PATHWAYS TO BETTER JOBS IN IDA COUNTRIES

Dino Merotto, Michael Weber, and Reyes Aterido

Findings from Jobs Diagnostics

WORLD BANK GROUP
Jobs

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CONTENTS

ACKNOWLEDGMENTS

PREFACE

This report documents cross-country findings from analysis conducted by World Bank staff working on Jobs Diagnostics. It identifies some key insights for policy makers to take into account when designing policies and programs for inclusive growth. The findings are drawn from three different sources. The macroeconomic section analyzes data for over 16,000 overlapping episodes of economic growth in 125 countries. The labor supply section analyzes labor data from the latest household surveys in 150 countries around the world. The firm-level analysis draws on business data from countries for which—at the time of writing—the World Bank had conducted a Jobs Diagnostic.

The emphasis—as with the Bank's original commitment to undertake Jobs Diagnostics—is mostly on International Development Association (IDA) countries. Jobs challenges depend on a country's demography and level of development. Since most IDA countries are youthful, they face the challenge of creating better jobs for a fast-growing workforce. The world's labor force will grow by 620 million people from 2020 to 2035, and more than half will be in Sub-Saharan Africa; another 38 percent will be in South Asia, mostly in IDA countries.

ABBREVIATIONS

GDP   gross domestic product
IDA   International Development Association
OECD   Organisation for Economic Co-operation and Development

All dollar amounts are U.S. dollars unless otherwise indicated.

OVERVIEW: KEY INSIGHTS FROM PATHWAYS TO BETTER JOBS

In low-income countries, most people work because they cannot afford not to (figure 0.1). Labor force participation rates and employment rates are highest in low-income countries. In lower-middle-income countries, inactivity is higher and unemployment rates lower. The employment rate starts to rise again around the upper-middle-income threshold and gets progressively higher as gross domestic product (GDP) rises.

Figure 0.1
Labor force participation for population age 15–64
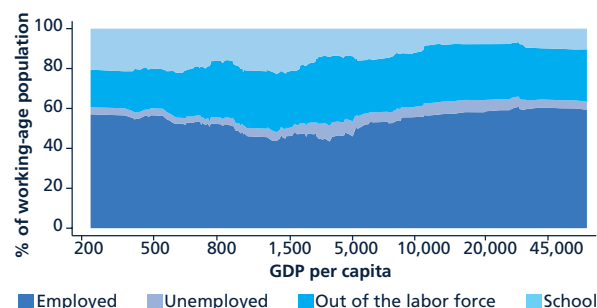
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 149 countries over the years 1999–2016.

Underemployment, not unemployment, is the main challenge for many low-income countries (figure 0.2). On average, 40 percent of employed workers work fewer than 35 hours per week in low- and middle-income countries. On the other hand, around a third of employed people in low-income countries work over 45 hours a week, indicating that hourly productivity is low, so they need to work long hours to survive. Only in upper-middle-income countries do most people work around 35 hours per week.

Figure 0.2
Working hours along GDP per capita
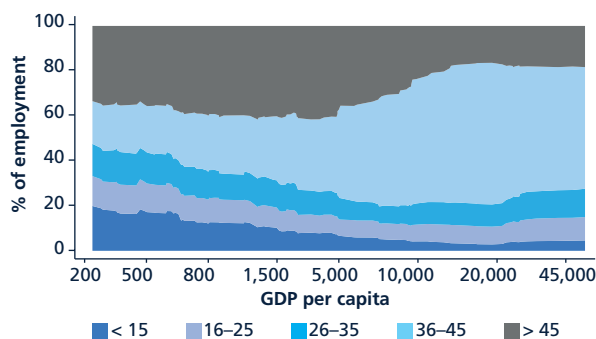
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 112 countries over the years 1999–2016.

Inactivity for women is lowest in low-income countries, but rises in lower-middle-income countries, and then drops again for upper-middle-income countries (figure 0.3). The U-shape for female labor force participation has been found to exist in studies within and between countries. It suggests that after a certain level of income, families decide that women should work in the household rather than take undignified or unsafe jobs. But at higher income levels, as better jobs become available, women return to the labor force.

Figure 0.3
Labor force participation for population age 15–64 by sex
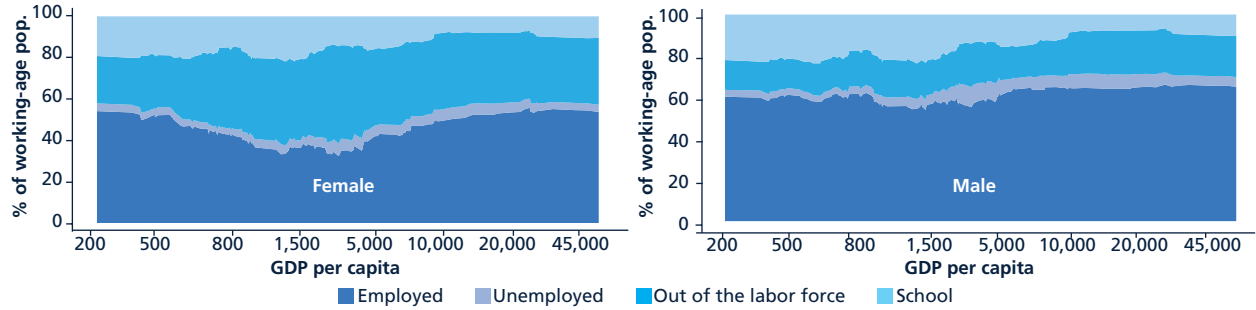
Employed   Unemployed   Out of the labor force   School

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 149 countries over the years 1999–2016.

Economic growth has not always created the right number and distribution of jobs for the expanding workforce in International Development Association (IDA) countries (figure 0.4). There is no guarantee that economic growth will be labor intensive, nor that productivity gains will be shared by all workers. Since most people in low-income countries work, employment in these countries tends to follow the growth of the labor force and is weakly correlated with GDP. What drives GDP growth is productivity growth. Growth can be more inclusive when it is labor intensive, so more workers experience gains in their productivity by moving to better jobs.

Figure 0.4
Employment growth and real GDP growth for five-year growth episodes, 1991–2015
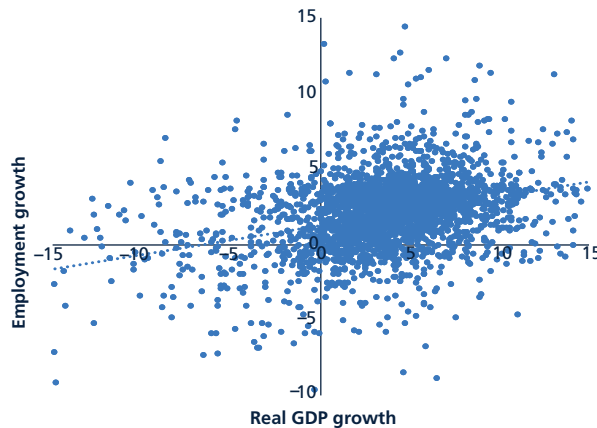
Source: World Bank Group, World Development Indicators.
Note: Figure draws on all growth episodes of five or more years between 1991 and 2015 in the 156 countries for which data are available.

Economic transformation is the main driver of productivity growth in low-income countries (figure 0.5). Our analysis of growth episodes suggests that almost 80 percent of labor productivity growth in low-income countries comes from the reallocation of labor from lower-productivity agriculture into relatively higher-productivity

services and industry. However, overall labor productivity growth tends to be lower in low-income countries than in lower- and upper-middle-income countries because the economy is often unable to absorb all the workers released from agriculture into higher-productivity jobs.

Raising agricultural productivity is critical in catalyzing growth and economic transformation in low- and lower-middle-income countries (figure 0.5). When agricultural productivity is growing, labor moves out of agriculture and GDP growth is faster. The opposite is also true. When agricultural productivity is falling, labor is moving into agriculture: family members return to the farm, which reduces agricultural productivity and lowers economic growth.

Figure 0.5
Productivity decompositions: all growth episodes and those in which agriculture grows
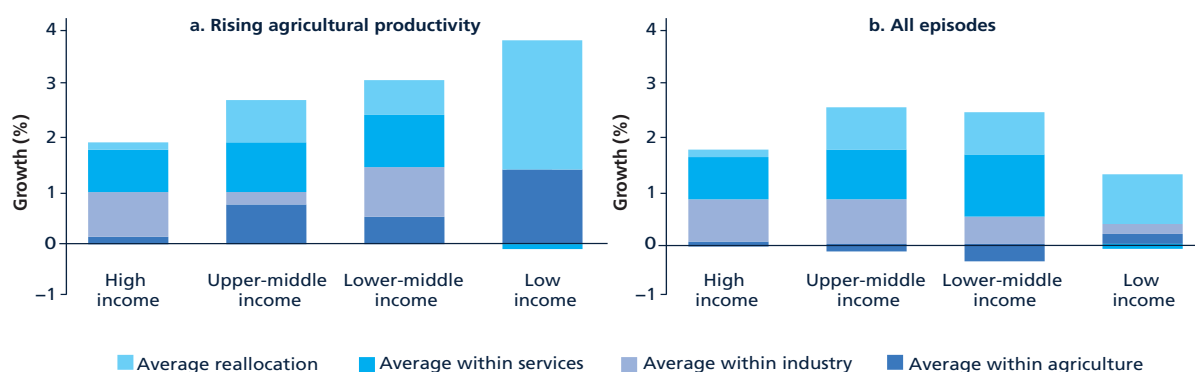
Source: World Bank Group, World Development Indicators.

The gains in economic transformation in low- and lower-middle-income countries are limited by the prevalence of low-productivity self-employed and service activities (figure 0.6). During the growth episodes in low-income countries analyzed for this report, more workers typically moved into services than into industry. Annual average employment growth in services was 37 percent higher than employment growth in industry. In 70 percent of the growth episodes in low-income countries where labor moved into services, the average labor productivity of the service sector declined. For lower-middle-income countries, this is true only in 25 percent of cases—suggesting that the growth of value added in modern services in lower-middle-income countries tends to be faster than in low-income countries.

Figure 0.6
Average annual growth in employment in services and industry for five-year growth episodes, 1991–2015
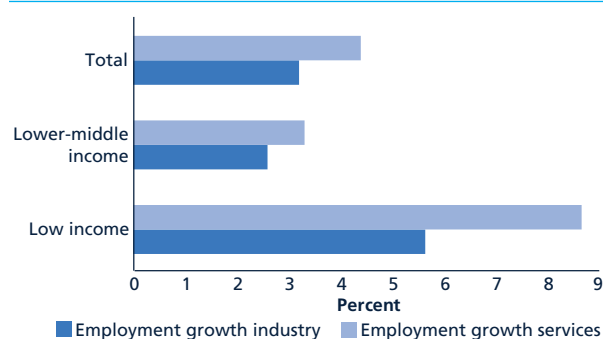
Source: World Bank Group, World Development Indicators.

Urbanization, especially in secondary cities, is a key complement to sectoral transformation in low- and middle-income countries (figure 0.7). In low-income countries, the growth in the share of the urban population in secondary towns and cities is double that of the primary city. In low-income countries that are urbanizing faster than average, labor reallocation from agriculture adds four times as much to per capita income growth as it does in countries with slower than average urbanization.
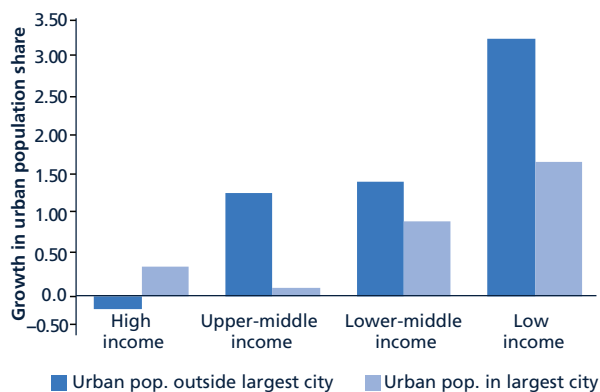
Source: World Bank Group, World Development Indicators.

The share of waged employment in total employment is lowest in low-income countries, and is progressively higher for lower-middle-income countries and upper-middle-income countries (figure 0.8). For countries with annual per capita income below $600, this share is about 20 percent; it reaches 63 percent of employment in middle-income countries. The shares of agricultural workers, unpaid family workers, and self-employed workers decline. This suggests that the creation of waged employment is an important aspect of the economic transformation countries make as they progress toward higher per capita income. This is one of our most significant findings, supporting the conclusion of the 2013 *World Development Report* that there are important developmental gains from waged jobs (even when they are informal), because they are better than the own-account jobs they tend to replace.
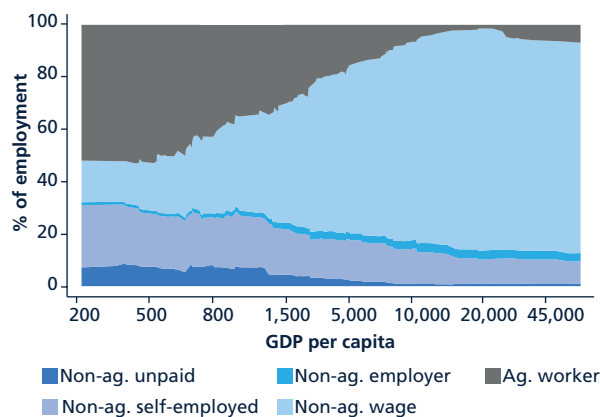
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 141 countries over the years 1999–2016.

The growing share of wage jobs observed as countries become less poor includes both informal and formal jobs (figure 0.9). The share of wage employment is steadily increasing with GDP per capita for low- and middle-income countries, due almost solely to increases in formal wage employment, which accounts for about 20 percent of all employment types at around $250 per capita and increases to around 55 percent at about $14,000 per capita. The share of informal wage employment remains at around 20 percent, while the shares of other types of employment—mostly self-employment, either formal or informal—decrease.

Figure 0.9
Formal wage, informal wage, and other employment by GDP per capita, age 15–64
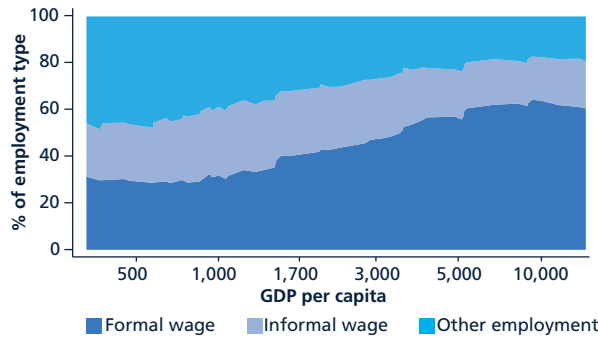
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 59 countries over the years 1999–2015.

In the private sector, job creation comes from new and young firms; large firms are significant employers, but micro firms tend not to expand employment (figure 0.10). Data are hard to come by in low- and middle-income countries, but these results are robust in the Jobs Diagnostics where such data do exist, even after adjusting for firm size and sector of activity. In many countries, micro firms are the majority. But large firms are significant employers of waged workers, and they pay higher wages. Micro firms tend to employ only family members. Although they are subject to a lot of churning, many persist as micro firms beyond 10 years without hiring paid employees—meaning they tend not to be job creators in the wider labor market.

Figure 0.10
Share of employment by micro and large firms and share of micro firms by age
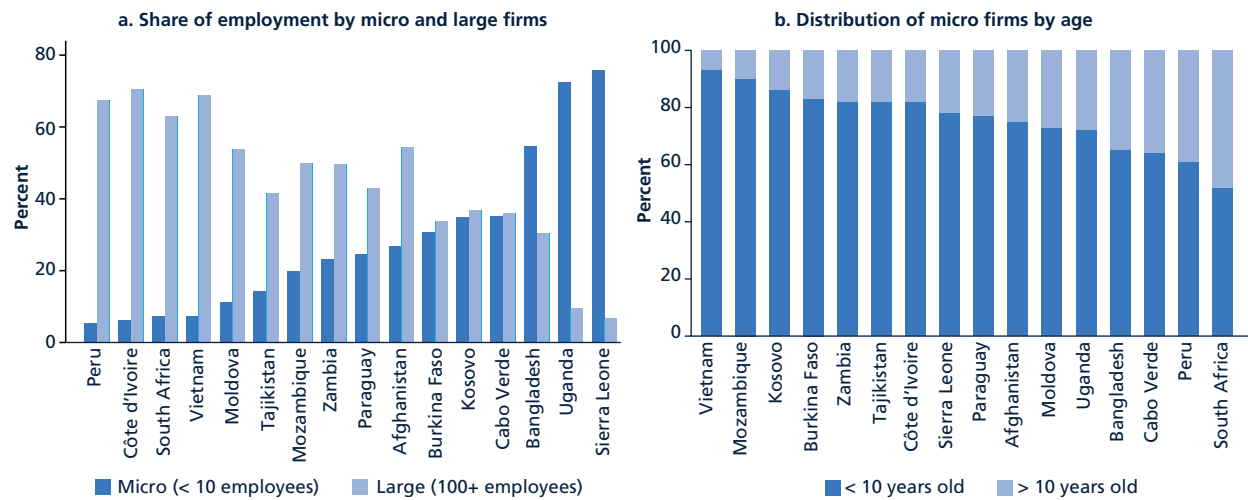
Source: Countries' statistical agencies.

Public sector waged employment in low- and lower-middle-income countries is a significant share of total waged employment (figure 0.11). Public sector waged workers account for about 40 percent of waged work on average (45 percent in low-income countries). Since most waged jobs in the public sector are teachers, nurses, police, and soldiers, these jobs provide careers and social mobility for many members of society and are important jobs in development.

Figure 0.11
Public, private, and other employment by GDP per capita, age 15–64
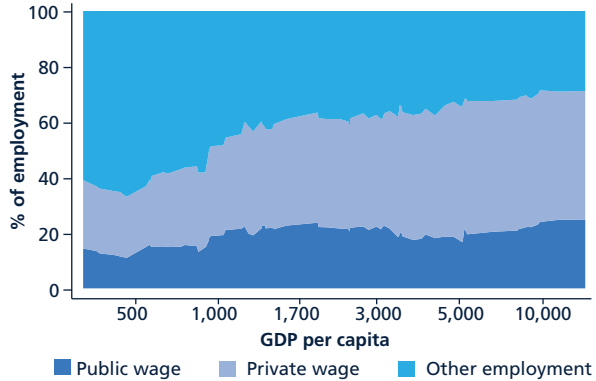
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 81 countries over the years 1999–2015.

1. SCOPE AND PURPOSE OF THIS REPORT

UNDERSTANDING THE PATHWAYS

Jobs drive inclusive development. Economies grow when more people find work, when they get better at what they do, and as they move from low-productivity work (such as self-employment and unpaid family work in farming) to better, higher-productivity jobs (such as waged jobs in the manufacturing or service sector). These jobs-related transitions—workers increasing their hours worked, becoming more productive in their work, moving between locations, changing sectors and occupations, and shifting from self- to waged employment and from less to more successful firms—are the pathways people follow to better jobs. These pathways unfold in response to the broader economic picture. Because as they grow, economies transform. New businesses open with new investment, producing new products in new places; existing businesses either adapt to changing market conditions by innovating, or decline in sales and shed workers.

Jobs determine the labor incomes and consumption for most people in the economy, driving the demand for goods and services—which, in turn, drives the demand for labor. Moreover, jobs have positive social externalities—for instance, by bringing different groups together in the workplace, helping people manage household risks, and keeping youth in productive employment.

JOBS DIAGNOSTICS AND JOBS STRATEGIES

Policy makers who are concerned about jobs need to design policies and regulations—and encourage investments—that stimulate economic transformation and smooth the pathways to better jobs. To address this need, this report presents insightful cross-country findings from analysis conducted by World Bank staff working on Jobs Diagnostics (box 1.1). Jobs Diagnostics use an integrated, three-pronged approach to identify the main jobs challenges faced by a country—especially those that appear to be binding constraints to improving jobs outcomes for poor people and vulnerable communities.

A country's Jobs Diagnostic should ideally inform the development of its jobs strategy. Jobs strategies can support inclusive growth and help countries secure jobs externalities. They propose viable solutions to the core challenges identified in the Jobs Diagnostic—including changes in sectoral and regional policies and investments—based on approaches that have been validated by rigorous research and focusing on a limited set of feasible actions that are likely to make a difference in the short and medium term (box 1.2).

REPORT PURPOSE AND ORGANIZATION

This report presents broad findings and benchmarks developed and refined in using the Jobs Diagnostics global data tools and from country examples. They are intended for use by policy makers, economic planners, decision makers, and advisers in governments and international development agencies to interpret Jobs Diagnostics and inform jobs strategies.

The 22 findings in this report are grouped into three sections reflecting the three components of a Jobs Diagnostic: macroeconomic analysis, labor supply analysis, and labor demand analysis.

- **Macroeconomic findings.** Section 2 analyzes over 16,000 overlapping episodes of economic growth in 125 countries to present findings on how countries' demography affects the jobs challenges they face. It summarizes how economic growth, productivity, and economic transformation affect employment across countries, and presents evidence on the main channels through which people transition into better jobs across country income groups. Supplementary/explanatory data are provided in annex A.

- **Labor supply findings.** Section 3 analyzes the latest household surveys in 150 countries around the world to present patterns of employment by gross domestic product (GDP) per capita. It focuses on the channels through which people benefit from economic growth by changing the jobs they do (structural change in occupations, urbanization, formalization). It presents findings on how different countries' jobs profiles compare by level of income, deepening the analysis of transitions by considering which types of workers and which sorts of jobs are affected at different stages of development. Supplementary/explanatory data are provided in annex B.

- **Labor demand findings.** Section 4 presents firm-level analysis drawing on business data from 16 countries. It provides average international benchmarks for countries at different income levels for normal levels, patterns, and changes in employment and labor productivity. It details which types of firms in the formal private sector have the better jobs and which types of firms drive job creation. Supplementary/explanatory data are provided in annex C.

BOX 1.1: JOBS DIAGNOSTICS: A HOLISTIC, STANDARDIZED APPROACH TO IDENTIFYING A COUNTRY'S JOBS CHALLENGES

The centrality of jobs to development makes it imperative to understand how people in a country benefit from economic growth through jobs. To this end, in 2015, the World Bank Group began developing and piloting a new Jobs Diagnostics approach to identify the biggest challenges a country faces in creating more and better jobs in the economy, and in helping vulnerable groups gain access to these jobs. The momentum behind the Jobs Diagnostics effort was increased with the most recent replenishment of the International Development Association (IDA), the Bank arm that finances the world's poorest countries. IDA18 emphatically puts jobs center stage, and application and refinement of the Jobs Diagnostics approach supports this policy commitment.

Jobs Diagnostics investigate whether jobs-related transitions are happening as should be expected, for whom, and what might be causing the outcomes observed. Using demographics and growth accounting, Jobs Diagnostics reveal the core jobs challenges facing a country, then check to determine whether some workers are failing to make transitions to better jobs as the economy grows. The Jobs Diagnostic then explores whether the observed results relate to worker gender, location, age, marital status, or education level, or whether there are abnormalities in formal private sector patterns of productivity, employment, and wages that may be constraining jobs outcomes.

A Jobs Diagnostic takes a multisector look at a country's core jobs challenges, examining the country situation from macroeconomic, supply (labor), and demand (firm) perspectives. It functions as a guided inquiry into a country's core jobs challenges, following three basic steps: [1] establishing the country's jobs needs, [2] interpreting the results, and [3] defining priorities and proposing possible solutions. The diagnostic enables analysts and policy makers to interpret symptoms of normal or abnormal jobs outcomes for a given country type, a given set of country conditions, and the country's stage of development. To date, Jobs Diagnostics have been conducted for 23 countries, with another 8 ongoing during fiscal year 2018 (annex D).

BOX 1.2: HOW JOBS STRATEGIES BUILD ON JOBS DIAGNOSTIC FINDINGS

Jobs strategies propose solutions to the challenges identified in Jobs Diagnostics. They identify macro-economic policies; tax and expenditure shifts; regulatory reforms in labor, product, financial, and land markets; and sectoral and regional investments to address the constraints identified in Jobs Diagnostics. They are structured around the objectives of creating more and better jobs, and of achieving more inclusive outcomes in terms of jobs creation, jobs quality, and jobs access. Jobs strategies take into account a country's characteristics and conditions, the challenges identified in the diagnostic with reference to global benchmarks, and the findings of rigorous research around possible solutions.

Suppose that a Jobs Diagnostic for a low-income country finds that most people are self-employed farmers or unpaid family workers on farms. Labor productivity in agriculture is low and stagnant, and urbanization is occurring more slowly than in other low-income countries. Young workers are not transitioning from farm jobs into better, off-farm jobs (either waged or in self-employment). In short, economic transformation is stalled, and not enough better jobs are being created, so the country risks squandering the potential of its demographic transition. Macroeconomic analysis shows that a large share of aggregate investment is flowing into capital-intensive extractives and enclave industries that generate few good jobs and have weak backwards linkages to primary production in the national economy. The expansion of extractives exports is raising the real exchange rate, undermining the expansion of other industries.

The jobs strategy would likely propose policies to increase investment in labor-intensive activities that can absorb the available surplus labor force. Macroeconomic policy might seek to ameliorate exchange rate tensions through sterilization measures to **accumulate foreign exchange**—perhaps in a sovereign wealth fund. Public policy would also seek to reduce taxes and regulations that discourage hiring labor in the formal sector.

The government might also want to consider demand-side incentives to **encourage firms to invest more in labor-intensive activities**, given the public interest in creating jobs for underemployed traditional sector workers, whose opportunity cost of labor is low. It might want to help small and medium enterprises overcome the risks inherent in expanding their businesses in uncertain regulatory climates. Labor supply interventions might also be needed to equip workers with the job-specific skills employers need.

At the sector level, policy would seek to **improve the productivity of smallholder farms**. It would promote reforms in land tenure regulations and support investments to promote commercial farms and aggregator facilities that can link smallholders to markets. This might include investment in rural infrastructure (such as roads and water), off-farm storage and collection points, training and inputs for smallholders, and legal reforms on movable collateral and leasing.

The jobs strategy might also **promote export development** to create additional demand for labor-intensive industries and aim to strengthen targeted regions' connectivity to retail demand in urban areas. Spatial analysis might show that it would make sense to develop secondary towns in regions with agribusiness potential. This would help create off-farm jobs in industry, develop jobs in transport or support services for the emerging farmers, and stimulate consumption demand for the output of adjacent farmers.

If the Jobs Diagnostic found that women have low labor force participation and that a high proportion of those not in education, employment, or training (NEET) are female, the jobs strategy might want to support the expansion of activities that can **generate better jobs for women**, address discriminatory norms and practices that limit women's access to existing jobs, support women's labor market access by promoting child care facilities, and increase women's security in the workplace or in traveling to work.

Summary and conclusions are presented in the report's final section. Section 5 draws inferences for the development of country jobs strategies, with a focus on low-income countries and International Development Association (IDA) borrowers. Conclusions about improvements to the Jobs Diagnostic process itself are also included.

Some of the findings presented here offer new insights, and some are more important for policy makers. Other findings confirm previous work. Table 1.1 provides an "at-a-glance" summary of the 22 findings presented in this report.

Table 1.1
Summary of findings

Topic	Finding
Macro	**1. Demography determines jobs challenges**
	2. Economic growth, on average, creates jobs
	3. Economic transformation is fastest in low-income countries
	4. In low- and lower-middle-income countries, economic transformation involves relatively more labor movement into services than industry
	5. When agricultural employment falls in low- and lower-middle-income countries, labor productivity in the receiving sector might also decline
	6. People and jobs are moving to towns and cities; this urbanization is positively correlated with per capita GDP
Supply	7. The majority of low- and middle-income country populations are of working age, but most hold low-quality jobs and many remain inactive
	8. Labor force participation rates vary with countries' per capita income
	9. Wage work underlies employment pattern shifts across country income groups
	10. Poorer countries feature high underemployment, not unemployment
	11. Informal jobs remain a significant source of employment in low- and middle-income countries, even for waged workers
	12. The public sector is important for formal employment in low- and lower-middle-income countries
	13. Gender, location, and education are the strongest predictors of labor market participation; sector is the strongest predictor of wage employment
Demand	14. Most businesses are micro firms; large firms employ more people
	15. A small number of firms account for a large number of jobs
	16. Micro firms persist but are unlikely to expand employment
	17. New and young firms are a primary source of jobs
	18. Large firms do not necessarily have higher labor productivity than small firms
	19. On average, large firms tend to pay higher wages
	20. Productive firms pay higher wages
	21. Labor is allocated to more productive firms on average and over time
	22. Less productive firms are more likely to exit

Note: Findings indicated in boldface are new, based on the present study; the remainder confirm previous findings.

2. MACROECONOMIC FINDINGS

The guided inquiry underpinning the Jobs Diagnostic and the findings in this report investigate the transitions workers make in the jobs they do under economic transformation. These transitions occur through occupational shifts between sectors (structural change), through urbanization, and through the shift from self-employment to waged employment in the formal private sector. Structural change is important for development; analysis suggests that African and Latin American countries grew more slowly than East Asian countries in the three decades after the 1970s because they failed to shift labor to jobs with higher labor productivity (McMillan and Rodrik 2014). Moreover, structural change is both a desirable process in low-income countries and a significant driver of growth in overall labor productivity (Diao, McMillan, and Rodrik 2017; Timmer and de Vries 2014). In many low-income countries, the shift of labor out of agriculture is accompanied by declining labor productivity in the receiving sectors (Timmer and de Vries 2014). The *static gain* for the economy of labor shifting into the higher-productivity sectors of industry and services is offset by the *dynamic loss* of declining average labor productivity in the receiving sector. In faster-growing economies in East Asia, structural change has been driven by productivity gains, particularly in tradable sectors (Diao, McMillan, and Rodrik 2017). Rodrik (2015), in "Premature Deindustrialization," suggests this change could be problematic for many low- and lower-middle-income countries, because their share of workers in industry is lower than it was for richer countries when they had similar levels of GDP per capita in the past.

The findings presented here match the empirical research on structural change. We also find evidence consistent with the literature on economic geography and agglomeration effects—namely that countries urbanize as they develop, and that those countries that enjoyed faster urbanization grow faster on average (Spence, Annex, and Buckley 2009).

The macroeconomic analysis presented here uses decompositions of over 16,000 episodes of per capita economic growth across 125 countries to analyze changes in demography, labor force participation, sectoral employment, and labor productivity. The analysis looks in particular at how structural change, urbanization, and formalization affect per capita income. Data are from the World Bank's World Development Indicators database, and the analysis uses the country income grouping from the jobs-focused *World Development Report* of 2013 (World Bank 2012).

1. DEMOGRAPHY DETERMINES JOBS CHALLENGES

Youthful countries in Africa and South Asia face the steepest challenges to creating more, better jobs. In less youthful countries, the jobs challenges are different. Almost 60 percent of the jobs that will need to be created globally to accommodate school leavers seeking work between 2020 and 2030 will be in South Asia and Africa. Assuming no change in labor force participation and employment rates, South Asia needs to create about 11.5 million jobs each year until 2020, and then an average of 14 million per year until 2030—an annual growth rate of 1.77 percent. Sub-Saharan Africa has a population just about half (52 percent) the size of South Asia, but needs to create a similar number of jobs annually until 2020 (11.4 million per year), and more on average annually (11.6 million per year) to 2030, amounting to annual employment growth of 3.06 percent. The fastest growth in projected employment globally (3.33 percent) is in the Middle East and North Africa (table 2.1).

Table 2.1
Projected employment required by region, 2020–30 (thousands)

Region	2014–20	Annual	2020–30	Annual	Growth rate
World	283,159	47,193	530,887	53,089	1.47
Africa	68,653	11,442	146,093	14,609	3.06
East Asia and Pacific	69,389	11,565	124,980	12,498	0.98
Latin America and the Caribbean	42,286	7,048	86,469	8,647	2.44
Middle East and North Africa	27,167	4,528	59,152	5,915	3.33
South Asia	69,150	11,525	133,223	13,322	1.77

Source: Calculations based on United Nations population projections and constant employment rates and labor force participation.

Creating better jobs for a fast-growing youthful workforce is the most significant challenge for Sub-Saharan Africa. Youth and children are a significant share of the population in Sub-Saharan African countries. In 2015, 54 percent of Sub-Saharan Africans were younger than age 20 (figure 2.1). In such youthful countries, a major challenge is to smooth the transition from school to work to ensure that it does not take youth too long to find a first job commensurate with their skills. It is also important for several African countries with high fertility rates to accelerate a decline in fertility to hasten the demographic transition from high birth and death rates to lower birth and death rates.

Figure 2.1
Population pyramids by five-year age groups, 2015
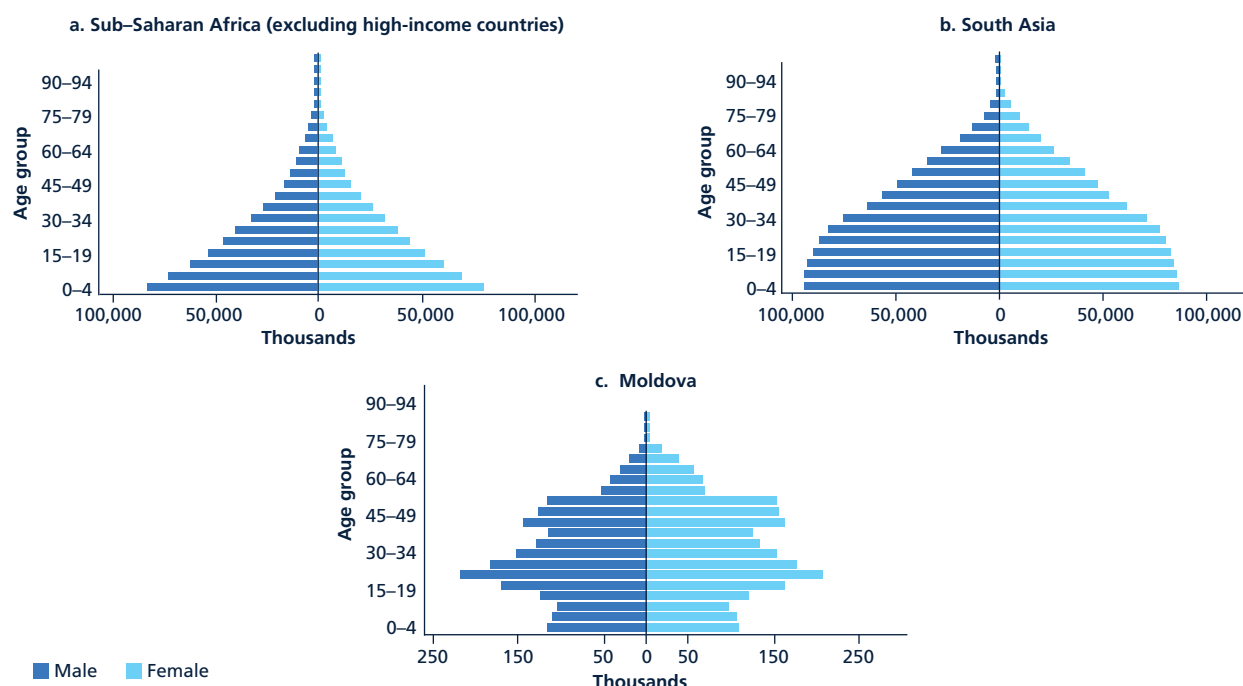
Source: World Bank Group, World Development Indicators.
Note: Moldova, for which a Jobs Diagnostic has been conducted, is included here for comparison, as it has one of the most rapidly aging populations of all low-income countries, driven not just by very low fertility, but by outmigration.

In South Asia, unlike Sub-Saharan Africa, a demographic transition has already begun. Fertility has fallen from 4.3 children per mother in 1990 to 2.5 in 2015. Concurrently, there has been a rapid fall in mortality—and under-age-five mortality fell from 129.4 in 1990 to 50.3 in 2015—leading to a flattening of the

population pyramid (figure 2.1). This transition allows these countries—in theory—to achieve a demographic dividend to economic growth by finding jobs for youth at the same or higher levels of productivity as other workers in the economy. So long as they can find more productive jobs, the arithmetic of more workers than dependents provides a window of opportunity to accelerate growth before these workers start to age. South Asia needs to increase employment growth, which is growing in line with the working-age population (figure 2.2).

Figure 2.2
Growth in real GDP and labor market demographics by region, 1991–2015
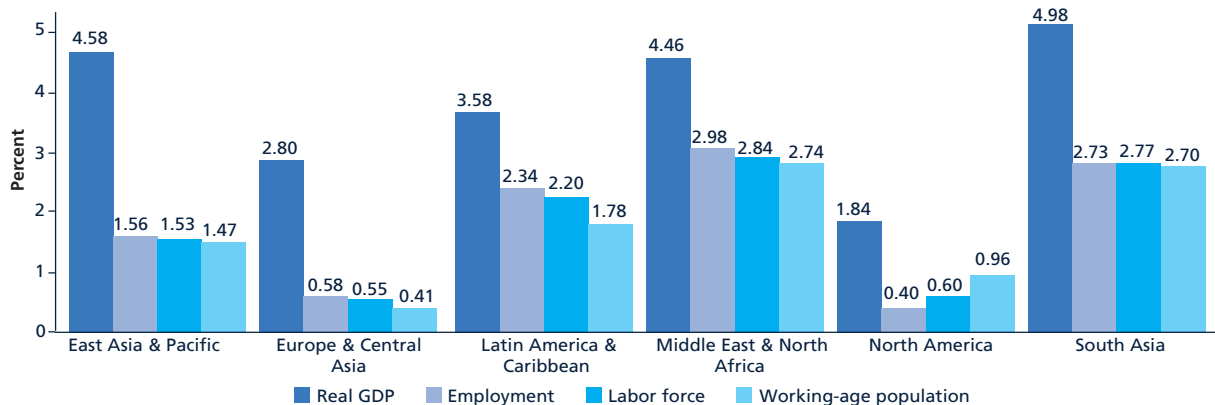
Source: World Bank Group, World Development Indicators.
Note: Data exclude Sub-Saharan Africa because the available data are not representative.

South Asia can draw lessons from the several countries that have achieved a demographic dividend to growth by creating more, better jobs (higher labor productivity) for its expanded working-age population. Growth decomposition calculations suggest that for growth episodes of over a decade or more since 1991 in countries as diverse as Azerbaijan, Belize, Bhutan, Botswana, Cambodia, Honduras, Iran, Moldova, Mongolia, Qatar, Saudi Arabia, and Trinidad and Tobago, an increase in the share of the working-age population has added between 0.85 and 1.90 percentage points to annual average real per capita GDP growth. With the exceptions of Belize and Qatar, these countries have successfully raised average labor productivity while hastening their demographic transition.

In other regions of the world, the challenge of creating more and better jobs is different than in the more youthful IDA countries. Outside of Sub-Saharan Africa, the working-age population and labor force participation have been growing fastest since 1991 in the Middle East and North Africa, South Asia, and—to a lesser extent—Latin America (figure 2.2). In each of these regions, growth in the working-age population has been slower than growth in labor force participation and employment, meaning that the respective economies have been creating a sufficient number of jobs. In Latin America, employment growth exceeds growth in the working-age population the most, indicating that the labor market in the region's countries is tightening. Faster labor productivity growth in the Latin America and the Caribbean and the Middle East and North Africa regions would, given their existing growth rates in employment, create strong jobs outcomes. East Asia is already enjoying good jobs outcomes because real economic growth exceeds employment growth there by 4 percentage points, while employment is growing faster than the working-age population. In North America, the working-age population has grown faster than the labor force and more than twice as fast as employment.

In contrast to Sub-Saharan Africa and South Asia, aging countries do not need to increase job creation; instead they must raise their labor productivity and increase labor force participation. For some rapidly aging countries such as Denmark, France, Germany, Greece, Italy, Japan, and Portugal, the decline in the share of the working-age population relative to the dependent (retired) population has reduced per capita income growth by between 0.15 and 0.57 percentage points annually. The main jobs challenges in these countries are to increase labor force participation (especially for women) and to increase labor productivity

within sectors, which acknowledges that structural change has already occurred. Increasing labor productivity is especially important for the smaller number of young entrants to the workforce in aging countries, making the quality of skills and tertiary education an important jobs challenge in aging countries.

Youthful demographics are associated with slower growth in labor productivity than is aging; the challenge here tends to be creating more higher-productivity (better) jobs. Figure 2.3 contrasts the growth rates of GDP and labor demographics in growth episodes for countries that are aging and those that are not. The non-aging countries had four times the annual growth in employment of aging World Bank borrower countries; yet their growth in real GDP was only 10 percent higher than for the aging countries. Labor productivity rose twice as fast in the aging borrower countries compared to the non-aging.

Figure 2.3
Labor demographics in aging versus non-aging economies
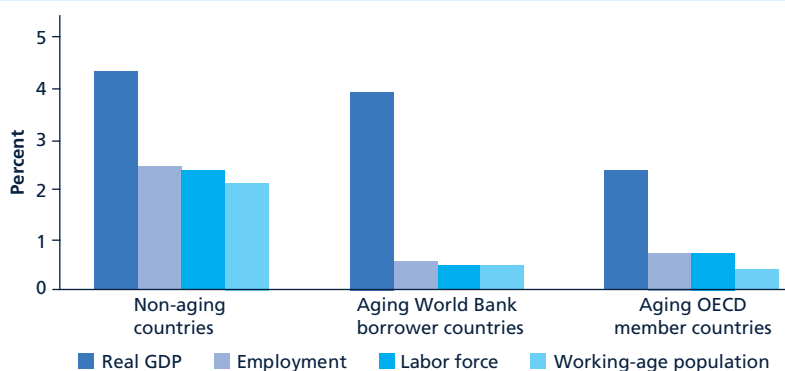
Source: World Bank Group, World Development Indicators.
Note: OECD = Organisation for Economic Co-operation and Development.

2. ECONOMIC GROWTH, ON AVERAGE, CREATES JOBS

Because demand for labor is derived from demand for goods and services, growth in aggregate production is usually associated with growth in total employment. But growth in production is no guarantee of an increase in employment in all cases; the labor intensity of growth matters. Figure 2.4 shows that although the relationship between real GDP and employment growth is positive across growth episodes, the spread of employment with GDP growth is relatively wide. In most cases, country growth episodes fall in the upper right quadrant, where both GDP growth and employment growth are positive. There are fewer growth episodes in the upper left quadrant—where employment was rising when GDP growth was negative—than there are in the lower right, where growth came with job losses. For most countries, the employment elasticity of real GDP growth (all durations) between 1991 and 2015 lay somewhere between 0.3 and 0.5 (figure 2.5). For episodes of *rising* real GDP per capita, the average elasticity in our database of growth episodes for all countries and all periods is 0.44; it is 0.23 for Organisation for Economic Co-operation and Development (OECD) countries. For episodes of *shrinking* real GDP per capita, the average elasticity was −0.33 (−0.62 for OECD countries).

Figure 2.4
Employment growth and real GDP growth for five-year growth episodes, 1991–2015

Figure 2.5
Employment elasticities for growth episodes of all durations by country income category, 1991–2015
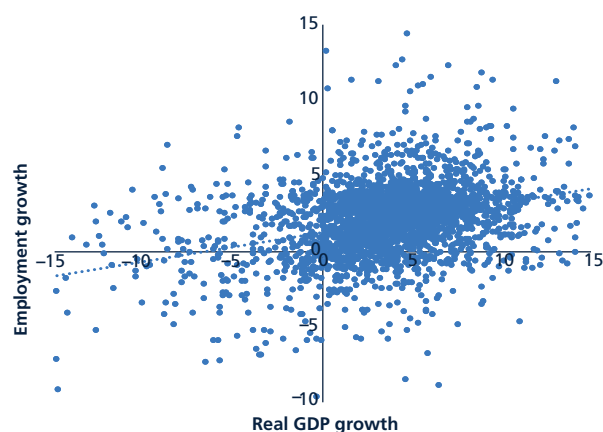
Source: World Bank Group, World Development Indicators.
Note: Figure 2.4 draws on all growth episodes of five or more years between 1991 and 2015 in the 156 countries for which data are available.
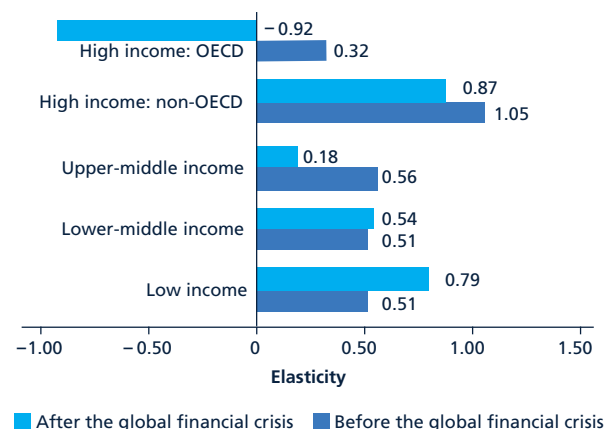
In 56 percent of growth episodes since 1992, employment growth exceeded growth in the labor force. In low-income countries, the proportion of episodes where employment rises slower than the labor force is relatively low at 27 percent (table 2.2). Taking all measurable growth episodes into account, only in North America and South Asia did employment grow more slowly than the labor force. Surprisingly, since more employment volatility would be expected in cyclical short-term growth episodes, these results hold whether we consider growth episodes of all duration or only those over five years.

Table 2.2
Share of growth episodes in which employment growth exceeds labor force growth by region and country income group, 1992–2015

Region/country group	Employment growth lags labor force growth	Employment growth exceeds labor force growth
Region		
East Asia and Pacific	43	57
Europe and Central Asia	45	55
Latin America and Caribbean	40	60
Middle East and North Africa	45	55
North America	69	31
South Asia	59	41
Sub-Saharan Africa	45	55
Country income group		
High income	48	52
Low income	27	73
Lower-middle income	44	56
Upper-middle income	39	61
Total	44	56

Source: World Bank Group, World Development Indicators.

Labor productivity drives economic growth, but productivity growth does not necessarily create more jobs.[1] In fact, all other things being equal, labor productivity gains are accompanied by lower levels of job creation. Analysis of growth episodes globally suggests that changes in the working-age population, labor force participation, and employment rate explain only about 20 percent of GDP per capita growth: 80 percent is explained by growth in labor productivity. Figure 2.6a shows that real GDP growth from 1991 to 2015 is closely related to growth in output per worker in 3,178 growth episodes of five or more years. However, as figure 2.6b shows, the relationship between growth in output per worker and employment growth is negative, though less strong.

Figure 2.6
Variation in productivity growth versus GDP and employment growth in five-year growth episodes, 1991–2015
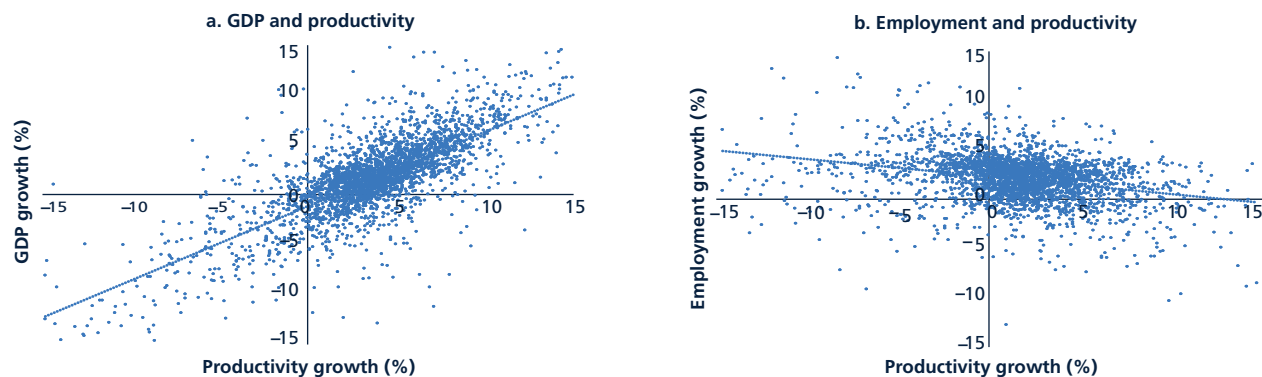
Source: World Bank Group, World Development Indicators.

Growth in labor productivity arises because (1) workers are more productive with more equipment (labor-augmenting capital investment), (2) there are economies of scale in product production, (3) new production techniques reorganize production and potentially save labor, and/or (4) labor moves from lower- to higher-productivity goods and services. Only if production was subject to fixed technology over time would there be a linear relationship between production and employment.[2] In most cases, entrepreneurs have an incentive to maximize the return on their capital through innovation and investment. Unless demand for their product is rising, they thus may seek to introduce cost- and labor-saving innovations.

Productivity growth was even more closely associated with GDP growth, and less closely associated with employment growth, after the global financial crisis. Growth's employment elasticity has been lower since the crisis (figure 2.7), and employment growth has been less responsive to real GDP growth (figure 2.8). This result is driven by the world's high-income economies; for many of these countries, as shown above, the employment elasticity of growth was negative in 2008 and 2009, and has remained so since.

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[1]   Throughout the analysis, we use single factor labor productivity, defined here as real GDP per person employed. This is not to deny the importance of capital or total factor productivity, but labor productivity is both more measurable and more directly relevant to Jobs Diagnostics.

[2]   In economic theory, this is known as a Leontief, or fixed proportions, production function.

Figure 2.7
Productivity growth and GDP growth before (1992–2009) and after the global financial crisis (2010–15)

a. GDP and productivity precrisis

b. GDP and productivity postcrisis
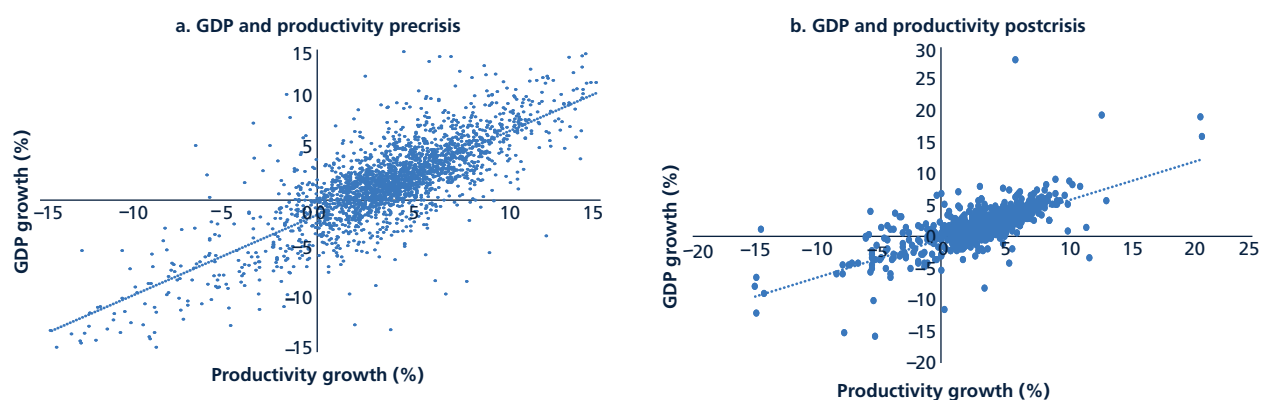
Source: World Bank Group, World Development Indicators.

Most improvement in productivity during economic growth episodes comes from gains within sectors. Productivity growth tends to come more from gains within sectors than from the movement of labor between sectors. On average, from the 16,000-plus growth episodes in the database, 78 percent of labor productivity gains came from within the sector and only 22 percent from the movement of labor across sectors.[3] The reallocation of labor across sectors tends to make a lower contribution to overall productivity in the more developed regions of the world (table 2.3).

Table 2.3
Composition of productivity growth (%)

Region	Within sector	Reallocation
East Asia and Pacific	83	17
Europe and Central Asia	86	14
Latin America and Caribbean	45	55
Middle East and North Africa	65	35
North America	100	0
South Asia	76	24
Sub-Saharan Africa[a]	78	22
Total	78	22

Source: World Bank Group, World Development Indicators.

a. Includes many observable episodes for South Africa within Sub-Saharan Africa; therefore this measure is not reflective of Africa's low- and lower-middle-income countries.

3. ECONOMIC TRANSFORMATION IS FASTEST IN LOW-INCOME COUNTRIES

In low-income countries, reallocation of labor from low- to higher-productivity sectors accounts on average for well over two-thirds of total productivity growth. The literature on structural change finds that growth in aggregate productivity stems from productivity gains *within* sectors and from the movement of factors of production *between* sectors (McMillan and Rodrik 2014; Timmer and de Vries 2014). Figure 2.8 presents two decompositions of growth in labor productivity (as measured as GDP per employee) into productivity gains within agriculture, industry, and services, and the gains from the movement of labor (and, implicitly,

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[3] This finding is robust when considering only growth episodes over five years old.

of capital) between these sectors.[4] Figure 2.8a shows the decomposition by country income group for growth episodes in which agricultural productivity was increasing. Figure 2.8b shows the average decomposition of productivity growth in all growth episodes.

Productivity decompositions: growth episodes in which agriculture grows and all growth episodes

a. Rising agricultural productivity

b. All episodes

■ Average reallocation   ■ Average within services   ■ Average within industry   ■ Average within agriculture
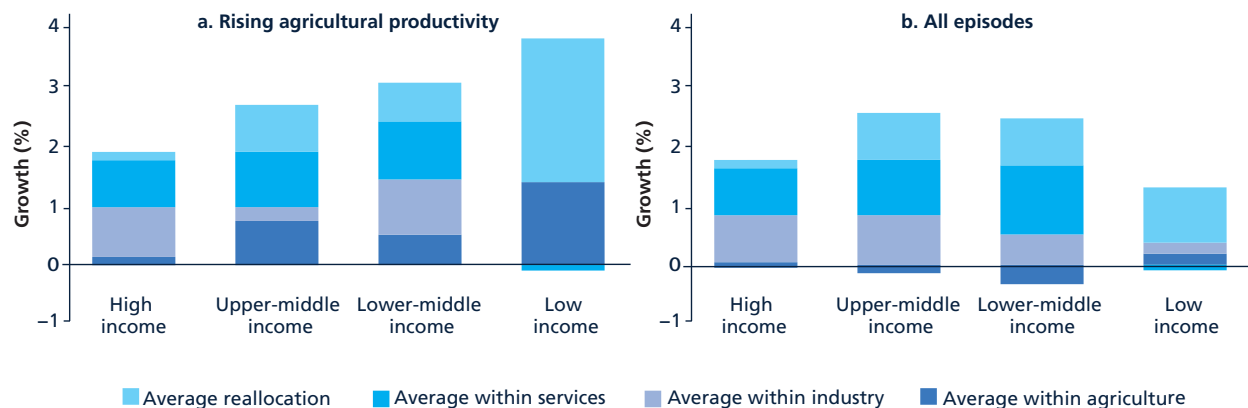
Source: World Bank Group, World Development Indicators.

Two things stand out.

- **For all but high-income countries, economies grow faster on average when agriculture is growing.** This holds particularly true in low-income countries where agricultural productivity growth contributes more to total productivity growth than it does in other country income groups.[5] More labor is in agriculture in low-income countries, as is further discussed in section 3.

- **Reallocation explains a large share of the productivity growth in low-income countries.** It accounts for 77 percent of productivity growth in all growth episodes, 62 percent in all episodes of real GDP growth (not shown in figure 2.8), and 57 percent in growth episodes where agriculture is growing. Reallocation continues to be important in lower-middle- and upper-middle-income countries, where it accounts for 36 percent and 32 percent, respectively, of productivity growth. In richer countries, reallocation contributes much less to productivity growth, because labor has already moved between sectors. In upper-middle- and high-income countries, industry and service sector productivity growth accounts for more than two-thirds of total productivity growth.

Successful economic transformation—the movement of labor into higher-productivity sectors—is associated with agricultural productivity growth. The patterns displayed in figure 2.8 suggest that agricultural growth plays an important role in economic transformation, particularly in low-income countries. This is borne out by the example in figure 2.9. This figure shows that in richer countries, where agricultural productivity is highest, the share of the economy's employment in agriculture is the lowest.

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4   These decomposition results are created in the Jobs Group's JobStructures macro tools. The decompositions rely on a Shapley decomposition (figure A.1 in annex A). Extensions to the tool are being incorporated to allow for static and dynamic components of the reallocation between sectors.

5   More data on sector of employment is needed for the low-income countries in the World Development Indicators database to allow more episodes of growth to be analyzed, but these patterns emerge from the existing data and the Jobs Diagnostics conducted to date. Note that Ethiopia was excluded from this analysis because of extreme outliers.
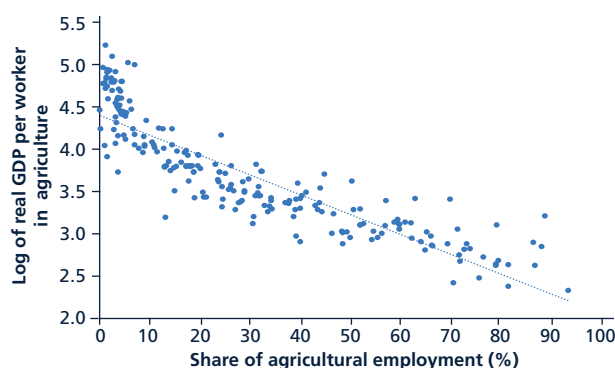
Source: World Bank Group, World Development Indicators.
Note: Real GDP is in constant 2010 dollars.

4. IN LOW- AND LOWER-MIDDLE-INCOME COUNTRIES, ECONOMIC TRANSFORMATION INVOLVES RELATIVELY MORE LABOR MOVEMENT INTO SERVICES THAN INDUSTRY

Ideally, new entrants to the labor market and those workers who are switching between sectors should be moving into more productive types of jobs. The Jobs Diagnostics conducted in IDA countries suggest that this is rarely the case in low-income countries, and our analysis of global growth episodes agrees.

During the growth episodes in low-income countries when employment in agriculture fell, average growth in employment in the service sector (which employs more people) was about 35 percent faster than in industry. For lower-middle-income countries, employment in services grew 27 percent faster than in industry. And across all the growth episodes in the database, employment grew faster in industry than in services only 13 percent of the time; most of the countries involved were petroleum exporters. With so many people already working in the service sector, and so many moving into service employment, jobs strategies need to consider prospects for productivity improvement and employment creation in services.

5. WHEN AGRICULTURAL EMPLOYMENT FALLS IN LOW- AND LOWER-MIDDLE-INCOME COUNTRIES, LABOR PRODUCTIVITY IN THE RECEIVING SECTOR MIGHT ALSO DECLINE

In around a quarter of the growth episodes in low- and lower-middle-income countries in which the share of employment in agriculture fell, average labor productivity in the receiving sector declined as well.[6] The results are worse from a growth perspective for low-income countries: in 45 percent of growth episodes for low-income countries, industry productivity fell as the employment share grew (figures 2.10 and 2.11). In 70 percent of growth episodes in low-income countries, service productivity fell as the share of labor increased. For lower-middle-income countries, the movement of labor out of agriculture is less likely associated with a fall in the productivity of the receiving sector. In only 26 percent of growth episodes for lower-middle-income countries did industry productivity fall, and only in 22 percent of growth episodes did service productivity fall.

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[6] Small sample sizes mean these results are less robust, but this finding occurs in most of the low-income countries where Jobs Diagnostics have been conducted using country data rather than the World Bank's World Development Indicators data.

Figure 2.10
Distribution of outcomes for growth in service sector labor productivity in episodes of per capita real GDP growth in which employment shifts out of agriculture for low- and low-middle-income countries
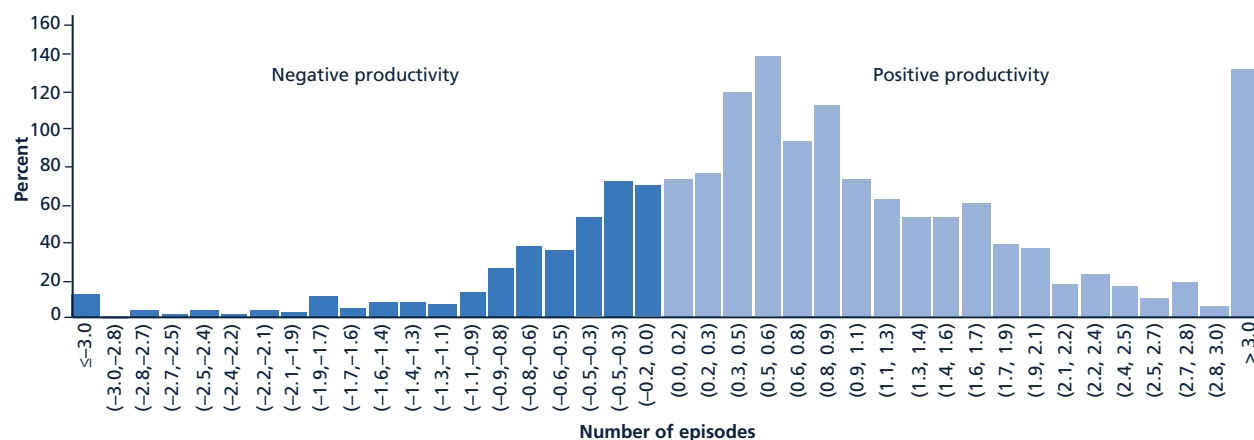
Source: World Bank Group, World Development Indicators.

Figure 2.11
Distribution of outcomes for growth in industry sector labor productivity in episodes of per capita real GDP growth in which employment shifts out of agriculture for low- and low-middle-income countries
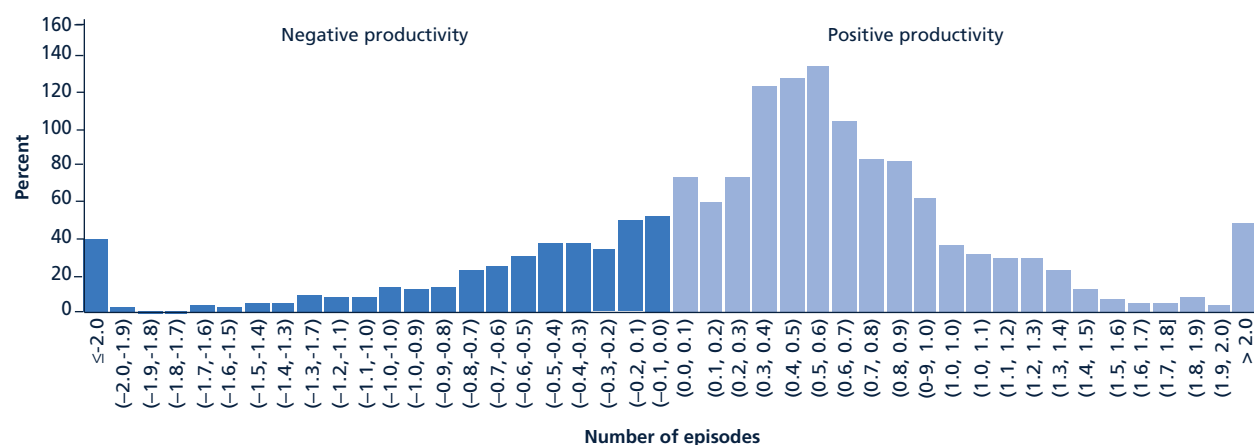
Source: World Bank Group, World Development Indicators.

When this dynamic decline in productivity occurs in receiving sectors in low- and middle-income countries, it is associated with 50 percent lower average per capita GDP growth (figure 2.12). There are many possible causes for this drop, but a likely explanation is that demand for industry goods and services may not be rising commensurate with the inflow of new workers. In the Jobs Diagnostics conducted for low-income countries, a common symptom accompanying the shift into services is a rise in self-employment and a reduction in hours worked in the service sector.

Figure 2.12
Average real per capita GDP growth with employment shifting out of agriculture; when average labor productivity increases and when it falls
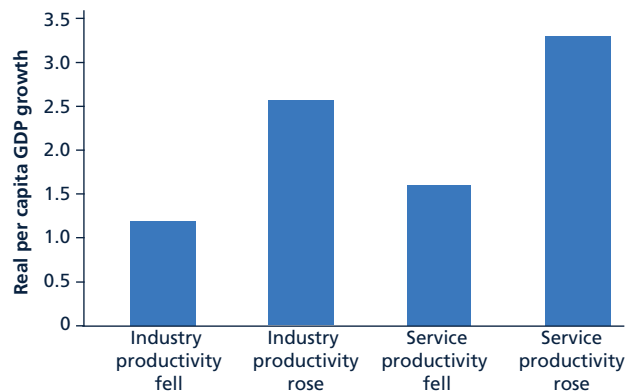
Source: World Bank Group, World Development Indicators.

6. PEOPLE AND JOBS ARE MOVING TO TOWNS AND CITIES; THIS URBANIZATION IS POSITIVELY CORRELATED WITH PER CAPITA GDP

In nearly all of the country Jobs Diagnostics analysis undertaken so far, labor supply-side analysis shows that the share of jobs in urban areas is increasing. Figure 3.10 in section 3 shows that earnings are higher in urban areas, making urbanization an important channel through which better jobs are created. Growth in share of urban population is fastest in low-income countries; within these, it is fastest outside of the largest city.

Urbanization in growth episodes seems to be associated with productivity gains from reallocation. An important consideration for workers seeking to obtain a better job is whether to change location. Cities and towns offer agglomeration effects for businesses compared with less densely populated rural areas, and can therefore provide the most productive and well-paid jobs in an economy. Macroeconomic data suggest that the rate of increase in jobs in urban areas needs to feature as part of a Jobs Diagnostic, for two reasons:

- Because an increased urban share of the population is associated with higher per capita real GDP

- Because urbanization tends to happen fastest at lower income levels—and for low-income countries, outside of the largest city (figure 2.13b)

There is a strong positive relationship between the share of population that is urban and GDP per capita. Figure 2.13a shows the share of urban population and the log of real GDP per capita for all years in all countries for which data are available between 1990 and 2014.

Figure 2.13
Changes in urban population by GDP per capita and changes in urban share of population by income group, 1990–2014

a. Changes in urban population by GDP per capita

b. Urbanization by income group
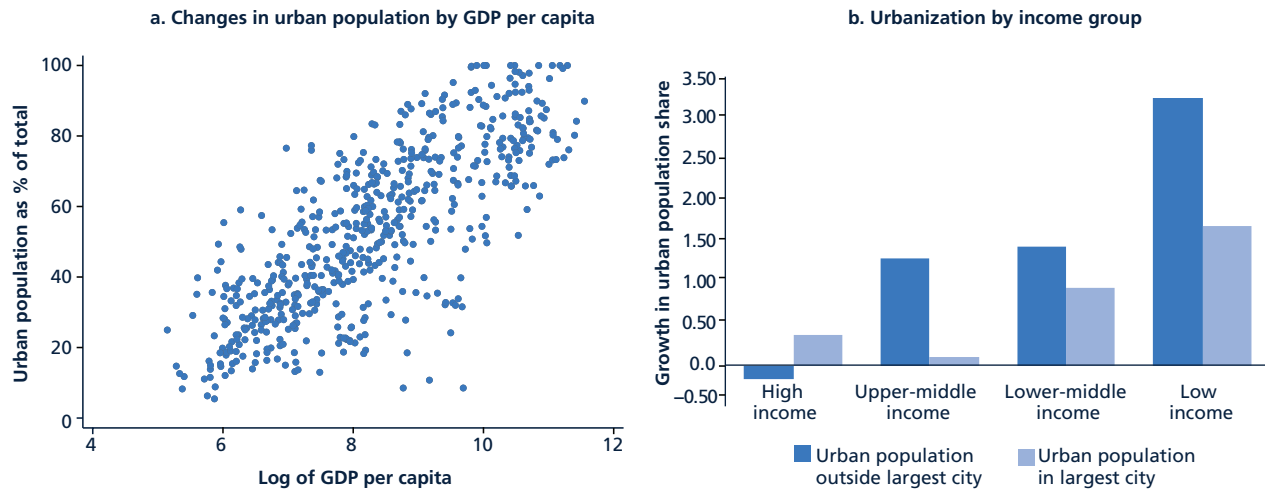
Source: World Bank Group, World Development Indicators.

Like structural change, urbanization is fastest in low- and lower-income countries, and on average occurs fastest in secondary towns and cities, not in the capital city. This phenomenon is captured in figure 2.13b, which shows changes in the shares of the urban population by income group between 1990 and 2014, distinguishing the urban population in the largest city from other urban areas.

Growth in urbanization can generate strong productivity gains. Figure 2.14 combines changes in urbanization with decompositions of changes in real GDP per capita growth. Findings are presented by income for all growth episodes of five years or more before the global financial crisis. The precrisis period is included to show a period of relative stability in the global economy; five-year growth periods are used to allow for changes in the urban share of the population. The figure shows the differences in the composition of growth in per capita income between countries with above- and below-average growth in share of population in urban areas.

Figure 2.14
Changes in contribution to real per capita GDP growth with growth in urban population share by country income group

Source: World Bank Group, World Development Indicators.

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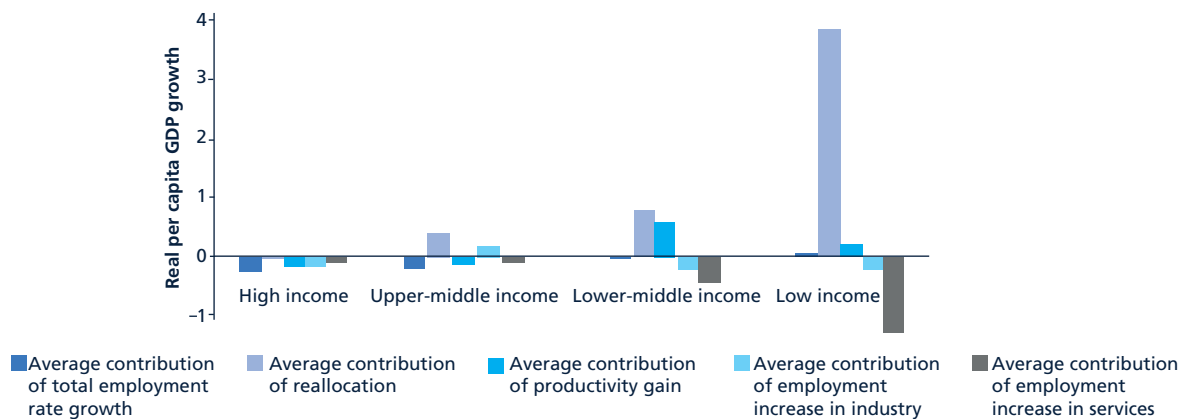
Three things stand out:

- **Differences in the contributions of labor productivity and employment outcomes to per capita income growth are most noticeable in low- and lower-middle-income countries.** An above-average growth in urbanization in these countries has a significant impact on the contribution of reallocation to per capita income growth. Higher than average urbanization results in a higher gain in real GDP per labor productivity growth through structural change. Essentially, cities seem to be where the better jobs are to be found—especially in low- and lower-middle-income countries, where growth in urbanization can generate strong productivity gains.

- **Productivity per worker within industry makes a bigger contribution to real GDP per capita growth with above-average urbanization in low- and middle-income countries.** This finding, related to the above point, is also true for services in low-income countries, which is not displayed in the figure.

- **The contribution to real GDP per capita from employment in services and industry is lower in growth episodes with faster than average urbanization.** This is because the new jobs created in the urban areas as people leave agriculture are often of lower productivity. We look more closely at employment rates with urbanization and economic transformation in the next section, which presents household data findings.

3. LABOR SUPPLY FINDINGS

From a worker's perspective, an economy's structural transformation implies a job transition. This transition can be to a different sector, occupation, location, income category, or type (Lewis 1954; McMillan and Rodrik 2014). Such transitions have different impacts on different groups. For example, the structural transformation in the United States when it shifted from the manufacturing to the service sector led to historic increases in rewards for skilled workers, but widened wage inequality (Borjas 2016).

The Jobs Diagnostics labor supply analysis explores the link between economic growth, employment, earnings, and related labor market outcomes from an individual worker's perspective. Jobs Diagnostics examine trends in demography (working age, dependency); labor force participation; employment, unemployment, and inactivity; determinants of employment; and determinants of labor income, job quality, and underemployment. The focus is on how economic transformation has affected the pathways people follow to better jobs and what challenges prevent people from benefiting from growth and job opportunities. Specific attention is given to women, youth, and vulnerable groups.

The findings presented in this section confirm the need for better skills to obtain higher wages, and point to the significance of location and sector in transitions to better jobs. While labor force participation is high for both sexes in low-income countries, it decreases for women in countries with rising GDP per capita, before increasing again. This phenomenon—known as the "feminization U-hypothesis" (Sinha 1967)—runs contrary to textbook economic theory on labor supply. Our supply-side Jobs Diagnostics work also observed this phenomenon in cross-sectional comparisons. It suggests a trade-off between economic growth and gender equality due to social stigma in employment (Gaddis and Klasen 2014; Goldin 1995).

Supply-side Jobs Diagnostics analysis sheds light on the relationship between a country's education and training system and its employment opportunities. For example, a low share of highly skilled labor alongside increasing returns to education could point at mismatches between the skills supplied and those demanded. These and similar untapped possibilities for productivity growth and structural change identified in labor supply analysis can be addressed in a jobs strategy emphasizing human capital development (World Bank 2012).

The data presented here are derived from household survey data for 150 countries. The data used for the analysis stems from each country's latest household survey with information on the labor force. In most cases, this was the most recent labor force survey; but sometimes the information was derived from other household survey or national census data. Where information from the labor force survey and another survey was available in the same year, priority was given to the labor force survey data. Unless otherwise specified, all results are weighted using sample weights that adjust for the probability of selection in the sample at the country level. Results are then aggregated using unweighted country averages to the global level. All regression results are estimated with robust standard errors. Unless otherwise stated, youth are age 15–24 and the working-age population is age 15–64. For the purposes of this analysis, formal employment is defined as all types of employment that provides the employee with a written contract, social insurance, or health insurance. All other forms of employment are considered informal.

7. THE MAJORITY OF LOW- AND MIDDLE-INCOME COUNTRY POPULATIONS ARE OF WORKING AGE, BUT MOST HOLD LOW-QUALITY JOBS AND MANY REMAIN INACTIVE

About 62 percent of the working-age population in low- and middle-income countries is employed, but about 35 percent is inactive (figure 3.1). Across all country income levels, low-income countries have the highest share of employment within their working-age population (70 percent). They also have the lowest share of individuals of working age within the total population (52 percent). Workers in low-income countries are largely employed in agriculture (59 percent); within this sector, 52 percent are self-employed and 38 percent are engaged in unpaid (family) work. Outside agriculture, the self-employed account for about 40 percent of workers in low-income countries. More than 50 percent of formal wage workers in low-income countries work in the public sector. In lower- and upper-middle-income countries, jobs are increasingly found outside of agriculture—particularly in non-agricultural wage employment. In fact, in upper-middle-income economies, 83 percent of workers are in non-agricultural employment. Of these, 75 percent are in non-agricultural wage employment. Informal employment accounts for approximately 27 percent of non-agricultural wage employment in these countries, compared to 68 percent in low-income countries. The public sector's share of formal non-agricultural wage employment in upper-middle-income countries is 25 percent, which is considerably lower than in low- and lower-middle-income countries.

Figure 3.1
Employment patterns of the working-age population for low- and middle-income countries
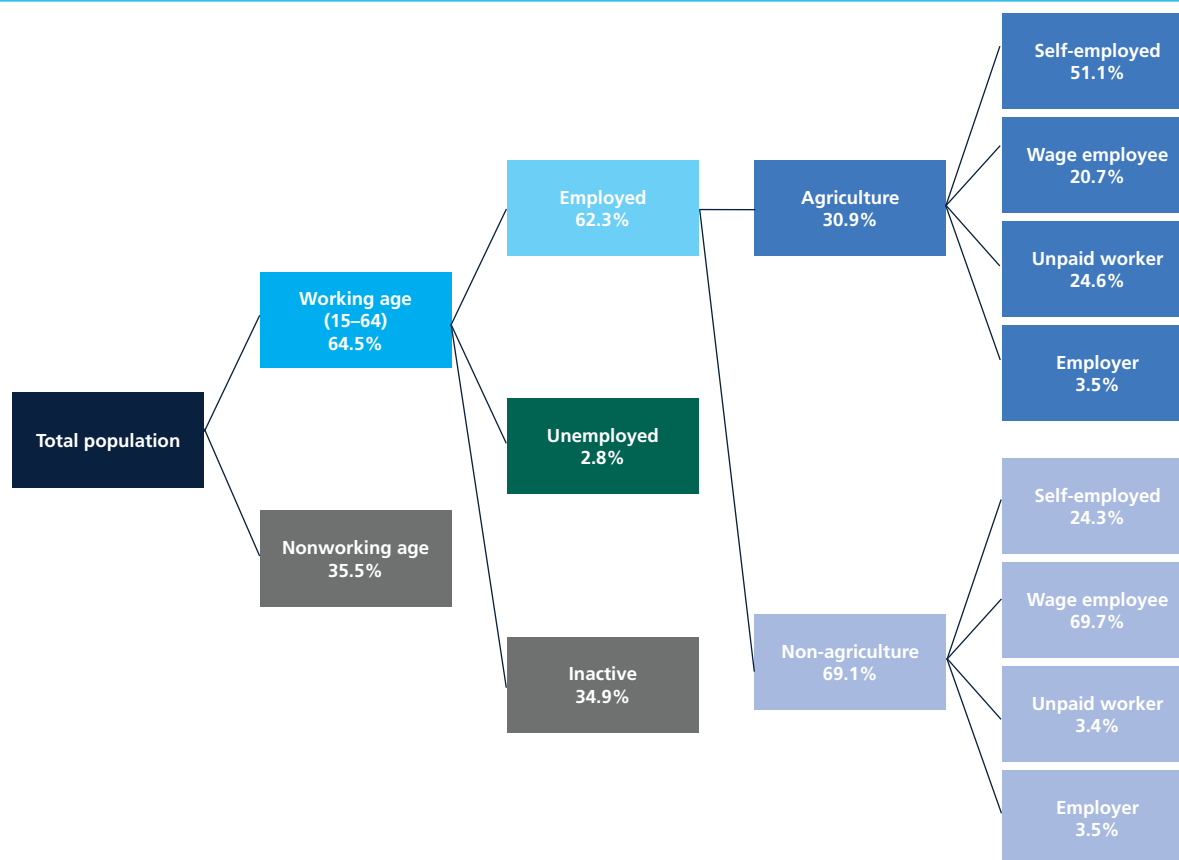
Source: World Bank Group, International Income Distribution Data Set (I2D2).
Note: Aggregated population weights over all included countries were used to create this figure. The presentation includes observations in the data set of the working-age population of 123 low- and middle-income countries. The split in employment between agriculture and non-agriculture includes 104 low- and middle-income countries.

Figure 3.2
Labor force participation along GDP per capita disaggregated by various factors
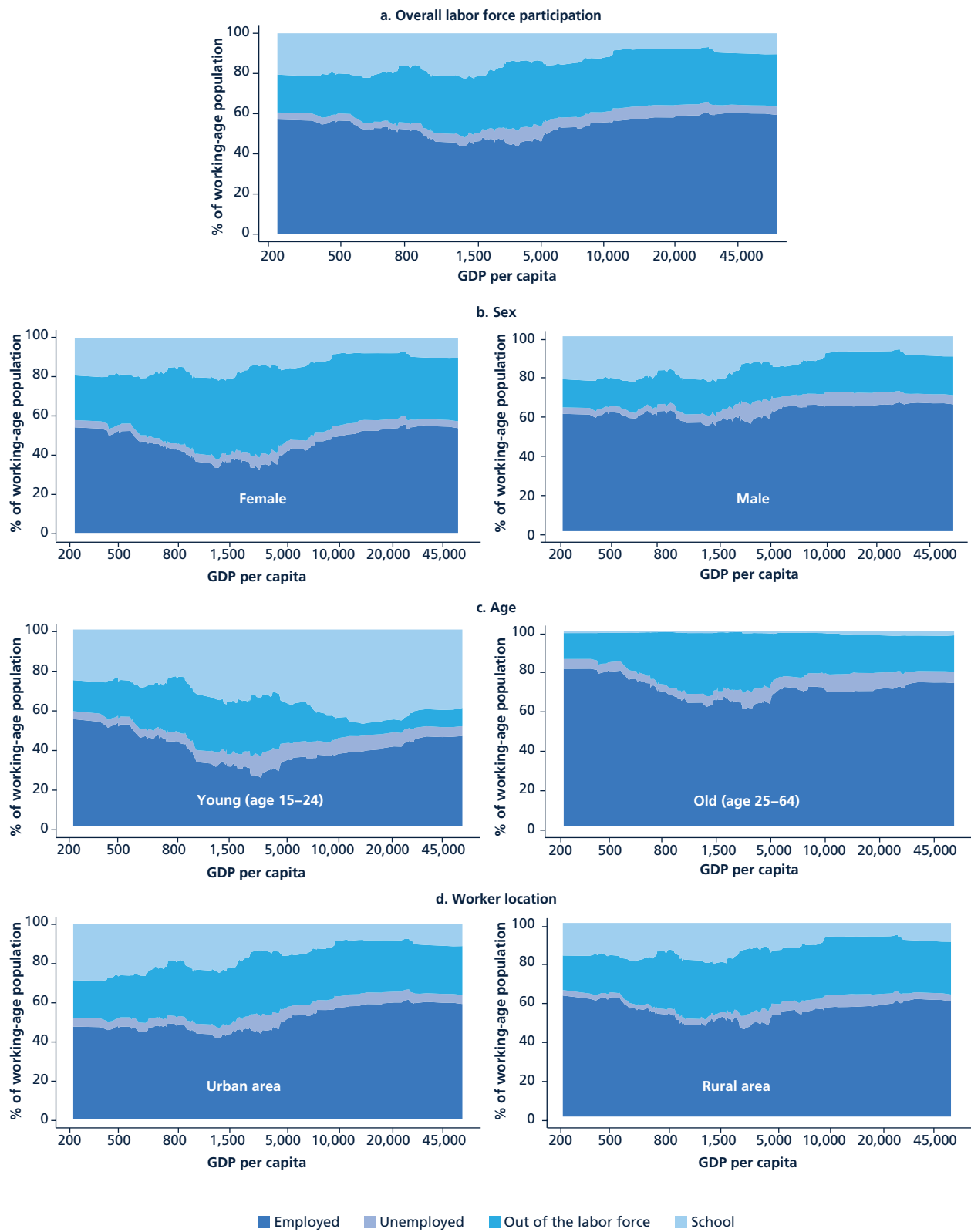
a. Overall labor force participation

b. Sex

c. Age

d. Worker location

Legend: Employed · Unemployed · Out of the labor force · School

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 149 countries over the years 1999–2016.

8. LABOR FORCE PARTICIPATION RATES VARY WITH COUNTRIES' PER CAPITA INCOME

The labor force participation rate indicates the share of all active individuals in the working-age population who supply labor to the market. This includes employed and unemployed workers, but excludes economically inactive individuals. Labor force participation rates are highest in low-income countries, lower for middle-income countries, and then higher again for high-income countries. As figure 3.2 shows, there are noteworthy differences between men's and women's labor force participation, and between rural and urban areas,[1] when compared by GDP per capita. Labor force participation rates tend to be highest in low-income countries for both males and females, with relatively small differences between the sexes. In contrast, in middle-income countries, the gap between male and female labor force participation is on average the widest, with a much larger share of the female working-age population out of the labor force. Participation rates are higher in high-income countries compared to middle-income countries for all worker characteristics and categories captured in Jobs Diagnostics supply-side analysis. However, the participation rates observed in the high-income countries are not as high on average as for the low-income countries. This difference is due in part to higher unemployment rates and a larger share of young people in school in high-income countries. In all country income groups, men have higher labor force participation rates than women on average.

Rural areas in low-income countries have substantially higher labor force participation and employment rates than urban areas, but labor productivity is generally low. These high rates can be linked to the role of agricultural work to sustain a livelihood, especially in rural areas. Individuals cannot afford not to work when facing poverty, and often have to take any job given underdeveloped social protection mechanisms and labor markets. The key jobs issue for most workers in low-income countries is therefore not *whether* they are employed, but *how* they are employed. In these countries, employment is typically of low productivity. Sometimes jobs are also characterized by a low number of weekly hours of productive work and influenced by seasonality.

The share of youth at school is much lower in rural than urban areas in low-income economies. For middle- and higher-income economies, these differences are not as striking.[2] Differences in the labor force participation rates of younger and older workers are largely explained by schooling. Countries with higher GDP per capita levels have higher shares of youth at school. In contrast, there is a relatively larger share of youth in middle-income countries who are not actively engaged in the labor market and are not in school. These young people are apparently neither economically engaged nor building their future income-generating potential. This "lost generation" phenomenon of apparently economically idle youth is subject to country-specific analysis.

9. WAGE WORK UNDERLIES EMPLOYMENT PATTERN SHIFTS ACROSS COUNTRY INCOME GROUPS

More developed economies have higher shares of wage work. For low-income countries, the share of wage employment averages around 20 percent of total employment. For middle-income countries, this share ranges from around 25 percent for countries toward the lower end of per capita GDP income ($1,026) to about 75 percent for countries at the upper end ($12,615). The share of wage employment in high-income countries is similar across the range of GDP per capita, averaging around 80–85 percent of total employment. As figure 3.3 shows, the big differences in the structure of labor markets compared to GDP per capita seem to occur within middle-income countries. It appears that episodes of jobs and economic transformation take place within this category.[3]

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[1] This disaggregation does not control for changing urbanization levels across countries with different GDP per capita.

[2] It is important to note that higher levels of urbanization are associated with higher GDP per capita, which consequently influences the overall pattern of labor force participation.

[3] Further analysis should investigate the growth and employment dynamics of middle-income countries over longer periods than is feasible with the data available for this study. If this analysis shows that those countries that developed the fastest made the most rapid transformations in jobs, that would have important implications for work on economic transformation and jobs. It could suggest that a focus on policies and investments that accelerate growth in rural productivity, facilitate diversification and urbanization, and stimulate private sector demand for waged workers may pay dividends in IDA countries.

Figure 3.3
Employment types along GDP per capita disaggregated by various factors
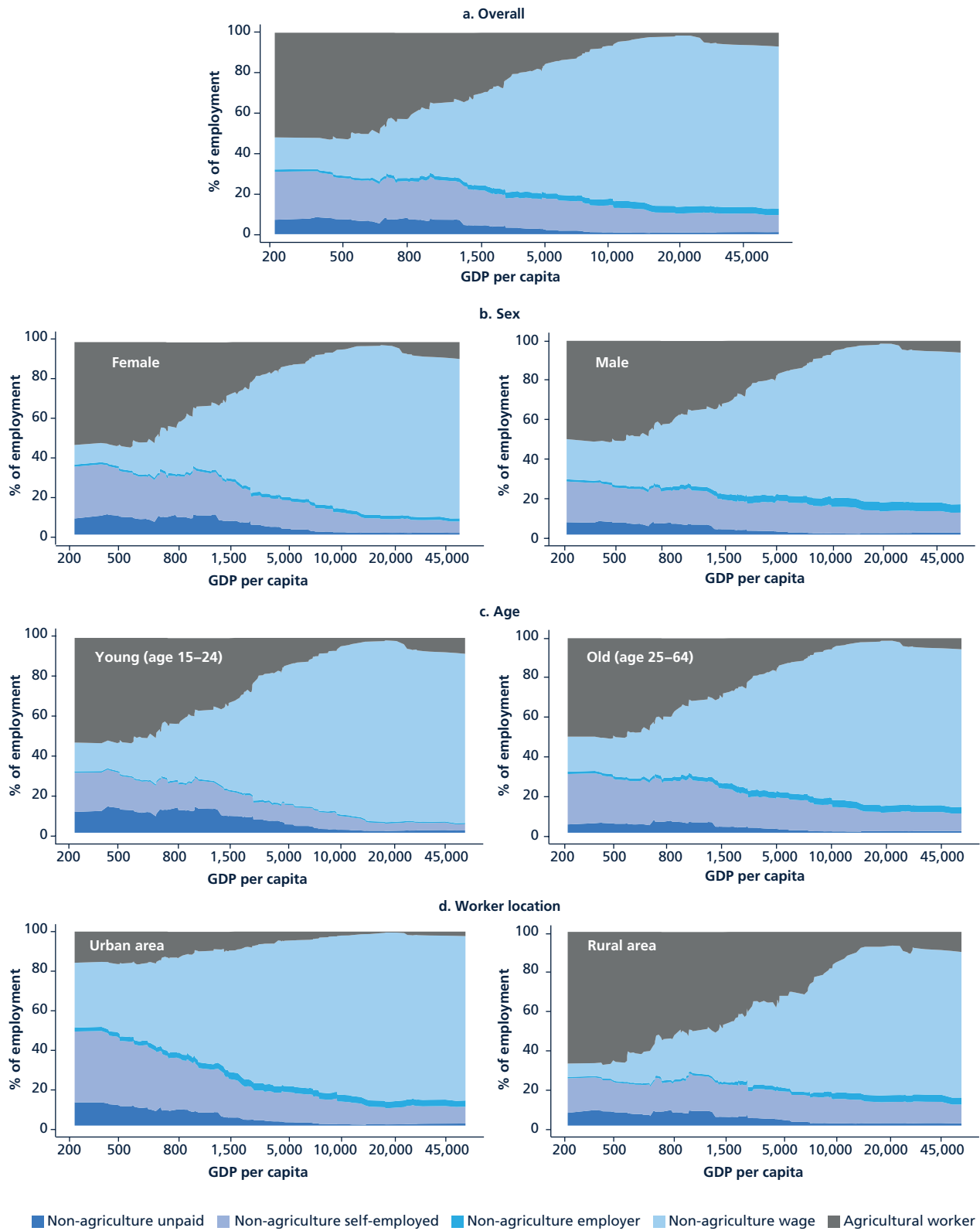
a. Overall

b. Sex

Female

Male

c. Age

Young (age 15–24)

Old (age 25–64)

d. Worker location

Urban area

Rural area

■ Non-agriculture unpaid ■ Non-agriculture self-employed ■ Non-agriculture employer ■ Non-agriculture wage ■ Agricultural worker

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 141 countries (137 for rural) over the years 1999–2016.

The increase in wage employment is associated with a decline in the share of agricultural employment and a small decrease in the shares of unpaid work and off-farm self-employment. In low-income countries, agriculture dominates employment and consists largely of self-employed and unpaid (family) workers. In contrast, the share of agriculture in total employment is much lower in both middle- and high-income countries. Despite the increasing shares of non-agricultural wage employment in middle- and high-income countries, most workers around the world—and most poor people—do not earn regular wages. Although the share of jobs in agriculture is falling in China, South Asia, and many African countries, it remains above 30 percent in nearly all lower-middle-income countries. Furthermore, self-employment outside agriculture remains significant in low- and middle-income countries. There is a gender and youth dimension to these trends as well: the proportion of women who work in agriculture, in self-employment, and in unpaid (family) work outside agriculture is considerably higher relative to men. Similarly, in low-income countries, young workers are more likely to be employed in agriculture or in unpaid work outside of agriculture than older workers.

Employment type is an important determinant of labor earnings and life satisfaction. Working as a farmer, being self- or wage employed, or being an employer outside of agriculture leads to very different labor earnings expectations (figure 3.4). These different types of employment strongly affect workers' life satisfaction; over different regions and across the different types of employment, wage work provides the highest life satisfaction values (World Bank 2012).

Figure 3.4
Mean hourly wages by employment and country type

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 140 countries over the years 1999–2016.
Note: Aggregated population weights by income group were used to create this figure. Mean hourly wages are in 2010 U.S. dollars purchasing power parity adjusted.

10. POORER COUNTRIES FEATURE HIGH UNDEREMPLOYMENT, NOT UNEMPLOYMENT

Low- and middle-income countries have a relatively high share of workers with a low number of working hours. In low-income countries, between 40 and 45 percent of workers report fewer than 35 working hours per week. The share of workers who work fewer than 15 hours per week averages around 15–20 percent in low-income countries (figure 3.5). On average, around 20–25 percent of workers in these economies work between 35 and 45 hours per week. This range could be regarded as a standard working week for typical wage workers subject to labor regulations. The share of workers reporting 35–45 hours per week gradually rises for middle-income countries, reaching and stabilizing at about 65 percent in high-income countries. In contrast, unemployment is much lower in low-income countries than it is in middle- and high-income countries.

a. Working hours along GDP per capita

b. Employment status by hours worked and country income group

Legend: ■ < 15 hours ■ 16–25 hours ■ 26–35 hours ■ 36–45 hours ■ > 45 hours

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 112 countries (figure 3.5a) and 113 countries (figure 3.5b) over the years 1999–2016.
Note: For figure 3.5b, aggregated population weights by income group were used. Data show respondents' answer to how many hours they worked in the last week.

Most workers in low-income countries are employed in jobs with a very low or a very high number of working hours that generally provide lower earnings. Combined with lower labor force participation and higher schooling in the countries where the share of waged work is greater, this finding suggests that the necessity of earning a living in low-income countries drives workers into low-productivity, low-earning jobs. In contrast, in richer countries, where waged work is available to one household member, other members can afford not to work. This finding is validated in all Jobs Diagnostics conducted for low-income economies. They systematically show that youth and females in richer households have lower employment rates and lower labor force participation rates than poorer households.

11. INFORMAL JOBS REMAIN A SIGNIFICANT SOURCE OF EMPLOYMENT IN LOW- AND MIDDLE-INCOME COUNTRIES, EVEN FOR WAGED WORKERS

The share of formal employment averages about 20 percent in low-income countries, around 45 percent in lower-middle-income countries, and about 63 percent in upper-middle-income countries. Restricting the analysis to only wage workers, as waged work is more likely formal, increases the share of formal jobs in low-income countries to about 55 percent and to around 60–80 percent for middle-income economies. However, changes in the average share of formal employment across GDP per capita flatten out against the rising shares of waged employment (figure 3.6). Informal employment persists even in relatively richer countries, and even when labor is no longer mostly in agriculture or self-employment. This pattern, which varies across regions, has implications in the design of social insurance schemes.

Figure 3.6
Shares of formal and informal employment along GDP per capita for all workers and for wage workers only
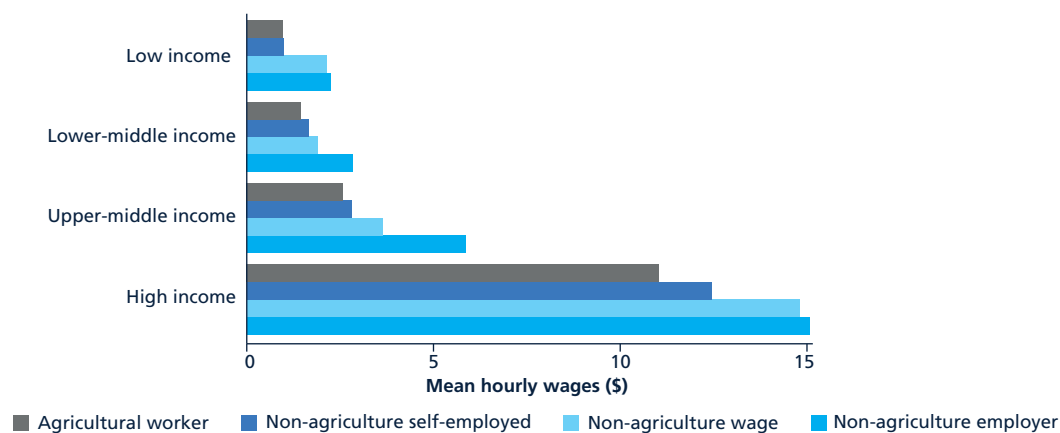
a. Overall employment

b. Wage worker employment
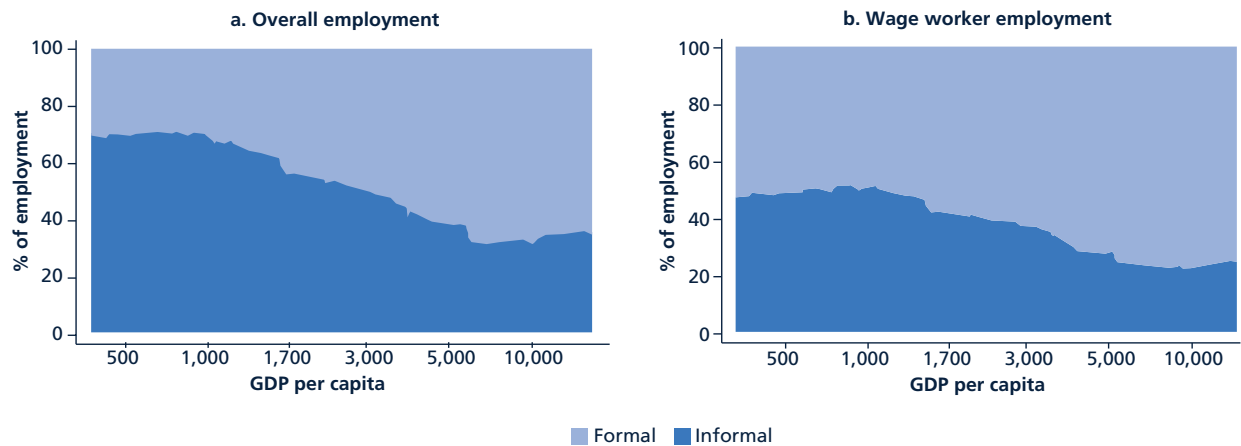
■ Formal ■ Informal

Source: World Bank Group, International Income Distribution Data Set (I2D2) for 62 countries over the years 1999–2015 for workers age 15–64.

12. THE PUBLIC SECTOR IS IMPORTANT FOR FORMAL EMPLOYMENT IN LOW- AND LOWER-MIDDLE-INCOME COUNTRIES

Public sector employment accounts for about 45 percent of all formal employment in low-income countries. The share decreases for lower-middle-income countries to between 35 and 40 percent, and drops further to around 20–30 percent of all formal employment in richer middle-income economies. This pattern of a more significant share of public formal employment in lower- and lower-middle-income countries holds for both rural and urban areas as well as for both men and women. The smaller role of the public sector for formal employment in upper-middle-income countries points to the greater importance of private wage jobs, given the overall rising share of wage employment in these economies (figure 3.7).

Figure 3.7
Shares of public and private employment of formal workers along GDP per capita and by worker location
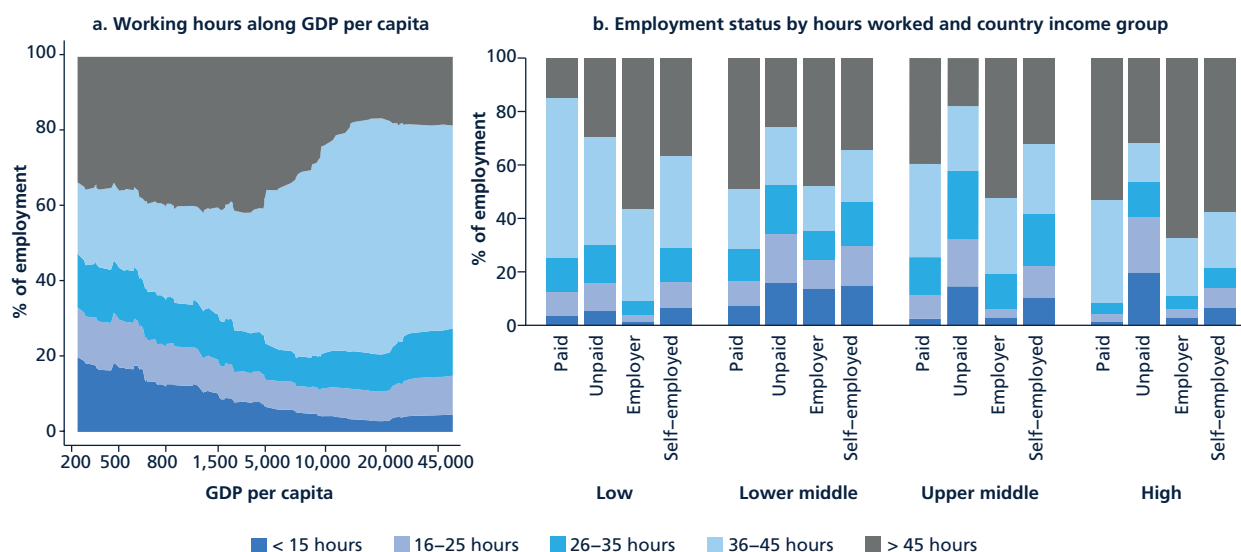
a. Overall

b. Worker location

■ Public ■ Private
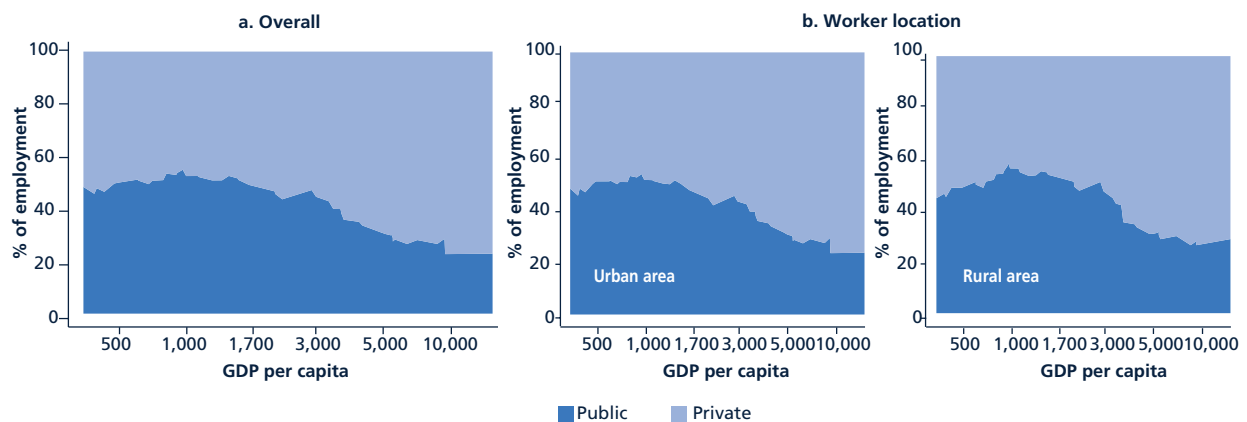
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 52 countries over the years 1999–2015 (figure 3.7a) and 49 countries over the years 2004–15 (figure 3.7b).

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13. GENDER, LOCATION, AND EDUCATION ARE THE STRONGEST PREDICTORS OF LABOR MARKET PARTICIPATION; SECTOR IS THE STRONGEST PREDICTOR OF WAGE EMPLOYMENT

Across all country income groups, women do not participate in the labor market as much as men, and workers in urban areas do not participate as much as those in rural areas. Determinants for active labor market participation are shown in figure 3.8 and annex B. However, women in lower-middle-income countries are far less likely to be active compared to low-income and upper-middle-income countries, confirming the results shown in figure 3.2. There is a higher likelihood for labor market participation in rural areas that are dominated by agriculture in developing countries. This likelihood is particularly strong for low-income countries, pointing to the need to earn a living independent of job quality.

Education has only a small positive, or even negative, effect on active labor market participation in low- and lower-middle-income countries. This effect changes in upper-middle-income countries, where better education is associated with increased participation in the labor market.

Figure 3.8
Determinants for active labor market participation and wage employment by income group

Source: World Bank Group, International Income Distribution Data Set (I2D2).
Note: Active participation is defined for all workers who are either employed or looking for employment. Confidence intervals are shown for a 5 percent level of significance.

The strongest determinants for wage employment in low- and middle-income countries are the economic sector and public sector employment. Workers are more likely to be in wage employment in all economic sectors relative to agriculture (figure 3.8). Overall, coefficient directions are positive and comparable over the three country income categories in most subsectors. Compared to agriculture, the service sector—with subsectors including public administration and financial and business services—increases the likelihood for wage employment relatively more in low-income economies. In lower-middle-income countries, this is the case for the industry sector. Working in mining has the highest likelihood (28 percent) for wage employment for workers in upper-middle-income countries compared to agriculture. For all country income groups, the private sector promises a smaller likelihood of wage employment compared to the public sector. Other factors associated with wage employment are education, sex, and location.

Higher earnings are, not surprisingly, associated with better education, more productive sectors, and certain occupations. Higher education, sectors with relatively higher value addition, and occupations that

involve more skills and experience largely determine higher earnings, as shown in figure 3.9 and the regression analysis in annex B. Service and market workers such as salespeople, "elementary" occupations such as cleaners and laborers,[4] as well as agricultural workers earn the least across all country income groups compared to senior officials. For example, working as a salesperson instead of as a senior official reduces average earnings by 71 percent in low-income countries, 63 percent in lower-middle-income countries, and 36 percent in upper-middle-income countries. Investing in education is the most rewarding in low-income countries, where a completed secondary degree or tertiary education yields a premium of 91 percent compared to no education. In lower-middle-income countries, the premium is as high as 54 percent and in upper-middle-income countries 76 percent.

Figure 3.9
Determinants of hourly earnings by country income group
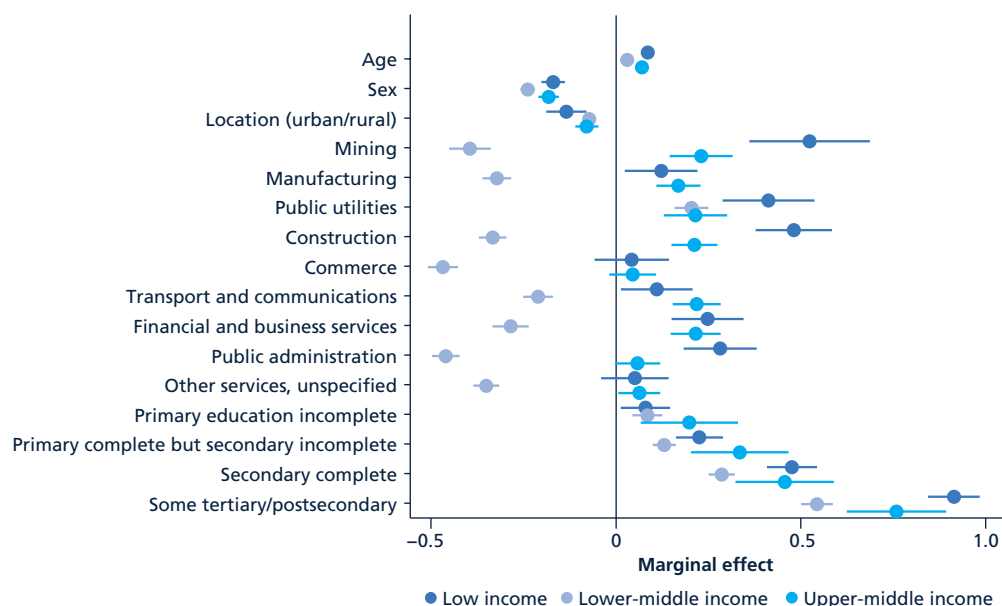
Source: World Bank Group, International Income Distribution Data Set (I2D2).
Note: Mean hourly (log) wages are in 2010 U.S. dollars purchasing power parity adjusted. Confidence intervals are shown for a 5 percent level of significance.

Inequalities within countries persist and are striking for women, youth, and rural areas. In terms of mean hourly earnings over different sectors of the economy, women, youth, and rural areas systematically fare worse (figure 3.10). The above earnings regression results demonstrate that female, younger, and rural workers are significantly and systematically at a disadvantage in low- and lower- and upper-middle-income economies (figure 3.9 and annex B). The average hourly earnings for women are 17–24 percent less than for men; workers earn between 3 and 9 percent more for each additional year of age; and rural workers earn, on average, 7–14 percent less than their peers who work in urban areas.

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4   As defined by the International Standard Classification of Occupations (ISCO) version 88.

Figure 3.10
Mean hourly earnings by sector in non-high-income (low-, lower-middle-, and upper-middle-income) countries by disadvantaged groups

a. Sex **b. Age** **c. Location**

Legend:
Agriculture · Mining · Commerce · Manufacturing · Construction · Public utilities · Public administration · Transport and communications · Other services, unspecified · Financial and business services
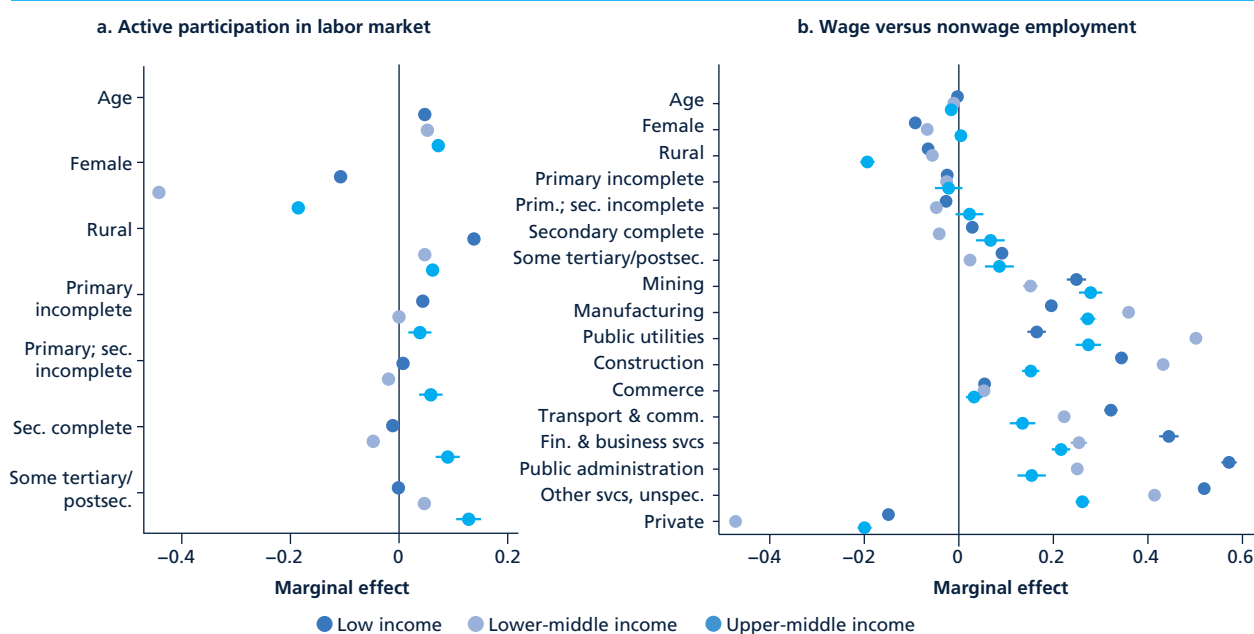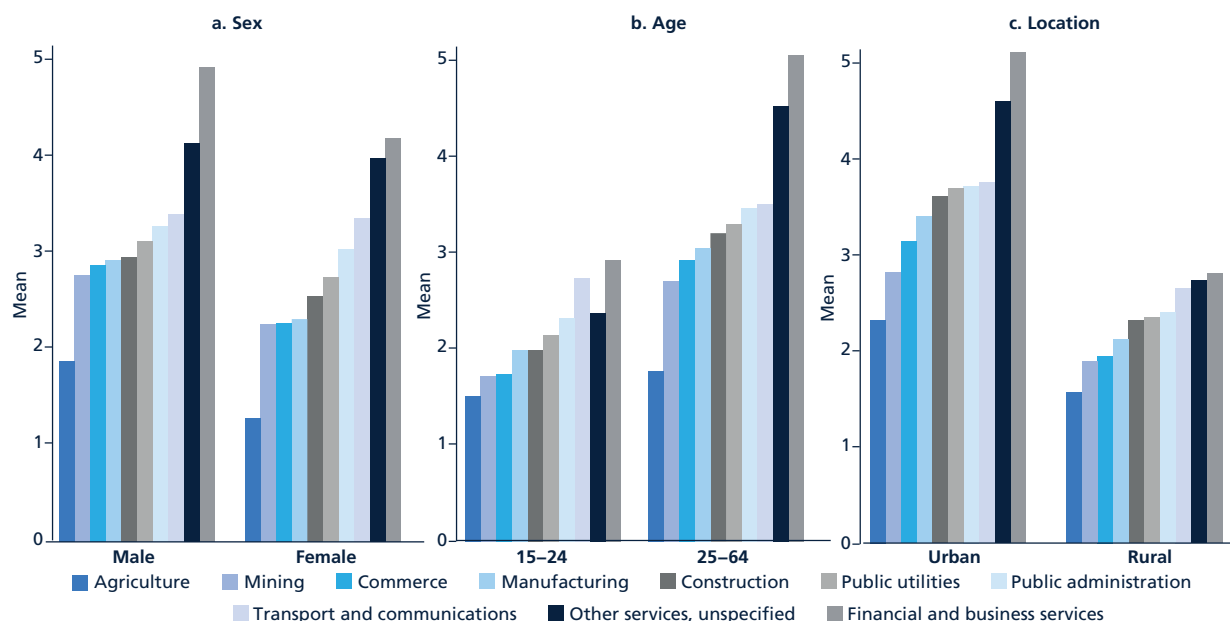
Source: World Bank Group, International Income Distribution Data Set (I2D2) for 84 countries over the years 1999–2016.
Note: Aggregated population weights by income group were used to create this figure. Mean hourly wages are in 2010 U.S. dollars purchasing power parity adjusted.

The bottom 40 percent of households by income experience strong inequalities with respect to type of employment as well as education. Looking at the distribution of average household incomes within low- and middle-income countries, there are considerable differences regarding these two factors that determine labor market outcomes (figures 3.11 and 3.12). In low-income countries, agricultural work dominates the lower income deciles, while non-agricultural wage work is the main employment type for the highest income group. Both shares of non-agricultural wage self-employment and non-agricultural wage work increase with income, while agricultural employment declines. For upper-middle-income countries, non-agricultural wage work dominates in all income deciles, increasing from around 40 percent in the lowest income decile to about 70 percent in the highest. Both agricultural work and non-agricultural self-employment decline as average household incomes rise in upper-income economies (figure 3.11). In both low- and upper-middle-income economies, households with a relatively lower household income have lower levels of education (figure 3.12). Starting from a different distribution of education, the shares of higher levels of education increase for both income groups. Overall, the share of educated workers increases for all levels of education in relatively richer countries as measured by GDP per capita. This increase is highest for workers with secondary and tertiary education.

Figure 3.11
Household income inequalities in low- and upper-middle-income countries by type of employment
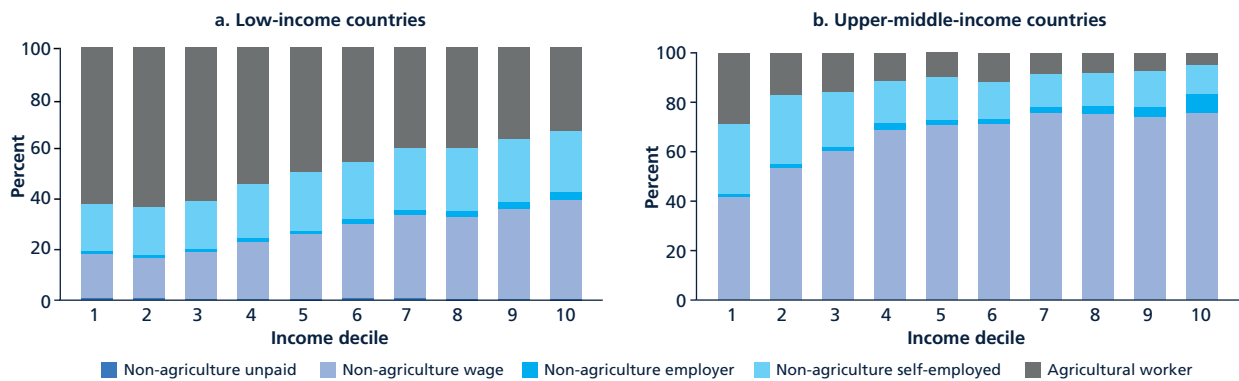
a. Low-income countries

b. Upper-middle-income countries

Legend: Non-agriculture unpaid ■ Non-agriculture wage ■ Non-agriculture employer ■ Non-agriculture self-employed ■ Agricultural worker

Source: World Bank Group, International Income Distribution Data Set (I2D2) for workers age 15–64 for 24 countries over the years 2004–16 (figure 3.11a) and 31 countries over the years 1999–2014 (figure 3.11b).
Note: Aggregated population weights by income group were used to create this figure.

Figure 3.12
Household income inequalities in low- and upper-middle-income countries by education
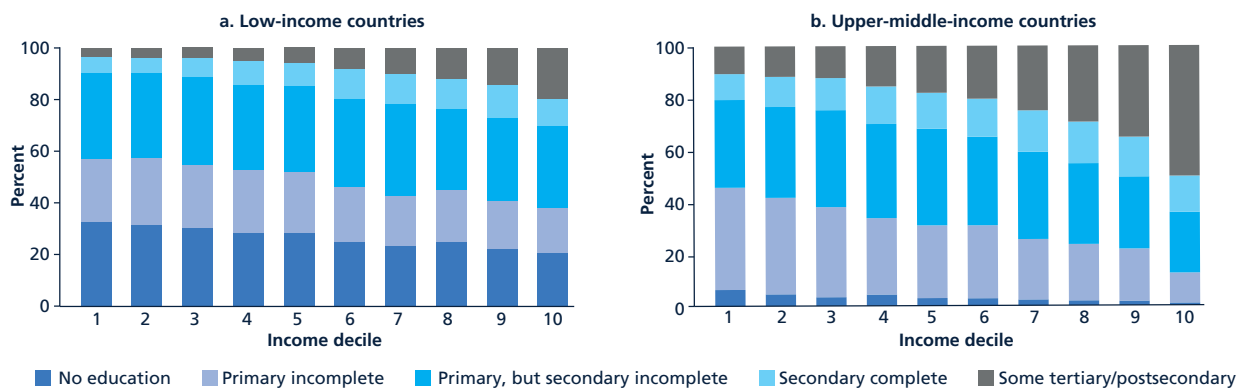
a. Low-income countries

b. Upper-middle-income countries

Legend: ■ No education ■ Primary incomplete ■ Primary, but secondary incomplete ■ Secondary complete ■ Some tertiary/postsecondary

Source: World Bank Group, International Income Distribution Data Set (I2D2) for workers age 15–64 for 27 countries over the years 2003–16 (figure 3.12a) and 34 countries over the years 1999–2014 (figure 3.12b).
Note: Aggregated population weights by income group were used to create this figure.

4. LABOR DEMAND FINDINGS

Not all countries are alike in their jobs challenges, and the same country's challenges are not fixed over time. Where a country is in its institutional and business development will affect what should be done to reduce frictional and structural unemployment and manage demand. But unfortunately, in most low- and lower-middle-income countries, employment and business data are not available with sufficient regularity to allow for overtime analysis.

This section presents the main findings emerging with regard to labor demand gleaned from the Jobs Diagnostics country pilots.[1] The findings set out here are the start of a process to improve knowledge about firms' demand for labor. The firm-level empirical analysis performed under a Jobs Diagnostic identifies which type of firms in which sectors have the greatest job potential and whether productive firms expand to create more jobs. If data permit, job creation, survival, and efficiency are analyzed at a deeper level.

The firm-level data used were collected from censuses, business registries, tax returns, and representative value-added surveys. The analysis presented includes only the formal private sector. The unit of observation is the individual firm, and the emphasis is on waged workers. Firms with at least one permanent employee are included; self-employment and government agency employment are excluded, as are unregistered firms. Roughly 30 percent of employment in the respective countries is captured by these data and 80 percent of value added.[2] Because representative firm-level data are, where available, limited in most developing countries, the evidence presented here on firms' employment patterns focuses mostly on composition and benchmarking to other low- and lower-middle-income countries.

14. MOST BUSINESSES ARE MICRO FIRMS; LARGE FIRMS EMPLOY MORE PEOPLE

The large majority of formal firms have fewer than 10 permanent workers. Micro firms—those with fewer than 10 employees—comprise between 50 and 95 percent of all firms across the 16 countries (figure 4.1). This is a share comparable to that observed in rich countries (Criscuolo, Gal, and Menon 2014). Recent work has shown that average firm size increases with per capita income, with poorer countries having a lower average firm size and richer countries skewed toward larger firms (Bento and Restuccia 2016). Firm size distribution—together with the number of firms in the industry, productivity, and institutional climate and regulations—influences how well a country responds to demand shocks with labor adjustments (Hopenhayn 2016). Görg et al. (2016) predict demand shocks have larger effects on employment in industries with a higher concentration of smaller firms.

Large firms (100 or more workers) make up an almost negligible share of firms in the sample. In contrast, the share of workers in large firms is significant in most of the countries studied, greatly exceeding the share of

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[1] The 16 countries discussed in this section are Afghanistan, Bangladesh, Burkina Faso, Cabo Verde, Côte d'Ivoire, Kosovo, Moldova, Mozambique, Paraguay, Peru, Sierra Leone, South Africa, Tajikistan, Uganda, Vietnam, and Zambia. The countries included were determined by the availability of outputs at the time findings were compiled for publication. Cabo Verde, Peru, and South Africa were included for benchmarking purposes; the same analytic methodology was used. Annex C provides a complete description of the data used in this analysis.

[2] The share of employment captured varies widely by country, ranging from 6 percent of total employment for Sierra Leone to 70 percent for South Africa. The median is 40 percent, and the standard deviation is 16 percent.

formal waged workers in micro firms in 10 of the 16 countries. In these 10 countries, large firms account for over 40 percent of employment in the formal private sector.[3]

Figure 4.1
Firm and employment shares for large and micro firms in 16 countries

a. Share of micro and large firms

b. Share of employment by micro and large firms

■ Micro (< 10 employees)   ■ Large (100+ employees)
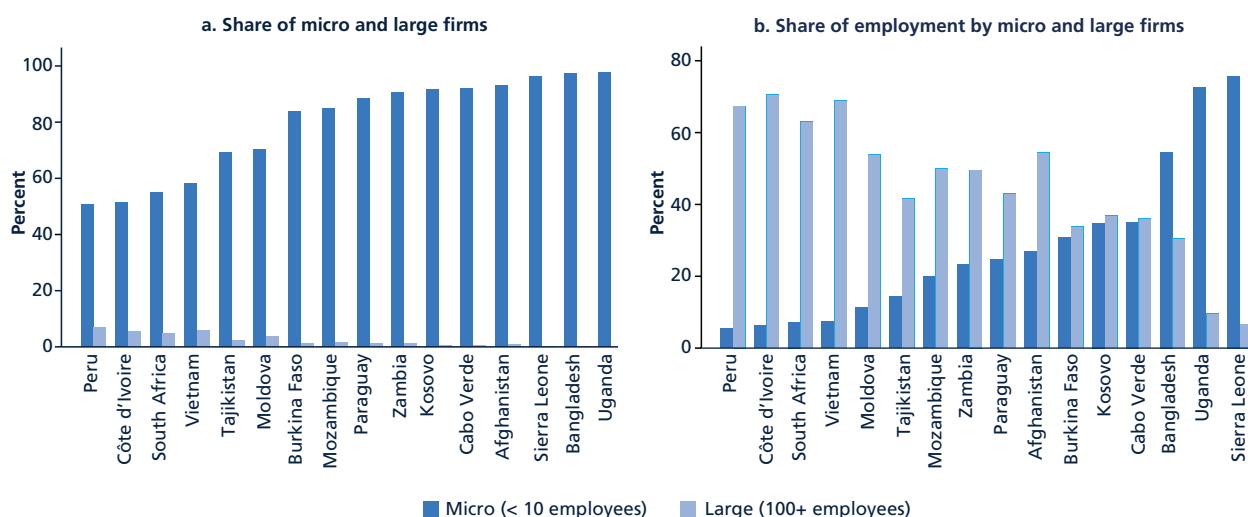
Source: Countries' statistical agencies.

15. A SMALL NUMBER OF FIRMS ACCOUNT FOR A LARGE NUMBER OF JOBS

In some countries, jobs are concentrated in just a few very large firms. Figure 4.2 shows that in more than half of the 16 countries, the top 1 percent of the largest firms account for more than one-third of the jobs in the formal private sector. In three of these countries, nearly half of the waged jobs in the formal private sector are controlled by the top 1 percent of firms. Revenue concentration in very large firms is even more pronounced (figure 4.2b). This means that labor productivity is likely to be even more concentrated in just a few very large firms.

Figure 4.2
Concentration of employment and revenues in the top 1 percent of firms

a. Share of employment by top 1% largest firms

b. Share of revenue by top 1% largest firms

Source: Countries' statistical agencies.

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3   The lack of standardized data collection in representative censuses and surveys makes the task of international benchmarking for firm-level data unduly complicated. The very low shares of employment in large firms in countries such as Sierra Leone and Uganda may be due to the data collection approach. Business censuses in these countries likely include informal firms.

16. MICRO FIRMS PERSIST BUT ARE UNLIKELY TO EXPAND EMPLOYMENT

Firm entry and exit take place predominantly among micro firms. Assessing whether micro firms have the potential to expand and grow is of interest for policy makers. The share of micro firms that are more than 10 years old can serve as a proxy for their survival.[4] There is a large variance in this indicator among countries (figure 4.3). In Vietnam, only 7 percent of micro firms are older than 10 years. In contrast, 48 percent of micro firms in South Africa are more than 10 years old. Micro firms survive and many persist, raising concerns about growth in employment among them. Figure 4.4 explores this further. Between 95 percent (Moldova) and 73 percent (Vietnam) of entrant firms were micro firms. Of these, only a quarter to a half survived beyond five years; the other half to three-quarters exited before they were five years old. Of the survivors, only 3–12 percent of micro firms grew beyond 10 employees.

Figure 4.3
Distribution of micro firms by age
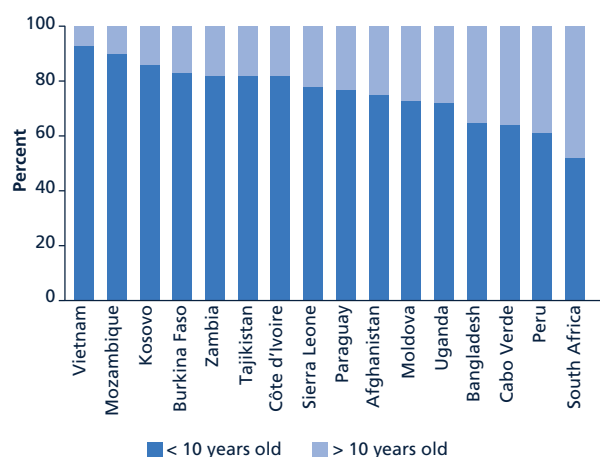
Figure 4.4
Micro firm entrants, survival, and employment growth
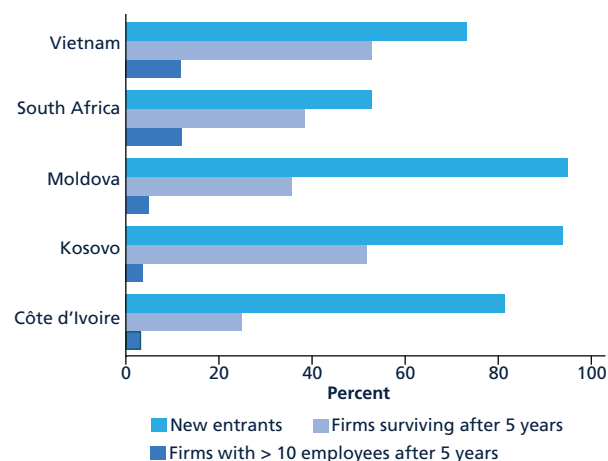
Source: Countries' statistical agencies.

17. NEW AND YOUNG FIRMS ARE A PRIMARY SOURCE OF JOBS

Young firms are robust contributors to jobs.[5] Between 20 and 60 percent of firms in our sample of countries were young (five years or less since starting economic activity). Nine out of 16 countries had particularly high rates of young firms. High entry and exit of new firms suggests dynamism to the extent that surviving young firms are productive and grow. These young firms typically accounted for 10–50 percent of the countries' jobs, meaning they were smaller than the average firm. In 4 of the 10 countries (Kosovo, Sierra Leone, Tajikistan, and Uganda) where more than half of the firms were less than five years old, these firms generated more than half of all jobs (figure 4.5). In Côte d'Ivoire, firm entrants were particularly small compared to incumbents; although they accounted for 50 percent of the total firms, they generated only 14 percent of all jobs. Only in Kosovo was the share of workers in young firms equivalent to the share of young firms among all firms.

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4 Both Vietnam and Kosovo underwent recent privatization processes, which is likely to account for the youthful skew of their firms' age distributions. South Africa's administrative data are likely to be skewed toward large firms, as many micro firms are not formal or sufficiently large to need to report taxes. Côte d'Ivoire, Kosovo, and Moldova rely on administrative data but show very different outcomes.

5 Haltiwanger, Jarmin, and Miranda (2013) show that in the United States it is age rather than size that matters for job growth. Hsieh and Klenow (2014) find that in India and Mexico, older firms do not grow much compared to young firms.

Figure 4.5
Firm and employment shares for young firms
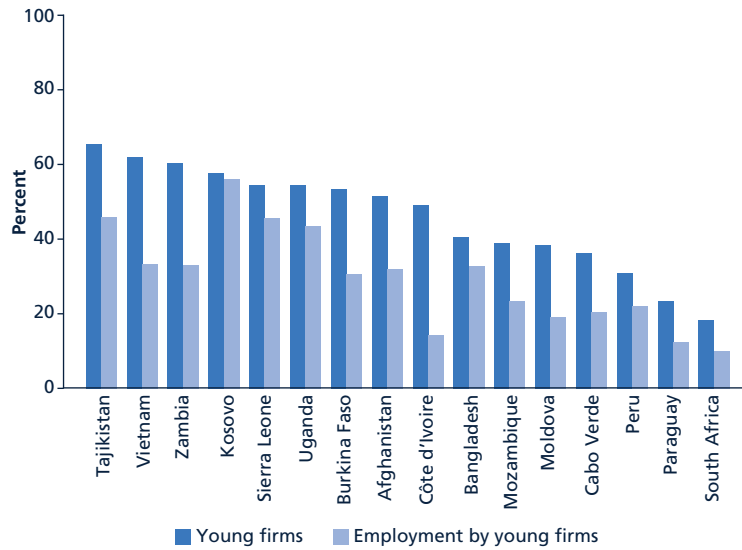
Source: Countries' statistical agencies.

Analysis of panel data from five countries suggests that employment growth of young firms is faster than for established firms. Employment growth slows as firms age: adjusting for other factors including size, the older a firm is, the larger its negative coefficient for labor growth compared to firms less than five years old. The order of magnitude varies by country. Roughly speaking, when a firm becomes older than five, growth slows by 10 percent. Each additional decade, employment growth slows an additional 2–3 percentage points. Figure 4.6 plots coefficients corresponding to age categories; the dependent variable is employment growth of incumbents. Young firms may grow faster, but they tend to be smaller than average. At the same time, smaller firms face lower survival rates.

Figure 4.6
Employment growth and age
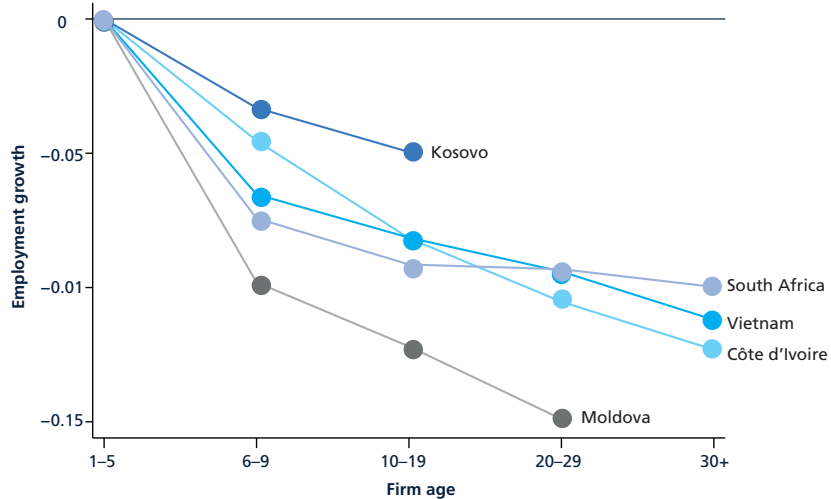
Source: Countries' statistical agencies.
Note: Regressions are estimated independently for each country. Controls include several categories of average size, age, ownership, location (department level), sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. All coefficients are significant to at least 90 percent. Base category: age 1–5. Moldova's result excluded four outlier firms older than 29 years.

Young firms are significant job creators. The following analysis looks at net job creation by incumbent firms for four countries where panel data are available, separating firms into three age categories: young (up to 5 years old), mature (6–9 years), and old (10 years and up). In three of the four countries, young firms were significant net job creators, contributing substantially more than either mature or old firms (figure 4.7). When firm entry is included, net job creation by young firms becomes even more important.

Figure 4.7
Net job creation of incumbent firms by country and firm age category
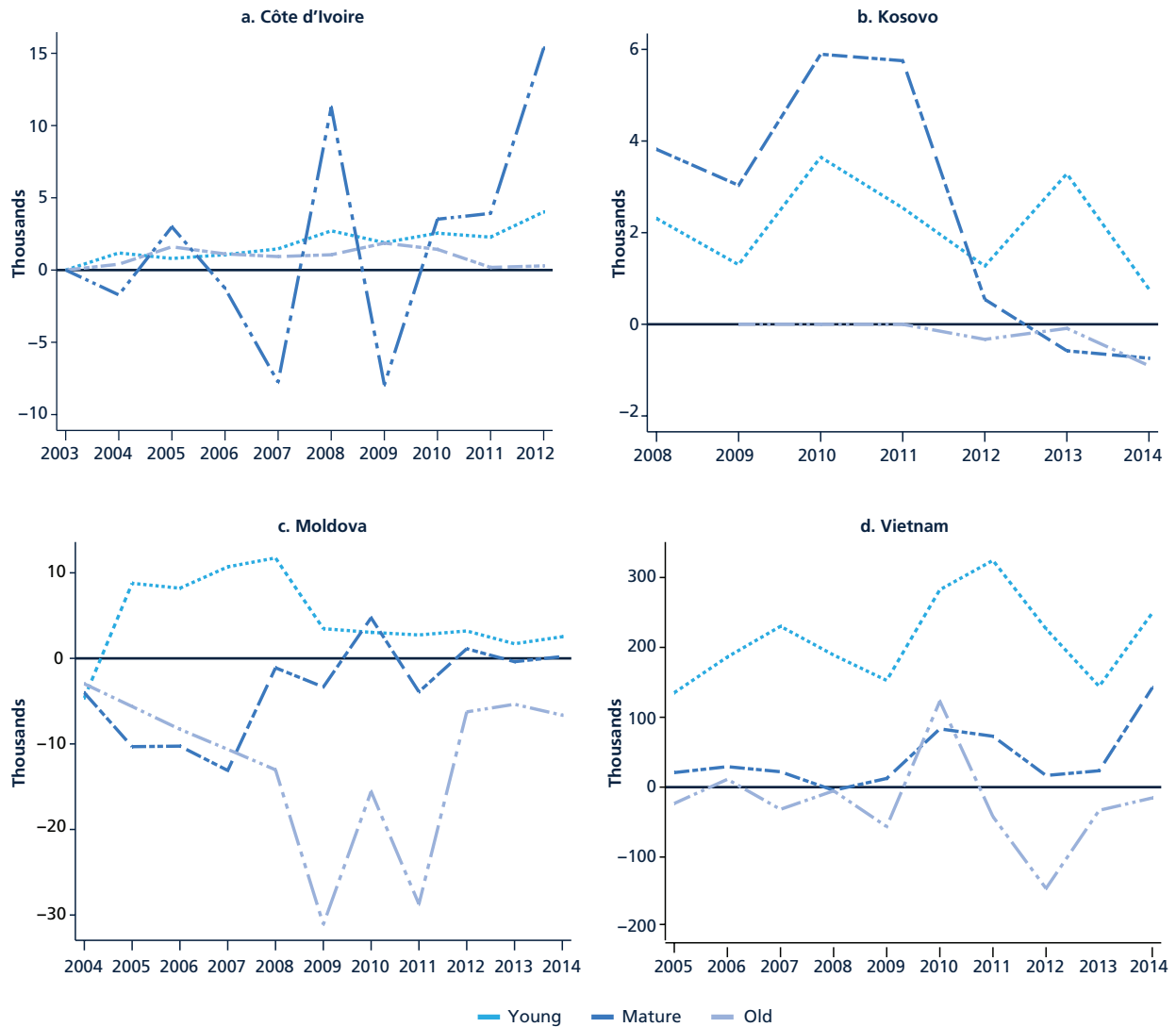
Source: Countries' statistical agencies.

18. LARGE FIRMS DO NOT NECESSARILY HAVE HIGHER LABOR PRODUCTIVITY THAN SMALL FIRMS

Industrial organization theory predicts that productive firms will expand.[6] If productive firms tend to grow more than less productive firms, firm size and productivity should be positively correlated. However, in the

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6   Asplund and Nocke (2006), Ericson and Pakes (1995), and Melitz (2003), among others, imply in their theoretical models that, over time, more productive firms expand at the expense of less productive ones.

16 countries, there is no robust evidence that large firms are more productive on average than micro firms. In five countries (Burkina Faso, Cabo Verde, Paraguay, Sierra Leone, and Zambia), large firms were on average two to four times more productive than micro firms, with productivity measured as output per worker (figure 4.8). However, in Afghanistan, Peru, and—to a lesser extent—Vietnam, the opposite was true. When productivity was measured in terms of value added per worker, the pattern in these countries was inverted—but not in Moldova and South Africa, where micro firms' productivity was consistently higher than that of large firms.

The evidence provides no robust correlation between firm size and firm productivity. To account for the fact that other firm characteristics may influence this relationship, figure 4.9 shows the results of firm size regressed on output per worker. We do not look at the relationship between micro firms and large firms per se. Instead, we control for other firm characteristics and estimate the correlation between productivity quartiles and size.

Figure 4.8
Productivity ratio of micro firms to large firms
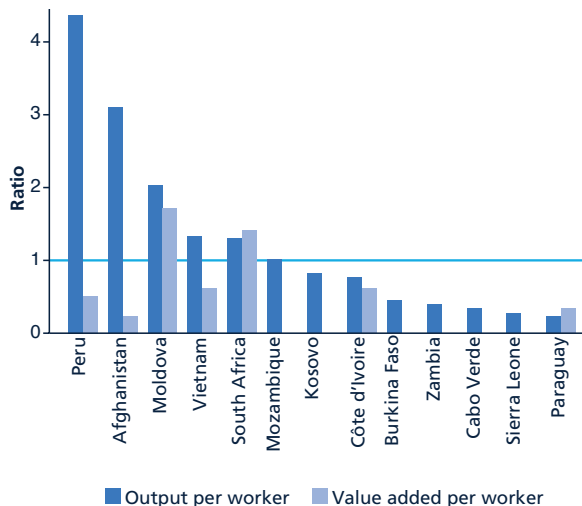
Figure 4.9
Firm size and labor productivity
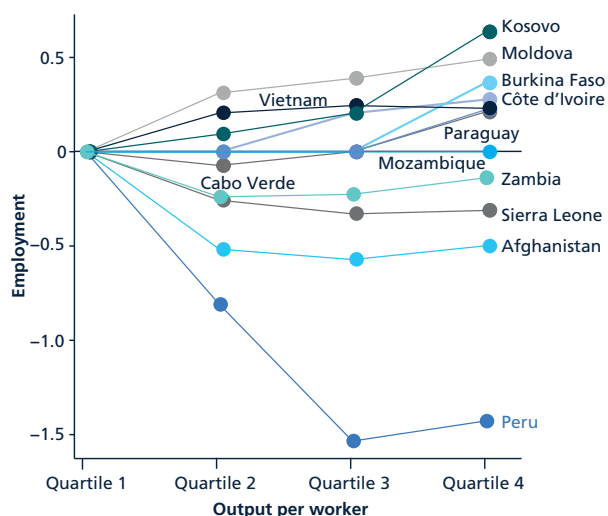
Source: Countries' statistical agencies.
Note: Regressions are estimated independently for each country. Controls include several categories of age, ownership, location (department level), sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. All coefficients are significant to at least 90 percent. Base category: lowest productivity quartile 1.

19. ON AVERAGE, LARGE FIRMS TEND TO PAY HIGHER WAGES

Although patterns differ across countries, there is a robust correlation between firm size and average wage paid. Regression analysis when controlling for firm characteristics (size, age, ownership, sector, and location) shows, with the exception of some anomalies, higher wages with firm size in most countries.[7] Côte d'Ivoire and Peru show higher wages relative to micro, but this pattern reverses after firm size exceeds 250 workers. In Afghanistan, average wages are highest for firms between 50 and 499 workers (figure 4.10).

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[7]   Wages are determined by dividing the total wage bill by the number of permanent workers.

Figure 4.10
Firm wage and size
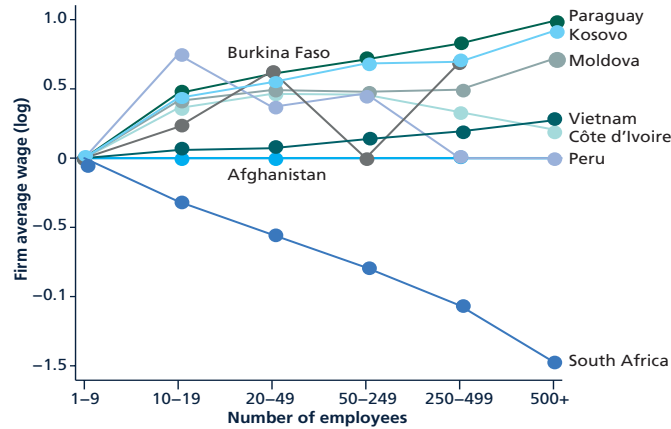
Source: Countries' statistical agencies.
Note: Regressions are estimated independently for each country. Controls include age, ownership, location (department level),sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. All coefficients are significant to at least 90 percent. Base category: size 1–9.

20. PRODUCTIVE FIRMS PAY HIGHER WAGES

Wages and productivity have a strong positive correlation. Regressions of average firm wages on productivity quartiles show that the more productive a firm, the higher the wages it pays, when holding all other factors constant (figure 4.11). This provides evidence that, to some extent, entrepreneurs share their gains with workers.

Figure 4.11
Firm wage and labor productivity
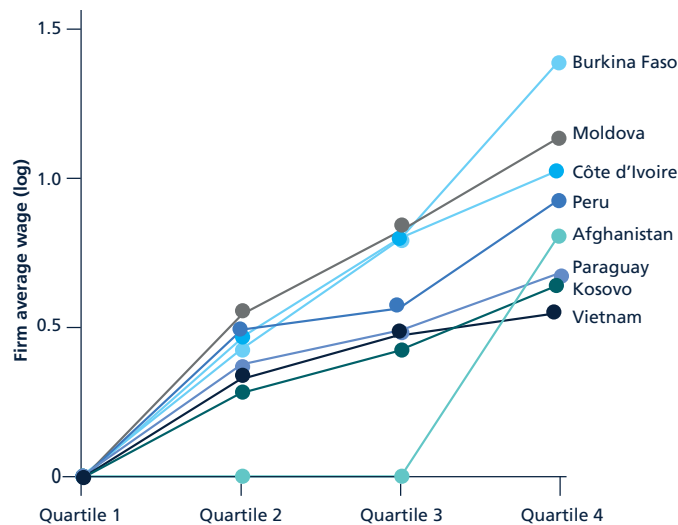
Source: Countries' statistical agencies.
Note: Regressions are estimated independently for each country. Controls include several categories of size, age, ownership, location (department level), sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. All coefficients are significant to at least 90 percent, except in Afghanistan, where productivity quartiles 2 and 3 are not significant at 90 percent. Base category: lowest productivity quartile 1.

21. LABOR IS ALLOCATED TO MORE PRODUCTIVE FIRMS ON AVERAGE AND OVER TIME

Economic theory suggests that when markets are functioning well, more efficient firms will survive and expand at the expense of less efficient ones. However, since the demand for labor is derived from the demand for goods and services, unless the latter demand increases in the aggregate, there is no guarantee that productivity gains will lead to employment creation.

Larger firms are not necessarily more productive, as noted in finding 18. Figure 4.12 shows the decomposition of labor productivity growth over time in five countries for which relevant data are available.[8] Note that the between-firm effect is positive in all five countries, indicating that firms with above-average productivity are expanding their employment share in the economy (or, conversely, that less productive firms are losing their employment share). The cross effect, however, is negative for all countries, indicating that firms that increase their productivity decrease their employment shares. The evidence shown here, limited to the panel countries but robust, is that productivity gains are accompanied by job losses.

More productive firms grow faster than less productive firms. Figure 4.13 plots coefficients with standard errors corresponding to productivity levels measured in quartiles; the dependent variable is employment growth of incumbents. The results show that the more productive firms exhibit negative growth with respect to the less productive firms.

Figure 4.12
Dynamic decomposition of productivity growth
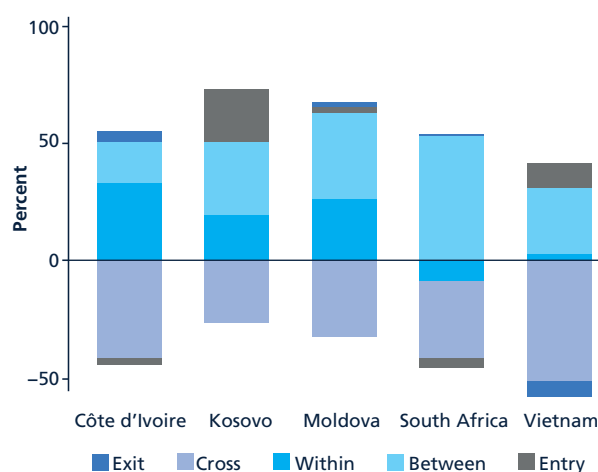
Figure 4.13
Employment growth and labor productivity
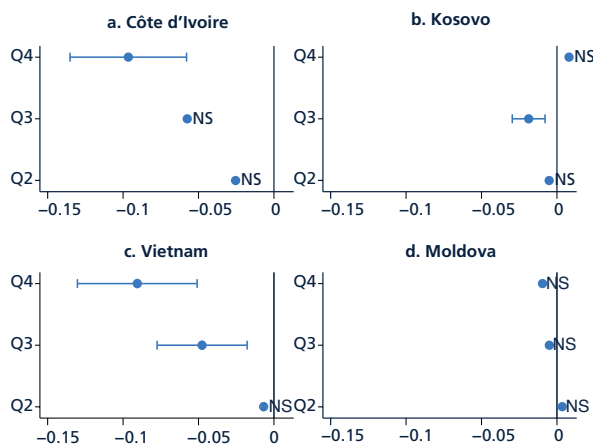
Source: Countries' statistical agencies.
Note: Controls include several categories of average size, age, ownership, location (department level), sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. NS = not significant at 90 percent. Base category: lowest productivity quartile 1.

22. LESS PRODUCTIVE FIRMS ARE MORE LIKELY TO EXIT

"Creative destruction" through firm closure and liquidation enhances productivity by freeing up labor and capital for use by more efficient firms. It is important to observe the death of the weakest firms in an economy, because it is evidence that "selection" in terms of firm survival is working. Firms with lower output per worker on average are more likely to exit, as shown by plotted coefficients with standard errors from

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8 The dynamic decomposition presented in figure 4.12 is based on Foster, Haltiwanger, and Krizan (2001) and measures reallocations toward productive firms of existing plants and those entering and exiting to explain aggregate productivity growth. Five components are measured: (1) *within-firm* productivity growth, weighted by the firm's initial employment share; (2) the *between-firm* effect, which captures the contribution of expanding/shrinking shares of high-/low-productivity firms to productivity growth; (3) the *cross* effect, which captures increases in productivity as firms expand/shrink; (4) the *entry* effect, which contributes positively to productivity growth if entering firms have higher productivity than the initial average; and (5) the *exit* effect, which contributes positively to sector productivity growth if exiting firms have lower productivity than the initial sector average.

probit regressions in 4 of the 16 countries for which firm-level panel data exist (figure 4.14). Compared to the reference group of firms in the bottom quartile, the likelihood of exit is lower for each of the higher-productivity quartiles. This is important from a jobs perspective for two reasons: (1) because average labor productivity rises as inefficient firms exit and more efficient survivors expand, and (2) because it means that—where employment in efficient firms is rising, and where the workers laid off from the inefficient firms are re-employed—the labor market is working as expected. This result is widely found in the literature on enterprise growth in rich countries (Bartelsman, Haltiwanger, and Scarpetta 2009).

Figure 4.14
Estimate of likelihood of firm exit on productivity

Source: Countries' statistical agencies.
Note: Controls include several categories of size, age, ownership, location (department level), sector (two-digit), and year. Standard errors are clustered by broad categories of size, sector, and location. Base category: lowest productivity quartile 1.
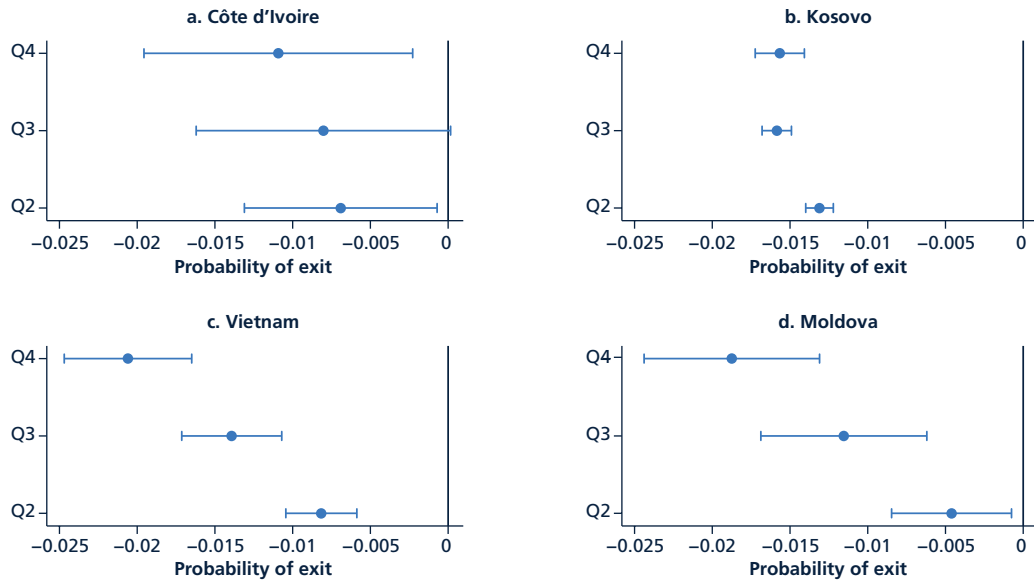
5. SUMMARY AND CONCLUSIONS

This report analyzes jobs outcomes at the levels of the economy, the individual worker, and the firm using the Jobs Diagnostics tools and techniques developed under IDA17. It identifies 22 stylized findings about jobs outcomes in low- and lower-middle-income countries. Taken together, these describe the pathways taken toward better jobs outcomes as countries move from low- toward middle-income status. Understanding these pathways will be helpful to policy makers when formulating jobs strategies as part of their inclusive growth policies.

The dozen insights highlighted in the opening section suggest that pathways to better jobs are linked to economic transformations that reallocate labor from less to more productive activities and that reduce economic inactivity and underemployment. Low-income countries are characterized by the lag in those transformations, and the price is paid by households and workers who remain trapped in low-productivity activities with meager livelihoods. The report advises policy makers to analyze the specific constraints that are holding back positive jobs transformations in their country. This will provide a basis for designing effective interventions to support faster transformations toward higher-productivity jobs and improved livelihoods. Finally, in this section, we also comment on some data gaps and inconsistencies that can make it harder for policy makers to diagnose jobs problems and formulate effective jobs strategies.

JOBS STRATEGIES SHOULD CREATE PATHWAYS TO BETTER JOBS

A desirable consequence of economic growth is that many people change the work they do. Workers follow a variety of pathways to better jobs: they may increase their working hours, become more productive by moving between locations, change sectors and occupations, or shift from self- to waged employment and from less to more successful firms. Policy makers can make economic growth more inclusive if they bring these pathways within reach of their workers and remove the obstacles in their way.

In low-income countries with large labor surpluses, pathways to better jobs can open up faster when the pattern of economic growth is labor intensive. This approach makes use of the economy's existing human capital and skills endowments, creating jobs people are able to do and demanding products they are able to produce. For example, the development of infrastructure, transport, storage, and trade logistics for labor-intensive sectors such as agriculture or apparel can connect more workers to markets and to value chains, improving their jobs and increasing their earnings.

Pathways to better jobs depend on the growth of investment in more productive economic activities. Consequently, they need a context of sound macroeconomic management and a healthy investment climate. The pathways can often be smoothed by improving the functioning of labor markets, product markets, and financial markets; or by removing obstacles to structural change, occupational mobility, and internal migration and creating waged jobs in firms with sufficient capital to raise productivity. Successful growth strategies are often associated with outward orientation, which opens markets and disciplines firms to compete at global standards.

Jobs strategies for low-income countries cannot limit themselves to enhancing market efficiency and accelerating capital investment. The findings of this report show that growth is weakly correlated to job creation, and many countries have experienced sustained growth while leaving behind the rural poor. The goal

of jobs strategies is to accelerate economic transformations that are inclusive for poor people. A modern jobs strategy will likely aim to improve connectivity for workers, to remove labor mobility constraints (for instance, through creating affordable and livable urban environments), and to enhance human capital endowments so workers can get better jobs.

In low-income country settings, the economic gains from linking workers to the modern sector can be enormous because the opportunity cost of their labor in existing, traditional activities is so much lower than its value in better capitalized activities linked to larger markets. But those gains do not accrue to the firms that make the investments—they go to the workers, in the form of higher wages. That creates a market failure known as a *labor externality*. The upshot is that profit-maximizing firms will underinvest in activities that transform jobs for poor people. This is further exacerbated when better jobs for some types of workers (such as young women in settings of high fecundity, or young men in settings of violence and criminality) generate *social externalities* (World Bank 2012).

Effective jobs policies are needed to address the market failures that hamper positive economic transformations for poor people in low-income country settings. This is a central inference of the findings presented in this report. The Jobs Diagnostics undertaken in IDA countries show that youth often do not transition quickly into paid work, and that young women in low-income countries often remain inactive and are much less likely to migrate from their place of birth for jobs in towns and cities. Young workers may be active in the traditional informal sector in self-employment but excluded from waged work in the faster-growing and more productive formal sectors of the economy. Women, youth, and people with lower education fare worse and earn less than older, educated men in nearly all the pilot Jobs Diagnostics. Yet the social and economic gains from better jobs are highest for young people, especially women.

PRIORITIES FOR JOBS STRATEGIES IN IDA COUNTRIES

- **Low-income countries need better jobs, not just more jobs.** Most people of working age in low-income countries work because they do not have the option to do otherwise. For them, it is the hours worked and the productivity of their work that needs to rise—as findings 2, 3, 7, 8, and 10 clarify. To increase productivity in fast-growing populations, GDP needs to grow even faster than employment. Ideally, then, demand for the products produced by the country's formal private sector should grow faster than its labor force. The countries that have succeeded in raising employment by more than labor force growth and raising labor productivity have typically expanded their exports of goods and nonfactor services.

- **Raise agricultural productivity, support commercialization in agriculture, and create off-farm jobs.** In rural low-income countries, productive job transitions will predominately need to take place in the rural areas where most people live and work. Findings 3, 4, 5, 8, and 9 show that, on average, growth in agricultural productivity is associated with employment shifts into other sectors. Figures 3.2 and 3.3 show that low- and lower-middle-income countries have a higher share of rural self-employed in agriculture compared to middle-income countries and a lower share of waged work in services.

- **Target higher-productivity waged work in labor-intensive firms with supply chain linkages.** Raising the productivity of smallholder farmers in low-income countries and creating more waged work in capital-rich firms should arguably be a higher priority in jobs strategies than raising the productivity of nonfarm self-employment (findings 3, 4, 5, 14, and 19). While both approaches would increase demand for the services typically supplied by the nonfarm self-employed, raising agricultural productivity should release labor from farming to fuel the growth of waged work in towns and cities.

- **Invest in secondary towns to create off-farm jobs in firms with higher productivity.** Consumption centers are growing in low-income countries (finding 6), and they create important opportunities for agro-processing, as borne out by recent Jobs Diagnostics in Uganda and Zambia. Jobs strategies can identify promising locations and solutions for local economic development through secondary towns and the transition of work into more productive waged jobs in secondary towns and cities (finding 9). These better jobs are needed to avoid a decline in productivity in urban industry and services as labor leaves agriculture (finding 5).

- **Foster labor-intensive growth targeting youth.** Youth in most low-income countries struggle to find their first job (findings 1, 8, and 13) and are more likely to be in unpaid family work or the informal sector. In these environments, fostering labor-intensive growth and developing youth schemes and employment incentives can help smooth the transition from school to work and/or encourage orderly emigration.

- **Improve pathways to better jobs for the self-employed in low- and lower-middle-income countries.** Most poor people in most low-income countries are self-employed farmers with little education, producing income-inelastic food products for their own or local consumption, often in lagging regions (findings 7, 8, and 9). As urban middle-class incomes grow and food tastes change, a key challenge will be to ensure that poorer people can diversify their labor and incomes into higher-value goods and services. If they cannot export more of what they produce (to urban centers or abroad, for example), and cannot diversify into new products, then demand for labor from the goods poor people produce can only rise with increases in demand from poor people. Productivity gains in production under these circumstances of limited demand growth could reduce prices and offset the earnings gain from productivity improvements. For many low-income countries, integrating poor farmers into the value chains of growing agricultural markets in income-elastic products (proteins, fruits and vegetables, processed foods) in cities and towns is a key approach, coupled with the creation of off-farm jobs for poor, less skilled workers for them to become net consumers of food.

MAKING DIAGNOSTICS EASIER

The work on Jobs Diagnostics synthesized in this report has exposed gaps in developing countries' data coverage of informal jobs, firms, agriculture, internal migration, and poverty. The establishment of data standards and agreed international definitions and methodology in each of these areas will greatly help the development of Jobs Diagnostics and jobs strategies.

- **Informal sector firm-level data on labor productivity and employment are, by nature, hard to collect.** Household enterprise data are available through Living Standards Measurement Surveys, and are used in some countries. But these tend to cover only self-employment and unpaid family work on the household premises, and are sampled to be representative of household consumption, not of informal firms or jobs. Some countries are collecting informal sector surveys of firms to support the rebasing of national accounts, but these surveys are not standardized and do not necessarily give attention to variables that enable jobs analysis.

- **Business data tend not to be standardized or fail to cover variables necessary for jobs analysis.** Most countries collect similar firm-level data for their system of national accounts, and yet there is no harmonized survey or census with labor variables. While generally representative of sectors and firm size, value-added surveys of firms for national accounts purposes are collected only infrequently in low-income countries, with panel data being rare, and tend not to be fully representative of districts within the country.

- **Farm-level data for analysis of labor productivity in agriculture is rare in low-income countries.** Moreover, such data are fraught with measurement problems in many countries. Further, reliable data on household enterprises both on and off farm are hard to come by in low-income countries.

- **Internal migration data are rarely standardized.** Data are often collected in population censuses, and sometimes in Living Standards Measurement Surveys and Living Standards Survey panel surveys. But these data are rarely standardized and still less often analyzed—a distinct gap, given the importance of geographic mobility to people's jobs transitions.

- **The International Income Distribution Data Set (I2D2) holds promise for global jobs indicators.** Poverty data for jobs analysis are improving. The World Bank's Poverty Global Practice is linking household consumption data to standardized labor variables in integrated surveys. The effort involves ensuring comparability with labor force surveys and improving the quality of household survey data for key labor variables, especially on labor market outcomes (earnings, working hours, multiple jobs). This initiative will help improve analysis and understanding of jobs for poor people and those in the bottom 40 percent; but as of now, coverage is limited in terms of countries and time periods.

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ANNEX A: DATA SUPPORTING MACROECONOMIC FINDINGS

Shapley decompositions of growth by typology, for more than five-year growth episodes
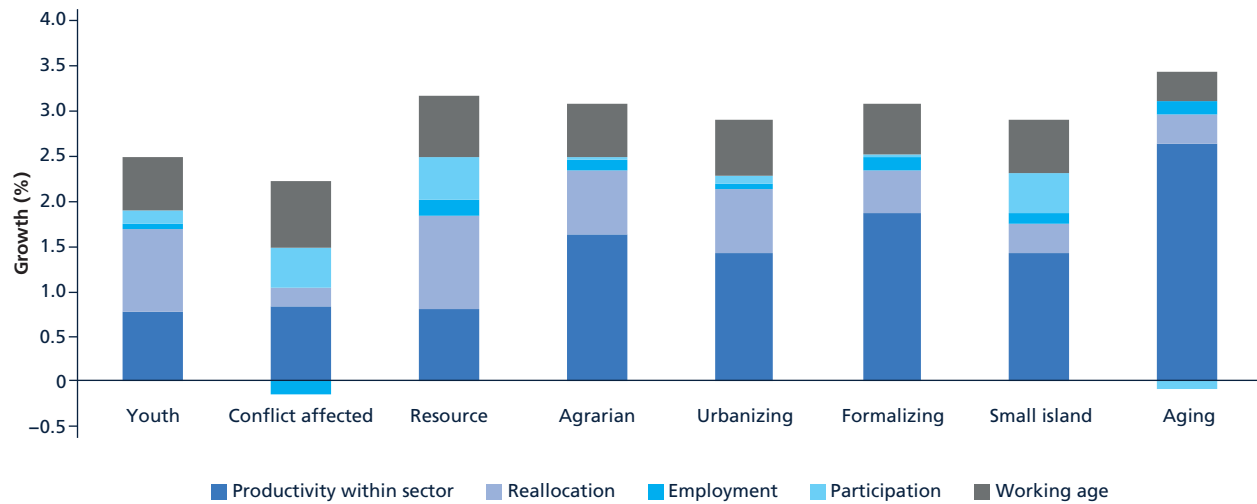
ANNEX B: REGRESSIONS SUPPORTING LABOR SUPPLY FINDINGS

Table B.1
Probit regression on active and inactive labor market participation

	Low income		Lower-middle income		Upper-middle income	
	Coeffi-cient	Marginal estimate	Coeffi-cient	Marginal estimate	Coeffi-cient	Marginal estimate
Individual age	0.186***	0.047***	0.185***	0.052***	0.262***	0.072***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Age squared	−0.002***	−0.001***	−0.002***	−0.001***	−0.003***	−0.001***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Male	Base	Base	Base	Base	Base	Base
Female	−0.430***	−0.109***	−1.429***	−0.447***	−0.674***	−0.188***
	(0.01)	(0.00)	(0.01)	(0.00)	(0.02)	(0.00)
Urban	Base	Base	Base	Base	Base	Base
Rural	0.522***	0.138***	0.167***	0.047***	0.227***	0.062***
	(0.01)	(0.00)	(0.01)	(0.00)	(0.02)	(0.01)
No education	Base	Base	Base	Base	Base	Base
Primary incomplete	0.175***	0.044***	−0.002	−0.001	0.128***	0.038***
	(0.01)	(0.00)	(0.01)	(0.00)	(0.04)	(0.01)
Primary complete but secondary incomplete	0.026**	0.007**	−0.071***	−0.020***	0.198***	0.058***
	(0.01)	(0.00)	(0.01)	(0.00)	(0.04)	(0.01)
Secondary complete	−0.047***	−0.013***	−0.171***	−0.049***	0.312***	0.090***
	(0.02)	(0.00)	(0.01)	(0.00)	(0.04)	(0.01)
Some tertiary/postsecondary	−0.008	−0.002	0.167***	0.046***	0.462***	0.129***
	(0.02)	(0.00)	(0.01)	(0.00)	(0.04)	(0.01)
Yearly fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	−2.538***		−2.812***		−4.262***	
	(0.03)		(0.03)		(0.08)	
Observations	598,450		2,191,364		1,804,119	

Note: Robust standard errors are given in parentheses.

*p < 0.1

**p < 0.05

***p < 0.01

Probit regression on wage employment by income categories

	Low income		Lower-middle income		Upper-middle income	
	Coeffi-cient	Marginal effect	Coeffi-cient	Marginal effect	Coeffi-cient	Marginal effect
Individual age	−0.010***	−0.002***	−0.035***	−0.010***	−0.059***	−0.016***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Age squared	0.000	0.000	0.000***	0.000***	0.000***	0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Male	Base	Base	Base	Base	Base	Base
Female	−0.544***	−0.091***	−0.244***	−0.066***	0.021	0.005
	(0.01)	(0.00)	(0.01)	(0.00)	(0.02)	(0.01)
Urban	Base	Base	Base	Base	Base	Base
Rural	−0.356***	−0.064***	−0.201***	−0.055***	−0.679***	−0.192***
	(0.01)	(0.00)	(0.01)	(0.00)	(0.03)	(0.01)
No education	Base	Base	Base	Base	Base	Base
Primary incomplete	−0.139***	−0.024***	−0.092***	−0.025***	−0.071	−0.021
	(0.01)	(0.00)	(0.02)	(0.00)	(0.05)	(0.01)
Primary complete but secondary incomplete	−0.152***	−0.026***	−0.172***	−0.047***	0.083	0.023
	(0.01)	(0.00)	(0.02)	(0.00)	(0.05)	(0.02)
Secondary complete	0.159***	0.030***	−0.149***	−0.040***	0.250***	0.068***
	(0.02)	(0.00)	(0.02)	(0.00)	(0.05)	(0.02)
Some tertiary/postsecondary	0.454***	0.092***	0.091***	0.025***	0.327***	0.087***
	(0.02)	(0.00)	(0.02)	(0.01)	(0.05)	(0.02)
Agriculture	Base	Base	Base	Base	Base	Base
Mining	1.117***	0.250***	0.508***	0.152***	1.015***	0.280***
	(0.03)	(0.01)	(0.03)	(0.01)	(0.05)	(0.01)
Manufacturing	0.941***	0.196***	1.171***	0.360***	0.986***	0.274***
	(0.02)	(0.01)	(0.02)	(0.00)	(0.03)	(0.01)
Public utilities	0.831***	0.165***	1.752***	0.502***	0.991***	0.275***
	(0.04)	(0.01)	(0.02)	(0.01)	(0.06)	(0.01)
Construction	1.404***	0.345***	1.440***	0.433***	0.496***	0.153***
	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)
Commerce	0.353***	0.055***	0.190***	0.054***	0.103***	0.033***
	(0.02)	(0.00)	(0.01)	(0.00)	(0.03)	(0.01)
Transport and communications	1.339***	0.322***	0.729***	0.223***	0.436***	0.136***
	(0.02)	(0.01)	(0.02)	(0.01)	(0.05)	(0.01)
Financial and business services	1.692***	0.445***	0.827***	0.255***	0.737***	0.217***
	(0.03)	(0.01)	(0.03)	(0.01)	(0.03)	(0.01)
Public administration	2.063***	0.572***	0.816***	0.251***	0.502***	0.155***
	(0.03)	(0.01)	(0.02)	(0.01)	(0.05)	(0.02)
Other services	1.907***	0.520***	1.370***	0.415***	0.933***	0.263***
	(0.02)	(0.01)	(0.02)	(0.00)	(0.02)	(0.01)
Public sector employment	Base	Base	Base	Base	Base	Base

	Low income		Lower-middle income		Upper-middle income	
	Coeffi-cient	Marginal effect	Coeffi-cient	Marginal effect	Coeffi-cient	Marginal effect
Private sector employment	−0.716***	−0.148***	−2.414***	−0.471***	−0.889***	−0.198***
	(0.01)	(0.00)	(0.04)	(0.00)	(0.04)	(0.01)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.128**		0.247***		1.921***	
	(0.06)		(0.01)		(0.12)	
Observations	316,930		1,005,062		728,638	

Note: Robust standard errors are given in parentheses.

*p < 0.1

**p < 0.05

***p < 0.01

Table B.3
Log of hourly earnings by income group, in 2010 U.S. dollars purchasing power parity adjusted

Variable	Low income	Lower-middle income	Upper-middle income
Individual age	0.09***	0.03***	0.07***
	(0.00)	(0.00)	(0.01)
Female	−0.17***	−0.24***	−0.18***
	(0.02)	(0.01)	(0.01)
Rural	−0.14***	−0.07***	−0.08***
	(0.03)	(0.01)	(0.02)
Agriculture	Base	Base	Base
Mining	0.52***	−0.40***	0.23***
	(0.08)	(0.03)	(0.04)
Manufacturing	0.12**	−0.32***	0.17***
	(0.05)	(0.02)	(0.03)
Public utilities	0.41***	0.20***	0.21***
	(0.06)	(0.02)	(0.04)
Construction	0.48***	−0.33***	0.21***
	(0.05)	(0.02)	(0.03)
Commerce	0.04	−0.47***	0.04
	(0.05)	(0.02)	(0.03)
Transport and communications	0.11**	−0.21***	0.22***
	(0.05)	(0.02)	(0.03)
Financial and business services	0.25***	−0.29***	0.21***
	(0.05)	(0.02)	(0.03)
Public administration	0.28***	−0.46***	0.06*
	(0.05)	(0.02)	(0.03)
Other services, unspecified	0.05	−0.35***	0.06**
	(0.05)	(0.02)	(0.03)
No education	Base	Base	Base
Primary incomplete	0.08**	0.08***	0.20***

Variable	Low income	Lower-middle income	Upper-middle income
	(0.03)	(0.02)	(0.07)
Primary complete but secondary incomplete	0.22***	0.13***	0.33***
	(0.03)	(0.02)	(0.07)
Secondary complete	0.47***	0.28***	0.45***
	(0.03)	(0.02)	(0.07)
Some tertiary/postsecondary	0.91***	0.54***	0.76***
	(0.04)	(0.02)	(0.07)
Senior official	Base	Base	Base
Professionals	0.13***	−0.04*	0.08**
	(0.04)	(0.02)	(0.04)
Technicians	−0.05	−0.34***	−0.04
	(0.04)	(0.02)	(0.03)
Clerks	−0.24***	−0.40***	−0.16***
	(0.05)	(0.03)	(0.03)
Service and market sales workers	−0.71***	−0.63***	−0.36***
	(0.05)	(0.03)	(0.03)
Skilled agricultural	−0.59***	−0.79***	−0.48***
	(0.08)	(0.03)	(0.05)
Craft workers	−0.41***	−0.40***	−0.32***
	(0.05)	(0.03)	(0.03)
Machine operators	−0.35***	−0.45***	−0.28***
	(0.05)	(0.03)	(0.03)
Elementary occupations	−0.73***	−0.58***	−0.33***
	(0.05)	(0.03)	(0.03)
Armed forces	−0.35**	−0.04	−0.18***
	(0.16)	(0.04)	(0.05)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	27,832	333,573	294,340
R-squared	0.58	0.90	0.29

Note: Robust standard errors are given in parentheses.

*$p < 0.1$

**$p < 0.05$

***$p < 0.01$

ANNEX C: DESCRIPTION OF DATA SUPPORTING LABOR DEMAND FINDINGS

Demand-side data for 16 countries were considered in this study (table C.1). The standard approach implemented by the World Bank Jobs Diagnostic facilitates comparability across countries. For this report, we include countries with outputs available at the time of findings compilation. We also include three countries for benchmarking—Cabo Verde, Peru, and South Africa. The latter two in particular are important comparators. We obtained outputs for these using the same methodology. The data were prepared and cleaned in a standard way; variables are consistently defined as per the Jobs Diagnostics guidelines. However, the data source and method of collection are likely to influence these comparisons. For example, information on formal firms collected by censuses and tax officials differs. Bangladesh, Paraguay, Uganda, and Vietnam use censuses. Vietnam only includes formal firms. However, only in the Paraguay census can firm formality be identified. We restrict the analysis to firms with at least one wage employee, but to the extent that informal firms have wage employees, censuses in Bangladesh and Uganda may overestimate microenterprises, which are arguably the most common type of informal firm. On the other hand, tax data—which are used in Kosovo, Moldova, and South Africa—may underestimate micro firms. We here define micro firms as those with less than 10 employees.

Reporting biases are also likely to be different. Reporting for tax purposes will underestimate output and profits, and overestimate inputs. Surveys may not provide enough incentives to ensure response and data quality. Similarly, if data are collected only electronically, microenterprises are likely to be underrepresented (as in Peru). Other cross-country studies face similar challenges. For example, World Bank enterprise surveys, while conducted in a standard way, use small samples and limited locations, and are representative only for broad sectors.

In rich countries, panel data for firms are the norm. In the rarer cases in low- and lower-middle-income countries where panel data for private firms are available, we analyze growth in productivity, labor costs, and employment. Data cover industry, services, and registered commercial agriculture, but exclude government agencies. The coverage of total waged employment varies widely depending on the level of formality in the country. Most of the countries discussed here have data between 2010 and 2014. Generally, countries were only observed at one or two points in time, but six have annual data. The results presented show the average in the period for which data exist, or the most recent point in time if the previous observation is substantially older (e.g., 10 years older). In panel data analysis, firm entry is identified by the year the firm started operations. Firm exit is not observed, but considered when the firm is last observed in the data set (this may overestimate exit).

Employment is measured by total number of permanent workers. When applicable (i.e., where panel data are available), our measure of employment growth follows Davis and Haltiwanger (1992). Employment growth (*Eg*) is measured as the change in the enterprise's (*E*) number of workers between year *t–1* and *t* divided by the firm's simple average of workers in periods *t–1* and *t*. It is symmetric around 0 and bounded by values −2 and +2.

$$Eg_{it} = 2 * (E_{it} - E_{it-1}) / (E_{it} + E_{it-1})$$

Sales revenues are deflated to a common year's real values using a price deflator series. When benchmarking is based in levels, units are converted to constant prices in U.S. dollars. Intermediate materials are producers' total expenditures on inputs (cost incurred in the current year adjusted by change in inventories). Value added is sales revenues less intermediary inputs including services. Capital is the capital stock replacement value; it does not include new purchases, but does include lease capital. Industry codes refer to four-digit level activity performed by a firm matched to its International Standard Industrial Classification (ISIC) version (in some countries, the number of digits is smaller).

Table C.1
Countries included in this analysis

Country	Period	Income level	Borrower status	Type of data
Afghanistan	2009	Low	IDA	Survey
Bangladesh	2013	Lower middle	IDA	Census
Burkina Faso	2008	Low	IDA	Census
Cabo Verde	2015	Lower middle	IDA	Census
Côte d'Ivoire	2003–12	Lower middle	IDA	Census—panel
Kosovo	2005–14	Lower middle	IDA	Census—panel
Moldova	2003–14	Lower middle	Blend	Census—panel
Mozambique	2016	Low	IDA	Census
Paraguay	2010	Upper middle	IBRD	Census
Peru	2007–12	Upper middle	IDA	Survey of small firms/census of large firms
Sierra Leone	2016	Low	IDA	Census
South Africa	2009–14	Upper middle	IDA	Census—panel
Tajikistan	2014	Lower middle	IDA	Business registry
Uganda	2010	Low	IDA	Census
Vietnam	2004–14	Lower middle	IDA	Census—panel
Zambia	2010	Lower middle	IDA	Census

Note: IBRD = International Bank for Reconstruction and Development.

ANNEX D: COMPLETED AND IN PROGRESS JOBS DIAGNOSTICS

Country	Completion date	Borrower status	Report
Afghanistan*	2017	IDA	—
Azerbaijan	In progress	IDA	—
Bangladesh	2017	IDA	https://openknowledge.worldbank.org/handle/10986/28498
Botswana	In progress	IBRD	—
Burkina Faso	2017	IDA	—
Cambodia	In progress	IDA	—
Congo, Dem. Rep.*	2017	IDA	https://openknowledge.worldbank.org/handle/10986/29327
Côte d'Ivoire*	2016	IDA	https://openknowledge.worldbank.org/handle/10986/26384
El Salvador	In progress	IBRD	—
Georgia	2017	IBRD	—
Ghana	2016	IDA	—
Haiti*	2017	IDA	—
Honduras	2018	IDA	—
Indonesia	In progress	IBRD	—
Jordan	2018	IBRD	—
Kenya	2016	IDA	http://pubdocs.worldbank.org/en/873301466715415004/Kenya-Jobs-for-Youth.pdf
Kosovo*	2017	IDA	https://openknowledge.worldbank.org/handle/10986/27173
Kyrgyz Republic	2015	IDA	https://openknowledge.worldbank.org/handle/10986/27266
Moldova	2016	Blend	—
Mozambique	2017	IDA	https://openknowledge.worldbank.org/handle/10986/30200
Nepal	In progress	IDA	—
Pakistan	In progress	IDA	—
Paraguay	2018	IBRD	http://documents.worldbank.org/curated/en/500641499411206696/Paraguay-jobs-diagnostic-the-dynamic-transformation-of-employment
Rwanda	2016	IDA	https://openknowledge.worldbank.org/handle/10986/22959
Sierra Leone*	2017	IDA	http://documents.worldbank.org/curated/en/134691513064668572/Sierra-Leone-Jobs-diagnostic
Tajikistan	2016	IDA	https://openknowledge.worldbank.org/handle/10986/26029
Tanzania	2018	IDA	http://documents.worldbank.org/curated/en/683801527849304687/Untapped-potential-household-enterprises-in-Tanzania
Uganda	2018	IDA	—
Vietnam	2018	IDA	—
Zambia	2017	IDA	https://openknowledge.worldbank.org/handle/10986/27008; http://documents.worldbank.org/curated/en/939371496842247611/Zambia-jobs-diagnostic-volume-2-policy-framework
Zimbabwe*	In progress	IDA	—

Note: * = country situation of fragility, conflict, and/or violence; — = not available; IBRD = International Bank for Reconstruction and Development.

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