permissible overtime was increased from 20 to 24 hours maximum per week, paid with a 50 percent wage premium.

The new Labor Act retains previous limits on hiring foreign labor, requiring firms to advertise for skilled openings. Firms can hire non-Nepalese workers only if no Nepalese are available to fill the vacancy. Practical implementation of this rule is questionable, however, given the significant presence of foreign workers in Nepal (from the SME survey, foreign workers account for 3–6 percent of firm employment). A new requirement to deposit 30 percent of social security obligations up front when sourcing labor from India represents a strong disincentive to hiring non-Nepalese, although the Government excludes some firms through special agreement. It is unclear how many firms fall into this category.

Labor cost increases associated with the new Social Security System are likely to discourage formal job creation and may exacerbate informality and sub-contracting. A social security system introduced in 2018 aims to provide medical, accident, and survivor's insurance, and old-age income, by pooling the costs and risks across the entire waged labor force. The contributory scheme is universal, applying to all firms and all wage employees, representing an ambitious level of social insurance coverage. Self-employed and informal workers can voluntarily participate. By replacing gratuity payments with a centralized system, pension benefits became portable, potentially increasing worker mobility and allowing the labor market to function more efficiently. Whereas implementation was meant to be phased and completed in 2019, the application of the new regulations remains partial, as the institutional capacity needed to disseminate the rules and procedures to all firms is still being developed. Employers and employees are required to make monthly contributions equivalent to 20 percent and 11 percent of the basic wage, respectively. The employer contribution includes a

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[67] The description below is based on the text of the Labor Act 2074 and the Social Security Act 2075, analysis by NBSM & Associates Chartered Accountants, "Nepal Labor Act 2074: Highlights of Changes brought by New Labor Law", and by Pioneer Law Associates, "Labor Rules, 2018 (2074)—Major Highlights" and "Social Security System in Nepal", and a background note by R. Sane (2019).

[68] The Labor Act 2074 does not apply to the civil service, Nepal Army, the Armed Police force or teachers covered by a defined benefit civil service pension (although they have now introduced a 6 percent employee contribution as well), or to public sector enterprises that have their own pension plans, and excludes Special Economic Zones subject to separate provisions, and journalists (unless explicit in the contract).

"gratuity" payment equal to 8.33 percent of each employee's wage to provide for retirement income.[69] Over 90 percent of the combined contributions into the Social Security Fund are earmarked to finance old age pensions ("Old Age Protection Scheme"). For self-employed and informal workers, the Government may contribute 50 percent (or 5 percent of the minimum daily wage) to at least partially cover the employer contribution. Pension benefits are tied to the individual's contribution plus the Social Security Fund's average investment returns (currently a government-fixed interest rate), and are paid out in a monthly benefit calculated based on 15 years post-retirement survival. If the retiree survives longer than 15 years, he/she continues to receive the monthly pension. If the retiree dies before 15 years, then the remaining benefit is paid out to his/her heirs. The system parameters assume a retirement age of 60 and at least 15 years of contributions.[70]

Employers in Nepal are required to pay several additional labor "taxes" that significantly raise the cost of labor. Labor taxes create a "tax wedge" between the labor cost to the employer and the worker's take-home pay, and large wedges can ultimately reduce both employment and economic growth. In addition to social security and gratuity contributions, employers must pay a bonus to employees equivalent to 10 percent of net profits. Employees are also entitled to a bonus to cover Festival Expenses, equivalent to an extra month's salary every year (or on a proportional basis for those in post less than a year). Taken together, these labor taxes amount to 28 percent of the basic wage excluding the profit bonus, and 37 percent with severance pay (Table 5.1). When the employee contribution to social security and the personal income tax are accounted for, the wedge between employers' labor cost and workers' net pay rises to 49 percent, which is higher than many other low- or middle-income countries (Figure 5.7).

Nepal's minimum wage, while below most average sector wages, might still be distorting wages at the low-end of the wage spectrum, potentially excluding less productive workers from formal jobs (World Bank 2012). The most recent minimum wage adjustment to Rs.13,450 per month in 2018 represented a 31 percent rise in real terms, an uptick in the rate of adjustment compared to recent years (Figure 5.8). Recall from Figure 2.18 that the revised minimum wage is below the average wages of most sectors, but exceeds the average wage in agriculture and hotels and restaurants, and is equal to the average wage in wholesale and retail trade. The minimum wage is set every two years through a tripartite process.

Under the recent reform, severance pay entitlement was extended from permanent employees to all employees, while slightly reducing the rate of severance compensation. Workers are entitled to one month's salary per year of full-time service, adjusted proportionally for non-full-time employment. This aligns closely to levels in high income countries and is much lower than in many low-income countries; it nevertheless represents a large cost to firms when workers end their service.

Table 5.1
Non-wage cost of labor

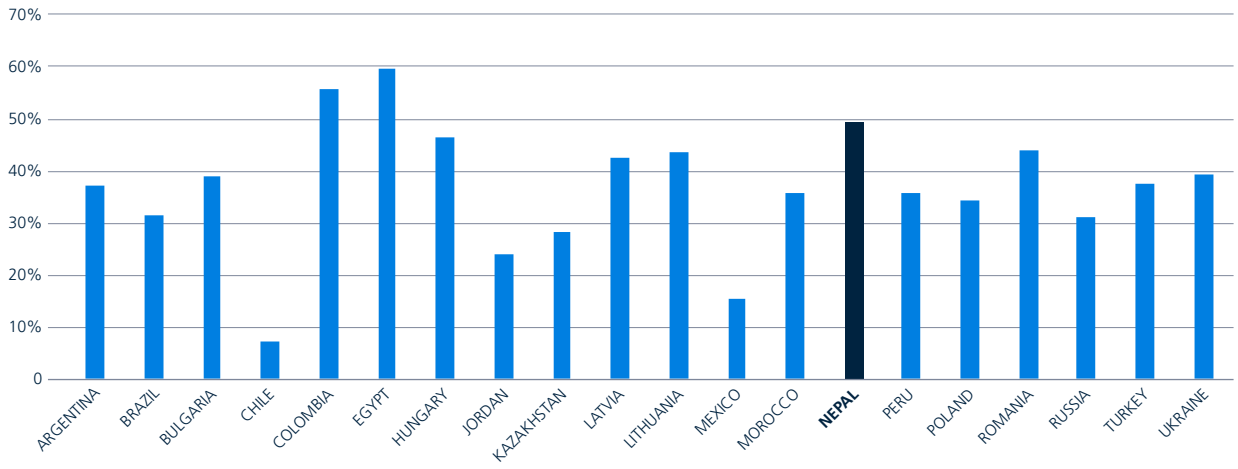
	Employer cost	Employee contribution
Social security	20%	11%
o/w Gratuity	8.33%	
Profit-sharing bonus	10%	
Festival expenses bonus	1 month (=8.33%)	
Severance pay	1 mo./year service (=8.33%)	

Source: Labor Act, 2074; Social Security Act, 2075.

[69] Prior to the new social security system, employers made an annual gratuity contribution equivalent to 8.33 percent, which was then paid in a lump sum to its employee upon his/her retirement.

[70] Workers employed prior to the new law (July 2019) who were covered by the provident fund and gratuity will remain under the old system, although they can choose to opt-in to the new Old Age Protection Scheme instead.

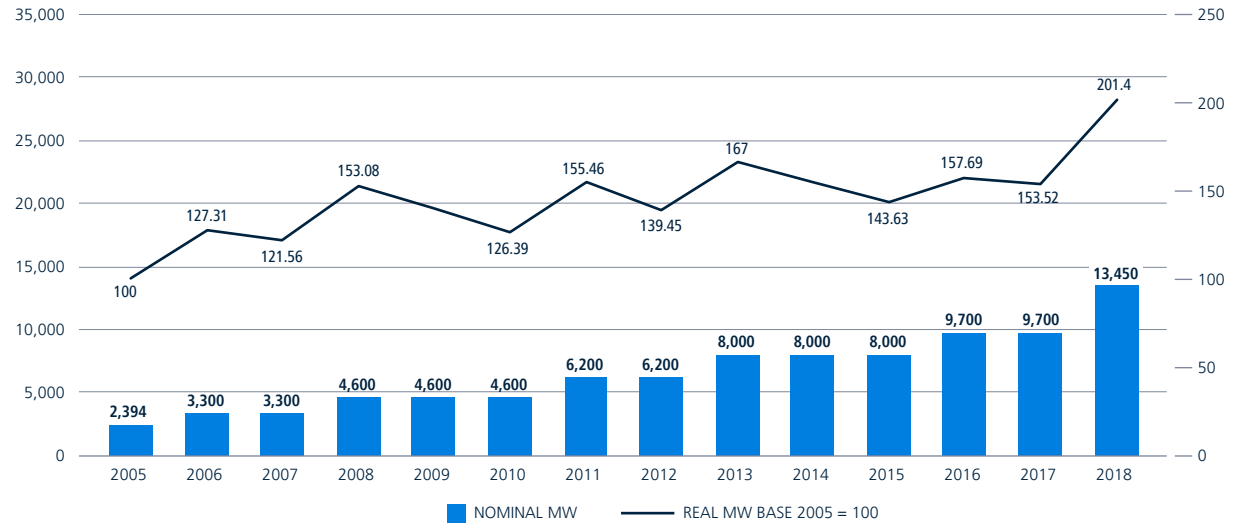
Figure 5.7
International comparison of average labor tax wedge



Note: Tax wedge is the difference between the firm's labor cost and the worker's after-tax wage; it includes income tax calculated at the rate for the average wage earner and excludes severance and profit-sharing bonuses. Data are for 2010/11, except for Nepal, which reflects the new law.

Sources: Social Security Act 2075; IMF (2012).

Figure 5.8
Evolution of the minimum wage



Source: Estupinan (2019), based on ILO estimates using ILOSTAT and WEO.

Leave policies are broadly in line with other low-income countries, except for recent maternity and paternity leave requirements. Workers in Nepal are entitled to 13 paid public holidays and another 13 days of paid annual leave (for full-time workers, proportional for less than full-time). Regulations extend maternity leave from 52 days fully paid under the old law to 98 days, of which 60 are fully paid. The rules now require paternity leave as well, in the amount of 15 days fully paid. The new maternity and paternity leaves will be financed through the Social Security Fund, eliminating the additional cost to employers who employ women of child-bearing age. This reform is therefore expected to reduce implicit gender preferences for hiring men.

The new Labor Act was the result of tripartite discussions and agreement on balancing workers' rights (including representation and collective bargaining) with employers' desire for reduced uncertainty and disruption of operations. Union activity is quite high in Nepal, dating to the 1980s when sector-level unions were established and gained traction, and ultimately played a significant role in democratic change. The ILO estimated union membership at 1 million workers in 2008 (ILO 2018). According to an ILO survey of 600 employers to assess the Enabling Environment for Sustainable Enterprises (EESE Survey), about 4 in 10 employers believed that unions did not adequately represent their concerns, and a similar share was concerned about union politicization (ILO 2018). At the firm level, workers' representation is protected through two main provisions of the new Labor Act: (a) Firms with 20 or more employees must create a Safety and Health committee, a forum for workers to monitor and provide input to management on working conditions; and (b) Workers in firms with at least 10 employees have the right to form a collective bargaining committee. While creating a mechanism to increase workers' voice, it also creates a hurdle, which firms may prefer to avoid by increasing sub-contracting. With respect to strike action, a secret ballot is no longer required; workers can strike after notifying management and necessary security agencies.

Because the extensive changes in labor regulations under the new Labor Act 2074 and Social Security Act 2075 raise the non-wage cost of labor, firms may find it more difficult to expand production and create more formal jobs. It is important to monitor compliance and effects on firm labor demand and on total national employment to address unintended consequences of these ambitious institutional reforms.

6. CONCLUSIONS AND POLICY CONSIDERATIONS

Nepal's ongoing structural economic transformation has enabled significant productivity gains and created better-quality jobs, but subsistence activities remain prevalent. This structural transformation brought more workers to cities, where many were able to access better jobs, especially wage employment. The share of wage work in Nepal jumped from 17 percent to 24 percent of total employment between 2008 and 2018, as nearly half of jobs added to the economy were wage jobs.

Increased wage employment signals foundational change in Nepal's economic development, but growth in wage jobs is not enough to absorb all job seekers, especially women. A rising share of men have found wage work over the past decade, but women are lagging. Traditional gender roles continue to marginalize women, and female human capital is underutilized and under-remunerated. Three-quarters of new jobs taken up by women between 2008 and 2018 were in non-wage self-employment or unpaid family work, much of which was farm work. In the absence of available wage jobs, many workers enter self-employment or unpaid work, many others seek employment abroad, and some exit the labor force.

A number of challenges impede better job outcomes. Nepal's topography makes it hard for many workers to access wage work. Difficult transport and logistics make it costly to connect producers to domestic and foreign consumers. Most jobs—whether paid or unpaid, wage or non-wage—are in low-productivity sectors, notably farming, construction, retail and manufacturing. Workers' skills are low on average: even among wage employees, three-quarters have not completed secondary school.

Inadequate labor demand is the greatest impediment. Private sector labor demand is weak, and SMEs struggle to compete and grow. The vast majority of firms in Nepal are micro-sized, are characterized by low productivity, and target the small domestic market rather than exporting or connecting to regional or global supply chains. In the absence of large and connected domestic markets, firms need to look outward, but they face difficulty competing in foreign markets. Doing business in Nepal is constrained by limited credit access, complex tax regulations, high taxes, and bureaucratic inefficiencies, among others; as a result, firms underinvest in capital, technology, skills and business process upgrades.

Nepal's economy struggles to escape a negative cycle of small and inefficient markets, tepid growth, insufficient creation of good jobs, low household incomes, dependence on subsistence agriculture, and underutilization of labor resources. The key challenge is how to support private sector growth that enables economic diversification, expands and integrates markets, increases product quality, and raises micro as well as larger firm productivity and earnings. Private sector dynamism—central to job growth—requires competitive firms operating in competitive markets. Policies to facilitate increased firm productivity and growth also stimulate skill upgrades that ultimately translate into more and better jobs. This in turn improves use of human capital resources and increases worker welfare—all important components for achieving sustainable and inclusive growth.

Having just implemented a federal system of government, Nepal is at a critical juncture for establishing a pro-jobs agenda. A robust and resilient economy and accompanying policy framework must complement the institutional changes underway to facilitate private sector development, job creation, and improved worker welfare. Without interventions to trigger more ambitious development gains, structural transformation is likely to progress slowly.

The policy interventions presented below to improve job outcomes in Nepal are considered through four main channels: (a) fostering SME productivity and growth; (b) improving the business environment and labor market policies; (c) increasing the individual, family and economy-wide benefits of international migration; and (d) preparing and connecting women and youth to better job options including entrepreneurship.

POLICY CHANNEL 1: FOSTERING SME PRODUCTIVITY AND GROWTH

Private sector firms are not growing fast enough to absorb available labor supply into high-quality wage jobs. More productive firms perform better and tend to pay higher wages. The challenge is therefore to help firms become more productive, expand their operations, and in so doing generate more jobs and better jobs. Tailoring interventions to address some of the greatest firm constraints—as highlighted in the SME survey and SME ecosystem assessment—will be important for promoting better labor outcomes. The gap in SME financing represents an important market failure. Many SMEs lack the technical and business know-how to increase their competitiveness or connect to foreign markets. BSOs can do more, and government can help through more effective and supportive institutions, but the private sector has a central role to play, given it is the main driver of economic growth and the principal source of labor demand. As both stakeholder in government regulations and producer of goods and services requiring technical competency and market discipline, the private sector must be involved in sharing knowledge to help shape government policy and policy implementation. To this end, Nepal should consider the most effective partnership modalities and optimal division of public and private roles to achieve different policy objectives. These considerations will, in turn, determine the most effective design of associated institutional and governance arrangements.

Short-term actions:

- Accelerate implementation of recent legislative and regulatory changes to (i) promote and develop the Venture Capital and Private Equity markets; (ii) foster Fintech through a modern retail payments system; (iii) expand and deepen the use of robust credit information and secured transactions systems to promote moveable collateral-based lending for MSMEs. These measures will increase inclusive access to financial services.
- Channel technical assistance resources towards strengthening government and regulatory capacity related to these recent legislative and regulatory reforms. Develop dissemination and training tools to encourage private sector take-up (for example, retailers and consumers for fintech payments, MSMEs and MFIs for the moveable assets registry).
- Partner with the private sector to develop support addressing common SME challenges by creating an online portal with guidance on sources of finance, sources of business advice and guidance, information on skills development, access to basic tools, online tutorials for essential business management functions such as book-keeping or 'business information factsheets', and summary guides on business regulations and tax rules.
- Facilitate delivery of high-quality business support services to help commercially sustainable firms emerge from the cluster of competing producers by differentiating their product, upgrading their product quality and/or identifying untapped markets for the same classes of products. Government's role is through: BSO accreditation; promotion and marketing of BSO services (but not specific BSOs) to entrepreneurs; and encouraging diversification of BSO service provision toward non-micro firms in the post-start-up growth stage.
- Review and update quality standards and the accreditation framework and facilities, with scope for private sector provision, to help producers meet the import requirements of trading partners.
- Pilot a program to address the credit market failure for labor-intensive SMEs with high job-growth potential by reducing their risk. Provide subsidized support combining technical assistance and equity financing above levels available under existing programs. This support needs to be designed to increase firms' bankability and signal creditworthiness to third-party investors. Firm selection must be transparent and based on a sound business case that includes job quality and/or job creation objectives.

Strategic long-term priorities:

- Review and revise foreign investment policies to better target SME market opportunities and foster linkages between potential foreign investors and SMEs, including revisiting the recent increase in the foreign investment threshold to Rs. 50 million and current Investment Board FITTA threshold of Rs. 6 billion.
- Strengthen the export promotion framework to reach out to new markets to connect foreign buyers and domestic suppliers, especially SME suppliers.
- Identify policies and programs to encourage innovation and adoption of better production technologies that enhance sustainability and/or target foreign consumers seeking eco-friendly products (an expanding segment of global demand). This includes programs to support productivity upgrades in agri-processing and tourism that support job creation through strong backward linkages.
- Establish the supporting environment to enable digital solutions to production and sectoral competitiveness constraints that can boost Nepal's market share beyond its currently limited export base. This requires coordinated federal regulatory and policy approaches, adequate digital infrastructure, and complementary ICT literacy and innovation training—in primary, secondary and post-secondary schooling—and through alternative delivery mechanisms for those who have left school.

POLICY CHANNEL 2: IMPROVING THE BUSINESS ENVIRONMENT AND LABOR MARKET POLICIES

Entrepreneurs report lack of clarity on regulatory requirements and mandates under the new federal system (that is, under respective mandates of national vs. province-level institutions), bureaucratic inefficiencies, competition and taxes as key obstacles to doing business and expanding their operations. The new Labor Act and Social Security reform together extend labor protections and social insurance coverage to employees in all firms (not just those with more than 10 workers), but associated increases in the labor tax rate is likely to deter firms from hiring, and result in increased informality and evasion.

Short-term actions:

- Accelerate current progress in improving Doing Business indicators—especially targeting SMEs—with a clear implementation strategy rooted in greater inter-governmental coordination on investment climate improvement between federal, provincial and local levels.
- Establish robust public-private dialogue arrangements to better partner with the private sector on the design, implementation and monitoring of initiatives supporting private sector and SME-led growth at national and sub-national levels. Adopt a mission statement, across government, containing 3 or 4 simple principles that stress the importance of private sector firms to the economy, and encourage Ministries to weigh the impact of their decisions on the private sector.
- Increase dissemination efforts around the new Labor Act and Social Security reform, and develop and implement mechanisms to monitor the impact of the new labor tax and social security rules on employment (for example, through tracking of firm registrations and worker participation, firm surveys/interviews, and household surveys).

Strategic long-term priorities:

- Consider narrowing the gap between formal and informal work status by reducing the magnitude of the recent rise in employer's labor tax contribution closer to international norms. Given that only 4 percent of employment is formal, the already high labor tax impeded formal job creation prior to the tax increase. Raising the cost of labor further will undermine firms' labor demand and incentivize evasion and sub-contracting. This in turn may reduce, rather than increase, the number of workers covered by social insurance, ultimately jeopardizing financial sustainability of the new system. Expanding coverage for informal workers without increasing evasion will require some government subsidy rather than burdening micro-firms that cannot afford the employer contribution rate.

- Strengthen monitoring of labor regulations and working conditions by increasing monitoring capacity at relevant ministry/agencies and enhancing training for regulators to train firm managers/employers in compliance standards. These public functions could be broadened by partnering with selected civil society organizations to help with monitoring.
- Review the impact of the maternity leave and benefit scheme under the Social Security Fund on women's participation in formal employment.
- Review the country's trade policies (including import tariffs on technologies with job creating impact), the logistics and connectivity environment and the trade facilitation agenda to increase Nepal's exports to other markets and promote trade-related jobs.

POLICY CHANNEL 3: INCREASING THE INDIVIDUAL, FAMILY AND ECONOMY-WIDE BENEFITS OF INTERNATIONAL MIGRATION

Improving migration outcomes and increasing the domestic spillovers of migration to enhance the resilience of vulnerable households deserves policy attention, given that international migration will likely continue to be an important income source for households, local economies, and Nepal's economy at large. The recent World Bank Board paper (World Bank 2019b) provides a global perspective on migration challenges and potential policy responses.[71] [72]

Short-term actions:

- Strengthen migration monitoring systems and introduce data collection instruments to track external migrants' employment outcomes and enhance evidence-based policy making. Relevant variables include duration of contract, occupation and sector of work, earnings and non-wage benefits, potential remittances, recruitment costs (SDG 10.7.1), remittance channels, and remittance costs (SDG 10.c.1). This cross-ministry effort would require technical assistance to the Central Bureau of Statistics and Department of Foreign Employment, among others.
- Increase integration of domestic and international labor intermediation systems to provide aspiring migrants better information on trade-offs between domestic and overseas opportunities, better coordinate reintegration of returning migrants, and reduce fraud and associated migration costs.
- Ensure that mandatory[73] pre-departure migrant training programs incorporate financial literacy, soft skills and psychological preparedness,[74] customized to specific destinations. Complement with pre-departure awareness programs targeting sending-families regarding financial arrangements, psychological and social conditioning, and adjusting to altered family responsibilities. Partner with banks to provide a financial literacy training component, creating the opportunity to bring unbanked households into the financial system.[75]
- Promote the design and take-up of remittance-linked financial products to encourage financial intermediation for unbanked households through (a) remittance-sending products, (b) remittance-backed credit for productive investments in Nepal, (c) remittance-linked household savings instruments, and (d) credit instruments to finance up-front migration costs.[76] A verified stream of remittances received by a household could be used as collateral for loans (future flow securitization), which could include loans for

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[71] The World Bank Board paper also lays out a template for a comprehensive Migration Diagnostic—already carried out in Lesotho (as part of a Poverty Assessment), eSwatini (SCD), Ethiopia (Debt Sustainability Analysis) and Nigeria (SCD)—which could be useful in Nepal.

[72] Nepal-specific migration challenges and policy options are presented in Raju and Rajbhandary (2018), Shrestha (2017), Bossavie and Denisova (2017), Cho et al. (2018), and Paoletti et al. (2014).

[73] Mandatory since 2004.

[74] A study by Regmi, Aryal and van Teijlingen (2019) found that little attention is paid to psychological preparedness.

[75] Experience from several countries in Latin America and the Caribbean shows that greater financial inclusion increases remittances through formal channels and also results in more productive investments by recipients (Hall 2010). Banks also gain from the process, and it results in overall financial deepening In Colombia, for example, following Bancolombia's comprehensive strategy to expand remittance services, 54 percent of Bancolombia's remittance clients were owners of the bank's accounts (Jaramillo 2016).

[76] Alternative product design and financial literacy approaches should be tested, as currently supported by UN Capital Development Fund (UNCDF).

entrepreneurial training or microenterprise development. New credit instruments could be developed to finance migration costs, replacing the common practice of paying exorbitant interest rates to informal money lenders. In addition to government's coordination role, it needs to ensure that appropriate financial regulations and associated monitoring processes are in place.

- Develop a comprehensive migration strategy to improve labor outcomes and safety for migrants, covering the complete migration cycle (from pre-decision to reintegration) and addressing gender concerns in a way that enables safe female migration. Women, like men, would welcome safe and regulated migration that does not involve risks of physical harm, exploitation, or social stigma. Many women who need to support their families rely on unregulated migration to India, where incomes are much lower than other destinations from which they are excluded, and yet they are still exposed to risk.
- Regulate recruitment service providers, and increase transparency and competition by introducing a web-based platform for migrants to rate agents and employers. Despite a ban on recruitment costs, informal recruitment fees paid out of pocket by migrant workers remain high, suggesting a revised approach is needed to address inefficiencies in matching the excess supply of potential migrants with the limited number of jobs available, and to increase safe migration. As market intermediaries, recruitment agents play an important role in addressing the information asymmetry between prospective employers and migrants.

Strategic long-term priorities:

- Increase financial inclusion for remittance-receiving households and strengthen linkages with schemes aimed to increase household and community resilience.
- Create space in the market for new remittance transfer providers that increases competition and reduces costs. While remittances costs from India and GCC to Nepal are low by global standards, costs from emerging destinations such as Japan are very high, partly driven by inadequate market competition (for example, exclusivity contracts between national agencies/banks and a few dominant remittance service providers), partly linked to anti-money laundering regulations. These factors may also discourage entry of new technology-driven remittance service providers that could otherwise disrupt the high-cost status quo. Government needs to review the regulatory setting and the necessary telecom infrastructure to encourage fintech options, and address exclusivity contracts.
- Promote successful reintegration of returnees by developing a multi-pronged reintegration support program (including for example skills certification, job matching, training) based on evidence from existing pilots and assessments of labor market constraints faced by returnees. The majority of Nepalese migrants are young males working in low-skilled tasks on short-term renewable contracts with no route to permanent residency. They eventually return and need to find work. Many also experience rocky social adjustments after being away from their families for extended periods of time. Smooth and successful re-entry requires planning on the part of both migrants and their families.
- Diversify migration destinations and occupations to reduce dependence on a small number of countries and enhance ongoing efforts by Government to shift towards higher-wage markets with better working conditions.

POLICY CHANNEL 4: PREPARING AND CONNECTING WOMEN AND YOUTH TO BETTER JOBS INCLUDING ENTREPRENEURSHIP

The shortage of good jobs and limited access to formal wage jobs by women and youth reduces the types of work available. Despite rising education and skill levels of Nepal's labor force, these gains have not led to significantly better job quality, due to the structure of the economy and the nature of labor demand—notably the preponderance of micro-sized family-run wholesale and retail firms. Many male youth choose to move for construction jobs or migrate abroad, but female youth do not or cannot, resulting in a severe underutilization of women and also youth. Increasing the capacity of women and youth to pursue better employment options is essential for raising the earnings of these groups, with important spillovers to household welfare and to economic growth.

Short-term actions:

- Strengthen implementation of curriculum revisions based on the Government's regular review of the national curriculum framework and of technical and vocational education and training (TVET) curricula. These revisions require timely and effective implementation to enhance youth's employability in a globally connected world. Foreign language skills, IT and cultural training will be particularly useful for facilitating trade integration and tourism.
- Develop concise and simple digital training modules for entrepreneurs incorporating fundamental "rules of thumb" about business processes (for example, simple accounting practices like keeping separate household and business accounts and cash flow), and design a digital outreach strategy and marketing campaign (for example brief voice/text digital "mini-bulletins" delivered via an App). These should be developed with/by the private sector, perhaps through existing BSO networks, and alongside the Government's array of micro-finance support programs.
- Promote entrepreneur networks targeting women and youth, and develop a mentoring program that matches younger firms/self-employed youth with more established firms to help them upgrade their operational effectiveness and management skills.[77]
- Support programs for increasing the productivity and incomes of subsistence and small holder farmers, for example, through assistance establishing cooperatives, linking to value chains, accessing seed capital/asset transfers, improving market access, price information, financial education, business and/or technical training related to both farm and off-farm activities.
- Facilitate connections between rural producer/entrepreneur networks, agriculture extension activities and advice on improving yields/raising farm earnings/climate-resilient alternatives, and SMEs operating along the agri-processing value chain (including transport, logistics, quality standards, export promotion).
- Co-sponsor innovation competitions/hackathons to develop digital solutions to improve small-scale producers' business and management practices.[78]
- Develop public information campaigns to de-stigmatize or neutralize gender-differences in occupations or sectors (for example, through promotional videos utilizing positive male and female role models).

Strategic long-term priorities:

- Continue mainstreaming soft skills such as problem solving, team work and communication skills into school curriculum, vocational training and programs for youth and adults engaged in low-productivity activities. Integrating soft skills not only increases employment prospects, but also helps produce a stronger cadre of future business leaders.
- Assist youth in shaping and broadening their career aspirations beginning in school and in ways that neutralize pre-assigned gender roles and work-related social status/stigma. Guide primary and early secondary students' career ambitions by exposing them to the existence of jobs in different industries and entrepreneurship options, including through site visits, entrepreneur interviews, and through digital tools (for example, videos, interactive discovery games). Adapt guidance tools to a non-youth audience.
- Encourage private sector firms and industry groups to provide systematic input into and advocate for a demand-driven skills development system. Public-private dialogue between employers and skills program providers is essential, and recently established sector skills councils can play a central role. Consider mechanisms for co-funding skills development programs in partnership with private firms (for example, through performance-based financing based on job placement/job promotion).
- Review the higher education system and curricula with input from employers in traditional sectors, such as manufacturing, and emerging sectors, such as ICT and tourism.

[77] Evidence from Kenya shows a positive impact on the profits of mentored microenterprises (Brooks et al. 2016).

[78] Examples from Cambodia include PassApp or Facebook as a way of reaching new customers (Cunningham et al. 2019).

- Develop a multi-sectoral youth employment strategy that addresses skills, job-matching and expanded use of internships and apprenticeships, and uses gender- and geographically-differentiated approaches. This strategy can build on lessons from recent apprenticeship pilots developed with donor support.
- Consider piloting multidimensional economic inclusion interventions to address barriers to better jobs faced by extreme poor, ethnic minorities, rural women and other marginalized groups.
- Review Nepal's food system and food safety controls and the role of agri-processing for meeting domestic and foreign consumption demand. Facilitate micro-producers, agriculture cooperatives and SMEs participation in national, regional and global food value chains; strengthen logistics, hygiene and quality standards; and lay the institutional groundwork for public oversight.
- Foster childcare and eldercare services industries to facilitate female labor force participation and female labor mobility out of unpaid family work. Government's role can include training and regulation of providers (including accreditation), and care services promotion at the national and local levels.

Some knowledge gaps remain. The analysis and findings presented above exploit multiple datasets on worker and firm characteristics to identify likely drivers of labor outcomes in Nepal. The three main areas where important knowledge gaps remain relate to gender norms, international migration, and the role of large firms. These themes affect Nepal's labor market outcomes at both the micro and macro levels. Additional research would help understand the size and transmission channels of the various related effects. For example, to what extent do social norms related to gender roles affect female work and education decisions? To what degree do they affect female and male labor mobility? How does external migration affect families' welfare (consumption, savings, investment in physical or human capital)? What are the trade-offs behind households' collective migration decisions, and what factors could tip the balance in favor of working domestically? How productive and export-oriented are manufacturing firms and what types of jobs do they create? Is a small number of large firms driving manufacturing trends? Are manufacturing jobs a good option for women? Designing effective policies in these areas may require new data collection. To understand large firms, researchers need access to the Economic Census 2018 database.

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ANNEXES

Table A.1
OLS wage regressions for employed wage workers (gross monthly wage in 2010 Rs.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Experience	0.033***	0.026***	0.020***	0.025***	0.033***	0.032***	0.032***	0.025***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Experience squared	–0.000***	–0.000***	–0.000***	–0.000***	–0.000***	–0.000***	–0.000***	–0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.340***	0.337***	0.322***	0.277***	0.287***	0.257***	0.276***	0.262***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Education level (relative to Primary incomplete or No education)								
Primary complete	–0.005	–0.020		–0.004	0.012	0.022	0.026	0.013
	(0.890)	(0.558)		(0.909)	(0.706)	(0.475)	(0.364)	(0.668)
Secondary incomplete	0.055	–0.002		0.059	0.114***	0.142***	0.132***	0.090**
	(0.098)	(0.955)		(0.064)	(0.001)	(0.000)	(0.000)	(0.006)
Secondary complete	0.184***	0.067		0.210***	0.321***	0.370***	0.353***	0.261***
	(0.000)	(0.074)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tertiary incomplete	0.490***	0.360***		0.513***	0.638***	0.695***	0.652***	0.559***
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tertiary complete	0.582***	0.428***		0.582***	0.734***	0.791***	0.757***	0.628***
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Formal employment		0.278***	0.417***	0.326***				0.332***
		(0.000)	(0.000)	(0.000)				(0.000)
Broad sectors (relative to agriculture)								
Industry				0.234***	0.231***			
				(0.000)	(0.000)			
Services				–0.070	–0.033			
				(0.075)	(0.403)			
Sub-sectors (relative to Agriculture)								
Mining						0.121	0.113	0.102
						(0.102)	(0.109)	(0.153)
Public utilities						-0.067	-0.096	-0.184**
						(0.258)	(0.107)	(0.001)
Manufacturing						0.110*	0.084*	0.075
						(0.011)	(0.047)	(0.074)
Construction						0.341***	0.325***	0.345***
						(0.000)	(0.000)	(0.000)
Wholesale and Retail						-0.172***	-0.201***	-0.189***
						(0.001)	(0.000)	(0.000)
Transport and Communications						0.022	-0.006	-0.029
						(0.655)	(0.904)	(0.520)
Hotels and Restaurants						-0.183**	-0.223***	-0.228***
						(0.002)	(0.000)	(0.000)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Financial and Business Services						0.051	0.034	-0.046
						(0.414)	(0.589)	(0.492)
Public Administration						0.172***	0.153**	-0.011
						(0.000)	(0.002)	(0.829)
Health and Education						-0.118*	-0.120*	-0.162***
						(0.014)	(0.012)	(0.000)
Other Services						0.026	-0.010	-0.006
						(0.707)	(0.878)	(0.925)
Province (relative to province 3)								
Province 1							–0.126***	–0.115***
							(0.000)	(0.000)
Province 2							–0.117***	–0.103**
							(0.001)	(0.002)
Province 4							–0.002	0.001
							(0.947)	(0.973)
Province 5							–0.122***	–0.117***
							(0.000)	(0.000)
Province 6							–0.054	–0.040
							(0.234)	(0.345)
Province 7							–0.182***	–0.175***
							(0.000)	(0.000)
Urban								0.000
								(0.985)
Constant	8.349***	8.444***	8.606***	8.353***	8.234***	8.241***	8.330***	8.423***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290

Notes: Ordinary Least Squares regressions with weighted observations; Heterocedastic robust standard errors in parentheses.* p<0.05 ** p<0.01 *** p<0.001.
Source: World Bank estimates based on NLFS 2018.

Table A.2
OLS wage regressions for employed wage workers (gross hourly wage in 2010 Rs.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Experience	0.028***	0.021***	0.012**	0.021***	0.028***	0.025***	0.025***	0.019***
	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Experience squared	–0.000***	–0.000**	–0.000	–0.000**	–0.000***	–0.000***	–0.000***	–0.000**
	(0.000)	(0.005)	(0.101)	(0.007)	(0.000)	(0.000)	(0.000)	(0.007)
Male	0.197***	0.194***	0.168***	0.162***	0.172***	0.172***	0.181***	0.163***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Education level (relative to Primary incomplete or No education)								
Primary complete	–0.009	–0.025		–0.012	0.004	0.018	0.022	0.012
	(0.829)	(0.564)		(0.790)	(0.921)	(0.676)	(0.594)	(0.778)
Secondary incomplete	0.056	–0.003		0.074	0.131**	0.151***	0.147***	0.108*
	(0.207)	(0.948)		(0.094)	(0.003)	(0.001)	(0.001)	(0.012)
Secondary complete	0.255***	0.133**		0.307***	0.424***	0.427***	0.421***	0.336***

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(0.000)	(0.006)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tertiary incomplete	0.592***	0.456***		0.644***	0.775***	0.766***	0.746***	0.664***
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tertiary complete	0.698***	0.537***		0.720***	0.880***	0.867***	0.851***	0.731***
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Formal employment		0.290***	0.471***	0.342***				0.331***
		(0.000)	(0.000)	(0.000)				(0.000)
Broad sectors (relative to agriculture)								
Industry				–0.103	–0.106			
				(0.117)	(0.104)			
Services				–0.386***	–0.347***			
				(0.000)	(0.000)			
Sub-sectors (relative to Agriculture)								
Mining						0.080	0.089	0.072
						(0.726)	(0.685)	(0.748)
Public utilities						–0.337***	–0.348***	–0.431***
						(0.000)	(0.000)	(0.000)
Manufacturing						–0.268***	–0.282***	–0.288***
						(0.000)	(0.000)	(0.000)
Construction						0.004	0.002	0.022
						(0.955)	(0.971)	(0.736)
Wholesale and Retail						–0.653***	–0.665***	–0.645***
						(0.000)	(0.000)	(0.000)
Transport and Communications						–0.338***	–0.350***	–0.370***
						(0.000)	(0.000)	(0.000)
Hotels and Restaurants						–0.630***	–0.646***	–0.648***
						(0.000)	(0.000)	(0.000)
Financial and Business Services						–0.218**	–0.226**	–0.305***
						(0.004)	(0.003)	(0.000)
Public Administration						–0.100	–0.109	–0.267***
						(0.173)	(0.147)	(0.000)
Health and Education						–0.337***	–0.335***	–0.381***
						(0.000)	(0.000)	(0.000)
Other Services						–0.264**	–0.282**	–0.272**
						(0.004)	(0.002)	(0.003)
Province (relative to province 3)								
Province 1							–0.053	–0.049
							(0.281)	(0.283)
Province 2							–0.050	–0.041
							(0.240)	(0.333)
Province 4							0.017	0.013
							(0.670)	(0.710)
Province 5							–0.125**	–0.127***
							(0.002)	(0.001)
Province 6							0.003	0.010

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							(0.956)	(0.851)
Province 7							–0.118*	–0.114**
							(0.011)	(0.009)
Urban								–0.040
								(0.167)
Constant	3.167***	3.265***	3.489***	3.434***	3.310***	3.333***	3.379***	3.503***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290

Notes: Ordinary Least Squares regressions with weighted observations; Heterocedastic robust standard errors in parentheses.* p<0.05 ** p<0.01 *** p<0.001.
Source: World Bank estimates based on NLFS 2018

Table A.3
OLS wage regressions over time (male vs. female, gross hourly wage in 2010 Rs.)

	1998				2008				2018			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Experience	0.029***	0.025***	0.033***	0.027***	0.045***	0.037***	0.045***	0.035***	0.032***	0.030***	0.033***	0.030***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Experience squared	–0.000***	–0.000**	–0.000***	–0.000***	–0.001***	–0.000*	–0.001***	–0.000	–0.000***	–0.000**	–0.000***	–0.000*
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.044)	(0.000)	(0.201)	(0.000)	(0.006)	(0.000)	(0.014)
Urban	0.195***	0.174**	0.192***	0.169**	0.147***	0.005	0.154***	0.020	0.002	0.076	0.000	0.077
	(0.000)	(0.003)	(0.000)	(0.003)	(0.000)	(0.926)	(0.000)	(0.725)	(0.913)	(0.110)	(0.992)	(0.101)
Formal sector	0.160**	0.370***	0.135*	0.351***	0.162***	0.503***	0.135***	0.468***	–0.079**	0.117	–0.098**	0.081
		(0.000)	(0.011)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.010)	(0.059)	(0.001)	(0.204)
Education level (relative to Primary incomplete or No education)												
Primary complete	0.209***	0.329*			0.021	0.104			0.011	0.048		
	(0.001)	(0.016)			(0.693)	(0.345)			(0.715)	(0.585)		
Secondary incomplete	0.324***	0.600***			0.123**	0.214*			0.104**	0.332***		
	(0.000)	(0.000)			(0.003)	(0.016)			(0.002)	(0.000)		
Secondary complete	0.539***	0.895***			0.460***	0.569***			0.294***	0.640***		
	(0.000)	(0.000)			(0.000)	(0.000)			(0.000)	(0.000)		
Tertiary incomplete	0.841***	0.895***			0.649***	0.926***			0.577***	0.970***		
	(0.000)	(0.000)			(0.000)	(0.000)			(0.000)	(0.000)		
Tertiary complete	0.861***	1.006***			0.823***	0.955***			0.712***	1.003***		
	(0.000)	(0.000)			(0.000)	(0.000)			(0.000)	(0.000)		
Sub-sectors (relative to Agriculture)												
Mining	0.603***	1.214***	0.609***	1.221***	0.688***	–0.038	0.751***	0.069	0.129	0.208	0.129	0.267
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.856)	(0.000)	(0.719)	(0.094)	(0.205)	(0.122)	(0.095)
Public utilities	0.653***	0.671*	0.614***	0.621*	0.409***	0.312*	0.347**	0.248	–0.034	–0.197	–0.066	–0.193
	(0.000)	(0.020)	(0.000)	(0.026)	(0.001)	(0.018)	(0.002)	(0.076)	(0.579)	(0.207)	(0.292)	(0.147)
Manufacturing	0.587***	–0.062	0.572***	–0.057	0.450***	0.071	0.422***	–0.024	0.156***	–0.210	0.144**	–0.244*
	(0.000)	(0.544)	(0.000)	(0.570)	(0.000)	(0.577)	(0.000)	(0.855)	(0.001)	(0.079)	(0.002)	(0.032)
Construction	0.555***	0.305**	0.538***	0.298**	0.436***	0.258	0.426***	0.204	0.344***	0.266***	0.339***	0.260***
	(0.000)	(0.003)	(0.000)	(0.004)	(0.000)	(0.298)	(0.000)	(0.401)	(0.000)	(0.001)	(0.000)	(0.000)

	1998				2008				2018			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Wholesale and Retail	0.482***	0.385***	0.454***	0.329**	0.203**	0.229	0.140*	0.082	–0.113*	–0.486***	–0.151*	–0.493***
	(0.000)	(0.000)	(0.000)	(0.006)	(0.003)	(0.125)	(0.032)	(0.606)	(0.046)	(0.000)	(0.012)	(0.000)
Transport and Communications	0.546***	0.695*	0.523***	0.689*	0.415***	0.160	0.394***	–0.008	0.044	–0.082	0.025	–0.088
	(0.000)	(0.011)	(0.000)	(0.013)	(0.000)	(0.473)	(0.000)	(0.972)	(0.326)	(0.562)	(0.558)	(0.531)
Hotels and Restaurants	0.321**	0.338*	0.302**	0.311*	0.253*	0.003	0.211	–0.110	–0.167**	–0.389**	–0.217***	–0.437***
	(0.002)	(0.018)	(0.003)	(0.040)	(0.048)	(0.981)	(0.095)	(0.476)	(0.010)	(0.004)	(0.001)	(0.001)
Financial and Business Services	0.660***	0.301	0.623***	0.251	0.369***	0.218	0.348***	0.041	0.173*	–0.332***	0.177*	–0.358***
	(0.000)	(0.072)	(0.000)	(0.159)	(0.000)	(0.123)	(0.000)	(0.785)	(0.028)	(0.000)	(0.033)	(0.000)
Public Administration	0.498***	0.456***	0.444***	0.438***	0.527***	0.415**	0.476***	0.255	0.218***	0.034	0.161**	–0.019
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.002)	(0.000)	(0.072)	(0.000)	(0.731)	(0.004)	(0.846)
Health and Education	0.453***	0.204	0.385***	0.159	0.394***	0.045	0.366***	–0.119	–0.000	–0.419***	0.010	–0.450***
	(0.000)	(0.067)	(0.000)	(0.160)	(0.000)	(0.717)	(0.000)	(0.360)	(1.000)	(0.000)	(0.846)	(0.000)
Other Services	0.295***	–0.248	0.268***	–0.251	0.207*	–0.020	0.169	–0.103	0.091	–0.224*	0.088	–0.230*
	(0.000)	(0.078)	(0.000)	(0.074)	(0.045)	(0.897)	(0.108)	(0.502)	(0.306)	(0.024)	(0.306)	(0.033)
Province (relative to province 3)												
Province 1					–0.211***	–0.238**	–0.210***	–0.227**	–0.114**	–0.189**	–0.128***	–0.202***
					(0.000)	(0.006)	(0.000)	(0.008)	(0.002)	(0.002)	(0.001)	(0.001)
Province 2					–0.277***	–0.295**	–0.287***	–0.288**	–0.125***	–0.100	–0.120**	–0.092
					(0.000)	(0.003)	(0.000)	(0.004)	(0.001)	(0.299)	(0.002)	(0.334)
Province 4					0.028	–0.259*	0.020	–0.251*	0.051	–0.115	0.048	–0.107
					(0.472)	(0.011)	(0.616)	(0.012)	(0.190)	(0.051)	(0.206)	(0.070)
Province 5					–0.143**	–0.209*	–0.153**	–0.203*	–0.132***	–0.084	–0.132***	–0.078
					(0.002)	(0.040)	(0.001)	(0.047)	(0.000)	(0.195)	(0.000)	(0.209)
Province 6					–0.092	–0.039	–0.104	–0.058	–0.044	–0.084	–0.048	–0.098
					(0.393)	(0.704)	(0.349)	(0.611)	(0.383)	(0.250)	(0.324)	(0.165)
Province 7					0.024	–0.170	0.006	–0.166	–0.213***	–0.084	–0.226***	–0.094
					(0.814)	(0.085)	(0.952)	(0.097)	(0.000)	(0.218)	(0.000)	(0.135)
Years of education completed			0.055***	0.072***			0.060***	0.081***			0.054***	0.085***
			(0.000)	(0.000)			(0.000)	(0.000)			(0.000)	(0.000)
Constant	7.102***	6.889***	7.009***	6.844***	7.516***	7.292***	7.247***	7.006***	8.613***	8.192***	8.331***	7.846***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R-squared												
N	5,144	1,491	5,144	1,491	4,516	1,225	4,516	1,225	4,838	1,452	4,838	1,452

Notes: Ordinary Least Squares regressions with weighted observations; Heterocedastic robust standard errors in parentheses.* p<0.05 ** p<0.01 *** p<0.001.

Source: World Bank estimates based on NLFS 1998, 2008, and 2018.

Table A.4
Net job creation for women, 2008–2018

		2008	2018	Net job creation	Share of total net job creation (%)
Agriculture	Permanent wage	9,232	772	–8,459	–0.4%
	Temporary wage	218,850	287,245	68,394	3.0%
	Non-wage	5,046,975	6,283,920	1,236,945	54.9%
Mining	Permanent wage	0	0	0	0.0%
	Temporary wage	3,177	7,696	4,519	0.2%
	Non-wage	4,832	8,090	3,258	0.1%
Public utilities	Permanent wage	2,459	3,615	1,156	0.1%
	Temporary wage	1,855	7,306	5,451	0.2%
	Non-wage	68,617	167,037	98,419	4.4%
Manufacturing	Permanent wage	9,553	6,555	–2,998	–0.1%
	Temporary wage	58,617	100,227	41,610	1.8%
	Non-wage	233,894	246,095	12,201	0.5%
Construction	Permanent wage	1,327	0	–1,327	–0.1%
	Temporary wage	20,017	108,669	88,652	3.9%
	Non-wage	19,264	12,436	–6,828	–0.3%
Wholesale and Retail	Permanent wage	1,846	4,384	2,538	0.1%
	Temporary wage	6,456	29,930	23,474	1.0%
	Non-wage	236,809	510,463	273,655	12.1%
Transport and Communications	Permanent wage	1,440	2,811	1,372	0.1%
	Temporary wage	6,258	10,408	4,149	0.2%
	Non-wage	4,043	6,711	2,668	0.1%
Hotels and Restaurant	Permanent wage	1,451	5,404	3,953	0.2%
	Temporary wage	9,090	21,849	12,759	0.6%
	Non-wage	92,638	139,716	47,078	2.1%
Financial and Business Services	Permanent wage	4,443	20,319	15,877	0.7%
	Temporary wage	5,469	46,589	41,121	1.8%
	Non-wage	11,318	6,439	–4,879	–0.2%
Public Administration	Permanent wage	7,712	13,159	5,447	0.2%
	Temporary wage	4,408	15,476	11,068	0.5%
	Non-wage	640	0	–640	0.0%
Health and Education	Permanent wage	42,999	78,444	35,446	1.6%
	Temporary wage	74,708	255,213	180,505	8.0%
	Non-wage	9,366	12,679	3,313	0.1%
Other Services	Permanent wage	2,697	1,321	–1,376	–0.1%
	Temporary wage	26,460	58,948	32,488	1.4%
	Non-wage	10,472	33,416	22,944	1.0%
All Sectors	Permanent wage	85,157	136,786	51,629	2.3%
	Temporary wage	435,367	949,557	514,190	22.8%
	Non-wage	5,738,867	7,427,003	1,688,136	74.9%
Total		6,259,391	8,513,346	2,253,955	100.0%

Source: World Bank estimates based on NLFS 2008, 2018.

Table A.5
Net job creation for men, 2008–2018

		2008	2018	Net job creation	Share of total net job creation (%)
Agriculture	Permanent wage	17,083	6,136	–10,947	–0.6%
	Temporary wage	276,935	240,599	–36,336	–2.1%
	Non-wage	3,135,477	3,091,430	–44,047	–2.6%
Mining	Permanent wage	83	529	447	0.0%
	Temporary wage	8,393	34,844	26,451	1.6%
	Non-wage	10,675	7,615	–3,060	–0.2%
Public utilities	Permanent wage	8,758	13,614	4,856	0.3%
	Temporary wage	14,462	30,900	16,438	1.0%
	Non-wage	25,262	72,661	47,399	2.8%
Manufacturing	Permanent wage	36,303	66,030	29,727	1.8%
	Temporary wage	218,842	366,386	147,543	8.7%
	Non-wage	203,616	286,555	82,939	4.9%
Construction	Permanent wage	12,496	6,842	–5,654	–0.3%
	Temporary wage	251,803	806,132	554,329	32.6%
	Non-wage	62,010	82,526	20,516	1.2%
Wholesale and Retail	Permanent wage	4,830	6,941	2,112	0.1%
	Temporary wage	51,767	117,994	66,227	3.9%
	Non-wage	390,008	570,187	180,179	10.6%
Transport and Communications	Permanent wage	30,840	18,661	–12,179	–0.7%
	Temporary wage	116,923	245,380	128,457	7.6%
	Non-wage	60,838	98,670	37,832	2.2%
Hotels and Restaurant	Permanent wage	3,423	5,218	1,794	0.1%
	Temporary wage	17,057	64,719	47,662	2.8%
	Non-wage	73,445	134,017	60,572	3.6%
Financial and Business Services	Permanent wage	14,007	56,736	42,730	2.5%
	Temporary wage	19,902	82,663	62,761	3.7%
	Non-wage	37,915	29,688	–8,228	–0.5%
Public Administration	Permanent wage	75,283	73,032	–2,251	–0.1%
	Temporary wage	17,446	31,166	13,720	0.8%
	Non-wage	3,367	379	–2,988	–0.2%
Health and Education	Permanent wage	126,148	139,402	13,255	0.8%
	Temporary wage	94,147	217,050	122,903	7.2%
	Non-wage	15,048	26,128	11,080	0.7%
Other Services	Permanent wage	9,537	8,974	–563	0.0%
	Temporary wage	44,453	92,028	47,575	2.8%
	Non-wage	30,897	85,440	54,543	3.2%
All sectors	Permanent wage	338,790	402,116	63,326	3.7%
	Temporary wage	1,132,130	2,329,861	1,197,731	70.5%
	Non-wage	4,048,558	4,485,296	436,738	25.7%
Total		5,519,478	7,217,273	1,697,795	100.0%

Source: World Bank estimates based on NLFS 2008, 2018.

Table A.6
Correlates of firm productivity (log), 2012

Variables	(1) Size	(2) Females	(3) Owner	(4) Capital	(5) HHI	(6) Export	(7) Region	(8) Innov-2012
sz_20to49	0.379***	0.422***	0.417***	0.126	0.122	0.106	0.0956	0.0430
	(0.103)	(0.0977)	(0.0981)	(0.0766)	(0.0773)	(0.0761)	(0.0648)	(0.0607)
sz_50to249	0.0377	0.122	0.0852	–0.335***	–0.341***	–0.362***	–0.368***	–0.455***
	(0.173)	(0.166)	(0.167)	(0.116)	(0.117)	(0.112)	(0.110)	(0.103)
sz_250to499	0.00342	0.156	0.108	–0.566***	–0.566***	–0.580***	–0.590***	–0.690***
	(0.295)	(0.258)	(0.247)	(0.181)	(0.187)	(0.181)	(0.183)	(0.148)
sz_500plus	0.581**	0.598*	0.484	–0.793**	–0.762**	–0.892**	–0.934***	–1.041***
	(0.284)	(0.315)	(0.306)	(0.328)	(0.323)	(0.339)	(0.348)	(0.283)
TextLeatFoot	–0.469***	–0.271**	–0.248*	–0.129	–0.140	–0.186*	–0.159*	–0.0810
	(0.129)	(0.124)	(0.127)	(0.103)	(0.105)	(0.106)	(0.0861)	(0.0734)
WoodPaperPrint	–0.379***	–0.396***	–0.389***	–0.288**	–0.311**	–0.305**	–0.283***	–0.207**
	(0.116)	(0.117)	(0.120)	(0.120)	(0.119)	(0.117)	(0.0867)	(0.0829)
PetChem	0.318*	0.330*	0.295*	0.267*	0.315**	0.286**	0.261*	0.186
	(0.175)	(0.167)	(0.151)	(0.138)	(0.137)	(0.143)	(0.134)	(0.116)
Plastics	0.00923	0.0325	0.0413	–0.0659	–0.0785	–0.0816	–0.0854	–0.0839
	(0.116)	(0.114)	(0.116)	(0.101)	(0.101)	(0.101)	(0.0882)	(0.0737)
NonMetCemClay	–0.288	–0.324	–0.296	–0.149	–0.194	–0.190	–0.184	–0.0914
	(0.205)	(0.198)	(0.198)	(0.139)	(0.140)	(0.135)	(0.127)	(0.110)
BasicMetals	0.391	0.283	0.289	0.248	0.323	0.302	0.277	0.208
	(0.258)	(0.237)	(0.234)	(0.193)	(0.195)	(0.189)	(0.180)	(0.181)
MachVehicTrans	–0.0129	–0.101	–0.103	–0.0455	0.0735	0.108	0.0925	0.223
	(0.145)	(0.147)	(0.146)	(0.179)	(0.182)	(0.182)	(0.186)	(0.197)
Furniture	–0.461***	–0.534***	–0.526***	–0.214**	–0.262**	–0.262**	–0.279***	–0.225***
	(0.118)	(0.119)	(0.121)	(0.102)	(0.102)	(0.102)	(0.0722)	(0.0644)
OtherMan	–0.111	–0.165	–0.167	–0.0988	–0.0272	–0.0357	–0.0204	0.00106
	(0.139)	(0.135)	(0.136)	(0.105)	(0.106)	(0.104)	(0.0854)	(0.0802)
Share of females		–0.930***	–0.936***	–0.568***	–0.532***	–0.478***	–0.531***	–0.499***
		(0.127)	(0.130)	(0.124)	(0.122)	(0.120)	(0.119)	(0.109)
Foreign			0.546**	0.401**	0.454**	0.422**	0.483***	0.442**
			(0.220)	(0.193)	(0.187)	(0.184)	(0.181)	(0.172)
State-owned			0.361	0.350**	0.368***	0.392***	0.472***	0.389**
			(0.241)	(0.144)	(0.136)	(0.137)	(0.162)	(0.153)
Capital (log)				0.238***	0.235***	0.225***	0.219***	0.196***
				(0.0155)	(0.0156)	(0.0148)	(0.0149)	(0.0138)
Labor concentration					–0.0739	–0.0917	–0.153	–0.194
					(0.343)	(0.345)	(0.334)	(0.315)
Sales concentration					–0.561***	–0.582***	–0.591***	–0.746***
					(0.206)	(0.208)	(0.213)	(0.206)
Export-value (log)						0.0194***	0.0189***	0.0191***
						(0.00378)	(0.00374)	(0.00354)
Central							0.120	0.138
							(0.0967)	(0.0828)

Variables	(1) Size	(2) Females	(3) Owner	(4) Capital	(5) HHI	(6) Export	(7) Region	(8) Innov-2012
MidWestern							–0.350***	–0.315***
							(0.116)	(0.106)
Western							0.138	0.145*
							(0.101)	(0.0828)
Eastern							0.153	0.160*
							(0.103)	(0.0836)
FarWestern							–0.0392	–0.0319
							(0.199)	(0.184)
Filed Patent								0.390***
								(0.0805)
Management Quality								0.395***
								(0.0790)
Constant	12.64***	12.73***	12.72***	9.395***	9.479***	9.614***	9.628***	9.856***
	(0.0930)	(0.0968)	(0.0978)	(0.248)	(0.248)	(0.241)	(0.229)	(0.215)
Observations	3,680	3,680	3,666	3,618	3,618	3,618	3,618	3,618
R-squared	0.065	0.091	0.096	0.222	0.226	0.233	0.252	0.283

Note: Robust standard errors in parentheses.* p<0.1 ** p<0.05 *** p<0.01.

Source: World Bank estimates based on National Census of Manufacturing Establishments 2012.

Table A.7
Correlates of firm employment level (log), 2012

Variables	(1) Prod	(2) Female	(3) Owner	(4) Capital	(5) HHI	(6) Export	(7) Region	(8) Innov-2012
LPV_quartile==Q2	–0.0896	–0.0884	–0.0975	–0.145*	–0.151**	–0.149**	–0.0994**	–0.103**
	(0.0887)	(0.0778)	(0.0766)	(0.0737)	(0.0720)	(0.0711)	(0.0407)	(0.0405)
LPV_quartile==Q3	–0.303*	–0.234	–0.245	–0.494***	–0.496***	–0.502***	–0.349***	–0.360***
	(0.172)	(0.163)	(0.163)	(0.165)	(0.161)	(0.161)	(0.0942)	(0.0956)
LPV_quartile==Q4-high	–0.0144	0.0679	0.0322	–0.550***	–0.548***	–0.574***	–0.446***	–0.519***
	(0.200)	(0.189)	(0.187)	(0.207)	(0.200)	(0.198)	(0.150)	(0.155)
Share of females		1.147***	1.135***	1.072***	1.118***	1.134***	1.098***	1.066***
		(0.302)	(0.303)	(0.217)	(0.220)	(0.221)	(0.190)	(0.189)
Foreign			0.881***	0.521***	0.597***	0.557***	0.589***	0.557***
			(0.209)	(0.142)	(0.141)	(0.136)	(0.132)	(0.126)
State-owned			1.241***	0.799***	0.825***	0.839***	0.787***	0.708***
			(0.291)	(0.240)	(0.235)	(0.226)	(0.196)	(0.202)
Capital (log)				0.315***	0.314***	0.301***	0.265***	0.244***
				(0.0385)	(0.0384)	(0.0392)	(0.0323)	(0.0307)
Labor concentration					–0.379	–0.489	0.129	0.136
					(0.744)	(0.709)	(0.527)	(0.501)
Sales concentration					–0.519	–0.525	–0.157	–0.315
					(0.323)	(0.318)	(0.238)	(0.227)
Export-value (log)						0.0228***	0.0210***	0.0214***
						(0.00796)	(0.00785)	(0.00738)

Variables	(1) Prod	(2) Female	(3) Owner	(4) Capital	(5) HHI	(6) Export	(7) Region	(8) Innov-2012
Central							0.0377	0.0596
							(0.235)	(0.224)
MidWestern							–0.133	–0.100
							(0.255)	(0.246)
Western							–0.103	–0.0860
							(0.242)	(0.225)
Eastern							0.0885	0.100
							(0.221)	(0.207)
FarWestern							–0.00651	0.00519
							(0.224)	(0.206)
TextLeatFoot							0.0984	0.156
							(0.205)	(0.192)
WoodPaperPrint							0.0466	0.105
							(0.149)	(0.137)
PetChem							0.174	0.116
							(0.213)	(0.197)
Plastics							–0.0800	–0.0701
							(0.184)	(0.169)
NonMetCemClay							0.919***	0.964***
							(0.284)	(0.273)
BasicMetals							0.916***	0.853***
							(0.331)	(0.310)
MachVehicTrans							0.233	0.345
							(0.222)	(0.214)
Furniture							0.0863	0.123
							(0.129)	(0.115)
OtherMan							0.233	0.248
							(0.172)	(0.157)
Filed Patent								0.378***
								(0.0845)
Management Quality								0.257**
								(0.120)
Constant	3.332***	3.147***	3.138***	–1.078**	–1.029**	–0.859*	–0.741	–0.525
	(0.222)	(0.213)	(0.211)	(0.464)	(0.459)	(0.456)	(0.478)	(0.454)
Observations	3,680	3,680	3,666	3,618	3,618	3,618	3,618	3,618
R-squared	0.014	0.061	0.083	0.328	0.335	0.344	0.477	0.498

Note: Robust standard errors in parentheses.* p<0.1 ** p<0.05 *** p<0.01.

Source: World Bank estimates based on National Census of Manufacturing Establishments 2012.

Table A.8
Correlates of average firm wage (log), 2012

Variables	(1) Size	(2) Female	(3) Owner	(4) Capital	(5) Export	(6) Productivity	(7) Regions	(8) Innov-2012
sz_20to49	1.033***	1.069***	1.065***	0.919***	0.918***	0.941***	0.947***	0.946***
	(0.0573)	(0.0546)	(0.0546)	(0.0505)	(0.0500)	(0.0473)	(0.0481)	(0.0485)
sz_50to249	2.029***	2.095***	2.087***	1.878***	1.877***	1.975***	1.979***	1.976***
	(0.116)	(0.110)	(0.111)	(0.0989)	(0.0983)	(0.105)	(0.101)	(0.103)
sz_250to499	3.200***	3.325***	3.310***	2.979***	2.978***	3.114***	3.103***	3.101***
	(0.169)	(0.147)	(0.143)	(0.126)	(0.126)	(0.120)	(0.124)	(0.124)
sz_500plus	4.555***	4.557***	4.480***	3.858***	3.855***	4.077***	4.061***	4.062***
	(0.291)	(0.265)	(0.272)	(0.257)	(0.252)	(0.319)	(0.316)	(0.318)
TextLeatFoot	0.0604	0.223**	0.228**	0.290***	0.289***	0.387***	0.417***	0.422***
	(0.0980)	(0.100)	(0.101)	(0.0995)	(0.0985)	(0.0736)	(0.0805)	(0.0818)
WoodPaperPrint	–0.0192	–0.0312	–0.0230	0.0188	0.0189	0.0722	0.0850	0.0898
	(0.0805)	(0.0808)	(0.0815)	(0.0808)	(0.0808)	(0.0696)	(0.0554)	(0.0573)
PetChem	0.0657	0.0755	0.0706	0.0518	0.0512	–0.0436	–0.0480	–0.0471
	(0.130)	(0.130)	(0.131)	(0.132)	(0.132)	(0.135)	(0.143)	(0.141)
Plastics	–0.0298	–0.00866	–0.00494	–0.0575	–0.0575	–0.0547	–0.0573	–0.0527
	(0.0793)	(0.0727)	(0.0729)	(0.0706)	(0.0707)	(0.0584)	(0.0595)	(0.0609)
NonMetCemClay	–0.137	–0.161	–0.156	–0.0856	–0.0855	–0.0395	–0.0613	–0.0551
	(0.109)	(0.102)	(0.103)	(0.0944)	(0.0942)	(0.0933)	(0.0885)	(0.0893)
BasicMetals	0.298	0.212	0.225	0.198	0.198	0.0846	0.0796	0.0850
	(0.225)	(0.207)	(0.209)	(0.196)	(0.196)	(0.213)	(0.217)	(0.217)
MachVehicTrans	0.337***	0.271**	0.277**	0.316**	0.316**	0.234**	0.215**	0.222**
	(0.111)	(0.109)	(0.109)	(0.123)	(0.124)	(0.0906)	(0.0842)	(0.0857)
Furniture	0.390***	0.335***	0.341***	0.488***	0.488***	0.472***	0.452***	0.457***
	(0.0808)	(0.0785)	(0.0803)	(0.0770)	(0.0770)	(0.0530)	(0.0573)	(0.0585)
OtherMan	0.167*	0.124	0.125	0.161*	0.161*	0.159*	0.159**	0.163**
	(0.0935)	(0.0893)	(0.0902)	(0.0895)	(0.0893)	(0.0847)	(0.0778)	(0.0779)
Share of females		–0.780***	–0.775***	–0.588***	–0.587***	–0.511***	–0.496***	–0.498***
		(0.159)	(0.159)	(0.168)	(0.165)	(0.146)	(0.142)	(0.143)
Foreign			0.0565	–0.0262	–0.0268	0.0227	0.0534	0.0560
			(0.138)	(0.135)	(0.134)	(0.138)	(0.139)	(0.140)
State-owned			0.533***	0.575***	0.575***	0.525***	0.581***	0.582***
			(0.198)	(0.132)	(0.132)	(0.134)	(0.135)	(0.136)
Capital (log)				0.114***	0.114***	0.0646***	0.0621***	0.0619***
				(0.0126)	(0.0125)	(0.0117)	(0.0112)	(0.0107)
Export-value (log)					0.000409	–0.00271	–0.00232	–0.00225
					(0.00480)	(0.00562)	(0.00539)	(0.00539)
LPV_quartile==Q2						0.467***	0.443***	0.443***
						(0.0407)	(0.0389)	(0.0389)
LPV_quartile==Q3						0.593***	0.569***	0.568***
						(0.0421)	(0.0399)	(0.0399)
LPV_quartile==Q4-high						0.637***	0.611***	0.609***
						(0.0537)	(0.0529)	(0.0518)

Variables	(1) Size	(2) Female	(3) Owner	(4) Capital	(5) Export	(6) Productivity	(7) Regions	(8) Innov-2012
Central							0.244***	0.246***
							(0.0703)	(0.0692)
MidWestern							0.0793	0.0820
							(0.0796)	(0.0801)
Western							0.247***	0.248***
							(0.0792)	(0.0793)
Eastern							0.155*	0.158*
							(0.0797)	(0.0795)
FarWestern							0.0772	0.0788
							(0.0796)	(0.0796)
Filed Patent								0.0324
								(0.0463)
Management Quality								–0.0275
								(0.0687)
Constant	12.56***	12.63***	12.63***	11.04***	11.04***	11.26***	11.12***	11.12***
	(0.0706)	(0.0703)	(0.0709)	(0.199)	(0.199)	(0.171)	(0.169)	(0.162)
Observations	4,075	4,075	4,058	4,002	4,002	3,618	3,618	3,618
R-squared	0.578	0.591	0.592	0.612	0.612	0.657	0.661	0.661

Note: Robust standard errors in parentheses.* p<0.1 ** p<0.05 *** p<0.01.

Source: World Bank estimates based on National Census of Manufacturing Establishments 2012.

Table A.9
Correlates of average firm wage (log), 2007

Variables	(1) Size	(2) Female	(3) Owner	(4) Capital	(5) Export	(6) Productivity	(7) Regions
sz_20to49	0.904***	1.208***	1.188***	1.072***	1.063***	1.009***	1.002***
	(0.0776)	(0.118)	(0.118)	(0.129)	(0.130)	(0.0889)	(0.0776)
sz_50to249	1.931***	2.358***	2.336***	2.090***	2.070***	2.138***	2.123***
	(0.141)	(0.123)	(0.119)	(0.108)	(0.112)	(0.0907)	(0.0788)
sz_250to499	3.315***	3.609***	3.566***	3.098***	3.058***	3.069***	3.082***
	(0.195)	(0.138)	(0.134)	(0.138)	(0.153)	(0.122)	(0.110)
sz_500plus	3.737***	4.162***	3.962***	3.418***	3.336***	3.586***	3.619***
	(0.258)	(0.222)	(0.257)	(0.261)	(0.282)	(0.278)	(0.290)
TextLeatFoot	–0.266**	0.609***	0.626***	0.760***	0.729***	0.519***	0.320***
	(0.125)	(0.150)	(0.147)	(0.151)	(0.158)	(0.115)	(0.0892)
WoodPaperPrint	0.145	0.105	0.125	0.177	0.181	0.226**	0.144
	(0.123)	(0.136)	(0.132)	(0.118)	(0.117)	(0.112)	(0.110)
PetChem	0.207	0.129	0.0997	0.122	0.119	0.180	0.0885
	(0.196)	(0.202)	(0.196)	(0.193)	(0.191)	(0.145)	(0.128)
Plastics	0.196	0.0791	0.0596	–0.0209	–0.0325	0.0458	–0.0902
	(0.137)	(0.150)	(0.146)	(0.135)	(0.140)	(0.136)	(0.101)
NonMetCemClay	–0.124	–0.143	–0.121	0.0795	0.0979	0.183	0.129
	(0.145)	(0.156)	(0.152)	(0.134)	(0.136)	(0.118)	(0.0956)

Variables	(1) Size	(2) Female	(3) Owner	(4) Capital	(5) Export	(6) Productivity	(7) Regions
BasicMetals	0.381*	–0.160	–0.194	–0.0986	–0.102	–0.180	–0.307
	(0.195)	(0.282)	(0.274)	(0.263)	(0.264)	(0.304)	(0.288)
MachVehicTrans	0.878***	0.572	0.601	0.610*	0.604*	0.575*	0.595*
	(0.319)	(0.357)	(0.361)	(0.362)	(0.348)	(0.312)	(0.349)
Furniture	0.374***	0.157	0.173	0.365***	0.371***	0.376***	0.266**
	(0.114)	(0.158)	(0.155)	(0.132)	(0.132)	(0.119)	(0.116)
OtherMan	0.304**	0.117	0.0888	0.119	0.122	0.152	0.0636
	(0.134)	(0.153)	(0.149)	(0.129)	(0.130)	(0.103)	(0.0972)
Share of females		–4.137***	–4.110***	–3.859***	–3.848***	–3.890***	–3.972***
		(0.193)	(0.193)	(0.197)	(0.198)	(0.178)	(0.174)
Foreign			0.356***	0.184	0.162	0.143	0.113
			(0.117)	(0.115)	(0.110)	(0.133)	(0.142)
State-owned			0.685**	0.589**	0.631**	0.658***	0.558**
			(0.290)	(0.289)	(0.294)	(0.234)	(0.228)
Capital (log)				0.110***	0.107***	0.0909***	0.0887***
				(0.0211)	(0.0196)	(0.0190)	(0.0170)
Export-value (log)					0.00770	0.0115**	0.0112*
					(0.00630)	(0.00560)	(0.00599)
LPV_quartile==Q2						0.339***	0.299***
						(0.0723)	(0.0716)
LPV_quartile==Q3						0.343***	0.253***
						(0.0852)	(0.0844)
LPV_quartile==Q4-high						0.330***	0.229**
						(0.0918)	(0.0899)
Central							–0.146*
							(0.0842)
MidWestern							–0.537***
							(0.114)
Western							–0.217**
							(0.0948)
Eastern							–0.455***
							(0.107)
FarWestern							–0.454***
							(0.169)
Constant	12.17***	12.55***	12.53***	11.00***	11.03***	11.04***	11.49***
	(0.109)	(0.141)	(0.137)	(0.337)	(0.323)	(0.300)	(0.275)
Observations	3,429	1,545	1,542	1,517	1,517	1,198	1,198
R-squared	0.440	0.713	0.715	0.731	0.732	0.772	0.781
Sector dummies	YES	YES	YES	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES	YES	YES	YES
Year#Sector	YES	YES	YES	YES	YES	YES	YES

Note: Robust standard errors in parentheses.* p<0.1 ** p<0.05 *** p<0.01.

Source: World Bank estimates based on National Census of Manufacturing Establishments 2007.

Table A.10
Firm size distribution in 2007 and 2012 Manufacturing Surveys

Size Category	2007	2012
10—19 employees	1,912	2,320
20—49 employees	755	810
50—99 employees	392	414
100—499 employees	355	509
500+ employees	32	23
Total number of firms	**3,446**	**4,076**

Source: National Census of Manufacturing Establishments 2007, 2012.

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