JOBS SERIES
Issue No. 9

DIAGNOSTIC BANGLADESH

Main Report

LET'S WORK
A global partnership to create more & better private sector jobs

WORLD BANK GROUP
Social Protection & Jobs

JOBS DIAGNOSTIC BANGLADESH

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Main Report

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ACKNOWLEDGMENTS

Lead authors of the report were Thomas Farole and Yoonyoung Cho, together with Laurent Bossavie and Reyes Aterido. Adrian Scutaru, David De Padua, Monica Paganini, Upasana Khadka, and Muhammad Faisal Ali Baig provided excellent research and analytical support. Important contributions were also received from the following World Bank Group colleagues at various points in the process: Simon Davies, Michael Engman, Zahid Hussain, Yue Li, Manjula Luthria, Dino Merotto, Mrinal Sircar, Rebekah Smith, Hosna Ferdous Sumi, and Michael Weber. Pallavi Mittal and Jane Park provided excellent GIS mapping and geospatial analysis, and invaluable support on design and copy editing came from Nita Congress.

Special thanks to Iffath Sharif for helpful advice and guidance throughout the process, and to Syud Amer Ahmed for his careful reading and excellent suggestions on draft versions.

The work was carried out in close collaboration with the Bangladesh Bureau of Statistics (BBS). The team would like to acknowledge the support of the BBS in providing access to the primary microdata sources used in the report, including the Labor Force Survey, the Economic Census, and the Survey of Manufacturing Industries.

The authors would like to thank participants of seminars and consultations held in Dhaka between November 29 and December 7, 2016, and on March 1 and June 1, 2017; and in Washington, D.C., on December 15, 2016. In addition, valuable comments and suggestions were received from Nomaan Majid and Aurelio Parisotto of the International Labour Organization.

The team worked with close guidance from David Robalino, Pablo Gottret, and Stefano Paternostro. Peer reviewers were Gladys Lopez-Acevedo, Sandeep Mahajan, Cem Mete, and Michael Wong.

The work was carried out under the leadership of Michal Rutkowski and Qimiao Fan.

The report, produced as part of the Let's Work Partnership in Bangladesh, is made possible through a grant from the World Bank's Jobs Umbrella Trust Fund, which is supported by the Department for International Development/UK AID, and the governments of Norway, Germany, Austria, the Austrian Development Agency, and the Swedish International Development Cooperation Agency.

CONTENTS

ABBREVIATIONS

BBS	Bangladesh Bureau of Statistics
BMET	Bureau of Manpower, Employment, and Training
FY	fiscal year
G2G	government to government
GCC	Gulf Cooperation Council
GDP	gross domestic product
LFP	labor force participation
LFS	Labor Force Survey
LMIC	lower-middle-income country
MOU	memorandum of understanding
NEET	not in education, employment, or training
OECD	Organisation for Economic Co-operation and Development
QLFS	Quarterly Labor Force Survey
RMG	ready-made garment
SIR	Survey on Investment from Remittances
SMI	Survey of Manufacturing Industries
TFP	total factor productivity
Tk	taka
UAE	United Arab Emirates
WDI	World Development Indicators

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

FOREWORD

Bangladesh has made remarkable progress toward poverty reduction and shared prosperity. As recently as 2000, around one in three Bangladeshis was in extreme poverty based on the $1.90 a day poverty line; today, this has fallen to below 13 percent. As in most countries, the vast majority of poverty reduction in Bangladesh over the past decade has been the result of higher labor earnings, and positive labor market developments have been at the center of such progress. Many factors—such as large-scale expansion of employment in manufacturing driven by the ready-made garment sector, rapid urbanization, and international labor mobility and remittances—have contributed to positive developments in the labor market, changing the lives of many.

Despite this impressive progress, Bangladesh cannot rest on its laurels. There are still more than 20 million extreme poor in the country, with many workers engaged in precarious labor activities. Bangladesh needs to build on its success to continue labor market transformations conducive for sustainable growth and poverty reduction. In this context, the role of evidence-based job policies is more pertinent than ever, and this multisectoral Jobs Diagnostic is a timely exercise. It provides a careful and comprehensive examination of the labor market in Bangladesh, providing insights on the sources of job creation, job quality, and access to jobs. The report conducts a macro structural assessment that includes analyses of both firms (demand side) and workers (supply side), identifies key challenges to be overcome, and provides areas for policy consideration.

Challenges in the Bangladesh labor market highlighted in the diagnostic include the slowing pace of job creation despite continued growth, stagnant quality of jobs, and increasingly difficult access to jobs faced by vulnerable groups. Most striking is the poor quality of jobs, with the large majority of workers engaged in informal, unpaid, or agricultural work as opposed to formal, wage jobs. This puts numerous workers in positions of significant vulnerability. Gender disparities in the quality of jobs remain acute, with one in three working women engaged in unpaid work versus just 5 percent of working men. Addressing these challenges will require not only improving worker skills and linkages to jobs, but—critically—attention to facilitating job creation by raising the productivity of microenterprises and small and medium enterprises, unblocking regulatory and infrastructural constraints to firm growth, and supporting diversification of manufacturing beyond the ready-made garment sector.

The diagnostic both underscores the importance of addressing the jobs challenge for Bangladesh to continue its success in growth and poverty reduction, and provides an analytical underpinning for designing and implementing a comprehensive national jobs strategy. Given the complex nature of Bangladesh's jobs challenges, concerted efforts are required on multiple levels to address macro, sectoral, regional, and labor policies. Such policies will contribute to the availability of jobs—stable, safe, and well-paying jobs—which is ultimately how ordinary Bangladeshis will judge the country's development progress.

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EXECUTIVE SUMMARY

This Jobs Diagnostic presents the characteristics and constraints of the labor market in Bangladesh, identifies the objectives of the jobs agenda, and proposes a policy framework to progress toward them. This multisectoral diagnostic assesses the relationships between supply- and demand-side factors that interact to determine job creation, quality, and inclusion outcomes. Understanding the factors that influence jobs outcomes requires a holistic approach capturing issues such as access to markets, inputs, capital, technology, skills, and matching of supply and demand. Standard labor analysis tends to miss crucial aspects of the demand side of job creation, while growth diagnostics have no direct link to jobs. The Jobs Diagnostic thus intends to provide the comprehensive evidence base to support the development of a national jobs strategy that focuses on policies to foster an environment for more, better, inclusive jobs in Bangladesh.

Bangladesh has made impressive development progress, but is facing mounting challenges on jobs

Bangladesh experienced sustained per capita income growth and poverty reduction between 2003 and 2016, accompanied by strong job creation, steady structural transformation, and robust productivity growth. Per capita real gross domestic product (GDP) doubled between 2000 and 2016, with the poverty headcount rate (based on $1.90 per day poverty line) declining from 33.7 percent to below 13 percent over this period. Much of the decline in poverty can be attributed to increased labor incomes resulting from positive labor market developments. Bangladesh's demographic transition, with the working-age population growing faster than the total population, provided a favorable condition for growth. Moreover, employment growth among the working-age population was strong (2.4 percent annually in 2003–16) with wage employment growing by 5.7 percent annually—driven in particular by large-scale job creation in manufacturing, mostly in urban areas—and contributing to growth in female employment of more than double the rate of that for the working-age population as a whole, bringing millions of women into the labor force. This job creation and structural transformation was accompanied by robust growth in labor productivity (4.3 percent annually), making Bangladesh one of the top performers among economies with similar income levels.

However, the pace of job creation has fallen in recent years, productivity growth has been relatively weak in manufacturing, and productivity levels remain low. Employment grew at a rapid annual rate of 3.1 percent in 2003–10, allowing for lower unemployment and higher labor force participation (LFP). But these trends were reversed in 2010–16, with job growth falling to just 1.8 percent annually. Moreover, value added per worker in the industrial sector has grown at only half the level for the economy overall. Productivity in manufacturing is particularly weak, with average annual productivity growth of just 1.6 percent in 2003–10 and 2.2 percent since 2010. Productivity levels in all sectors remain extremely low by international standards, despite recent progress. Overall worker productivity in Bangladesh, measured by value added per worker, is half that of the South Asian average, less than 40 percent of the lower-middle income country average, and less than a tenth of the global average.

Key jobs challenges in Bangladesh include poor quality of jobs, uneven access to jobs, slowing job creation, and lack of dynamic enterprises

The quality of jobs in Bangladesh has remained poor, with substantial shares of workers engaged in informal, unpaid, or subsistence-level agricultural work. Only 22 percent of male and 20 percent of female workers are wage employees, with large shares of female workers in unpaid work and male workers in day labor.

Informality—even among wage employees—is commonplace, with less than 40 percent of wage employees having a written contract. Access to better quality jobs varies largely by education level and location, with better educated workers in urban areas much more likely to be employed as wage and salaried workers, and lower-skilled and rural workers more likely to be self-employed. While ongoing structural transformation and increasing urbanization have reduced the share of total employment in agriculture, it remains by far the largest source of employment, accounting for 42 percent of all jobs in 2016. It is also a sector where job quality remains particularly problematic, with household, unpaid work, and underemployment common.

There are substantial gender gaps in the Bangladesh labor market, reflected in low female LFP and the low share of females in nonagricultural employment. In 2003, the LFP rate was 27.5 percent for females versus 90.0 percent for males. Female LFP has steadily increased, reaching around 37 percent in 2010 but leveling off since then. Jobs in the ready-made garment (RMG) sector in urban areas and agriculture in rural areas have absorbed an increasing number of women, contributing to the increase in female LFP over time. Despite this progress, the female LFP rate is still substantially lower than that for males (85 percent in 2016). Female LFP in Bangladesh remains below both the lower-middle income country average (39 percent) and the middle-income country average (48 percent). Moreover, progress on female LFP has reversed recently among urban females, with their LFP rate declining from 36 percent in 2010 to 32 percent in 2016. Women also have less access to better quality jobs than men, with 39 percent of working women in unpaid work, as opposed to 5 percent of working men. A larger share of working females is employed in agriculture than of men, and women have a much smaller presence in services.

Labor market outcomes for youth reflect a growing challenge in light of demographic pressures and the slowdown in the pace of job creation. Even though the shares of youth (age 15–29) employed in nonagriculture and wage employment are rising with improved educational attainment, this age cohort tends to have higher unemployment rates than older workers (age 30–64). In recent years, youth unemployment rates have spiked, while those for older workers have remained stable; this suggests that youth may be disproportionately affected by the pressures associated with the recent slowdown in job creation. School-to-work transitions for youth continue to be a challenge, as better educated youth, with probably a higher reservation wage, enter a labor market where quality jobs are scarce. Moreover, there are few programs targeted to youth to promote their employment, such as skills development after formal education, job intermediation, or entrepreneurship.

Sluggish enterprise growth presents a challenge for job creation, with a large share of employment accounted for by low-growth microenterprises. Private sector growth and job creation have been modest considering Bangladesh's robust economic growth; this is partly explained by the large number of microenterprises. Despite the prominence of large-scale manufacturing firms particularly in the RMG sector, permanent microenterprises, along with household enterprises and temporary establishments, account for 98 percent of all economic units in the country and half of all jobs. In contrast, firms with more than 500 workers—mainly in the RMG sector—account for just 0.04 percent of firms but 15 percent of all jobs. Most microenterprises exist to offer subsistence earnings in the absence of formal wage jobs, and are not positioned for growth. Thus, Bangladeshi firms tend to be micro and old, with good firms failing to grow and bad firms failing to shut down. What is missing in the private sector is growth and job creation from small and medium enterprises.

Structural and spatial transformations are shaping the future context for jobs

Slowdown in the export-oriented RMG sector underscores the need for continued structural shifts in the Bangladeshi economy. The RMG sector has been the driver of structural transformation and the dominant source of employment. However, job creation in the RMG and textiles sectors combined declined from over 300,000 jobs in 2003–10 to just 60,000 jobs annually since 2010. While other manufacturing sectors are growing rapidly to meet increasing domestic demand, large-scale, quality job creation will require greater export orientation among the non-RMG sectors. Some sectors—such as footwear, leather products, and pharmaceuticals—have improved their export performance, but Bangladesh has failed to diversify its export basket significantly and has not emerged as a major global exporter in any new sector over the last decade. Services sector employment growth has been steady but modest; and higher-value, tradable services are still small scale.

Sustaining rapid job creation will also require addressing constraints to spatial transformation, including congestion in megacities and stalled emergence of secondary cities. Bangladesh's urbanization process has been dominated by large-scale job creation in Dhaka, which has experienced significant structural change over the past decade. This structural transformation is underpinned by ongoing internal migration, which benefits primarily higher-skilled workers moving into Dhaka for jobs in industry. While Dhaka Division is now home to around 30 percent of Bangladesh's population, it accounts for 45 percent of all industry jobs and 37 percent of all service jobs. This rapid growth has resulted in severe congestion costs, with lack of access to land, transport bottlenecks, and housing shortages driving investment and jobs into the still poorly served urban periphery and contributing to both demand- and supply-side constraints to productive employment. Despite these constraints, secondary cities are not emerging as favored locations for industrial investment, and access to quality jobs is severely limited outside Dhaka. Firms in secondary cities are constrained not only by land shortages, but also by shortfalls in critical physical infrastructure such as transport and electricity, as well as gaps in health care and education service delivery, all of which make it difficult to attract skilled workers.

In this context, international migration has been and likely continues to be a channel for many workers to find better quality jobs, despite high migration costs and risks to worker safety. On average, 544,000 Bangladeshis a year have migrated abroad temporarily over the past decade. In 2016, outmigration rose to 750,000, with women representing a significant share (16 percent) for the first time. The push factors for this growth in outmigration include the domestic job creation slowdown and pressure from the rapidly growing working-age population. Pull factors include strong demand from major destinations (mostly from the Middle East) and continued large wage differentials between domestic and overseas markets. However, future demand for Bangladeshi migrant workers is uncertain due to volatilities in the highly concentrated set of receiving economies, largely associated with oil prices, and increasing competition from other countries. Excessive concentration in employment sectors for outmigrants—construction for males and domestic work for females—underscores the importance of skills diversification. Costs for temporary labor migration for Bangladeshis are among the world's highest, and are often the source of heavy indebtedness and overstay of migrant workers, highlighting the need for improved support for a broad-based approach to migrant worker protection.

This diagnostic provides a framework to link objectives to a comprehensive policy, strategy, and actions

Three interlinked objectives emerge from the analysis as critical for the Bangladesh jobs agenda: increasing the pace of job creation, raising the quality of jobs, and connecting vulnerable workers to jobs. To deliver large-scale job creation that will absorb a growing labor force, Bangladesh must diversify its manufacturing and services sectors, with a focus on increasing exports and foreign direct investment; accelerate productivity growth; and facilitate urbanization, especially in secondary cities. Raising the quality of jobs will require policies that address barriers to firm and worker productivity, expand access to worker protection, and facilitate labor mobility. It will also require translating productivity gains into higher wages. The actions to connect vulnerable workers to jobs will have to address specific needs of the targeted population—for instance, reducing barriers to female LFP, facilitating school-to-labor market transitions for youth, and lowering the costs of international migration for lower-income and peripherally located workers. Reducing constraints to labor mobility within the country and enhancing spatial integration of the domestic economy will also be critical in connecting vulnerable workers to job opportunities in the private sector.

Addressing this agenda will require a comprehensive strategy with coordinated policy actions on multiple levels. Policies related to the economy's macro fundamentals and the investment climate will be necessary to promote more trade and investment, diversify the manufacturing sector, and expand high-productivity services. For labor markets, policy actions will need to promote the quality and relevance of worker education and skills, provide services to link workers to job opportunities in both domestic and international markets, and facilitate entrepreneurship. These actions will need to be delivered while expanding worker protection and social insurance. Finally, sectoral and regional policies will need to strengthen firm capabilities and domestic supply chains and encourage innovation, while supporting the development of secondary cities and facilitating urban-rural connectivity.

1. INTRODUCTION

WHY JOBS DIAGNOSTICS?

Economic growth is critical for eradicating poverty, but growth alone is not sufficient to reach the extreme poor and ensure sustainable, shared prosperity. A key pathway to meeting these goals is through jobs. As highlighted in the *World Development Report 2013* (World Bank 2012a), jobs are at the center of development. Leveraging labor—the most important asset of the poor—to generate an earnings stream, whether through wage employment or a range of household-based and other informal sector activities, is the most sustainable way out of poverty for individuals and households. Moreover, jobs offer a number of other important development payoffs including skills acquisition and thus enhanced productivity, empowerment of women, enhanced security through productive engagement of youth, and support to social stability in conflict and postconflict societies (World Bank 2012a).

Understanding the factors that influence jobs outcomes necessarily requires a multisectoral approach that goes beyond traditional analytical techniques and captures issues such as access to markets, inputs, capital, technology, skills, and matching of supply and demand. Standard labor analysis tends to miss crucial aspects of the demand side of job creation, while growth diagnostics have no direct link with jobs. In this context, the multisectoral Jobs Diagnostic approach aims to assess the relationships between supply- and demand-side factors which together shape outcomes in terms of job creation, quality, and inclusion.

OBJECTIVES

The objective of this report is to present a comprehensive Jobs Diagnostic for Bangladesh to promote inclusive economic growth and poverty reduction. The underlying proposition is that jobs need to be at the center of a development strategy in Bangladesh. The Jobs Diagnostic is being prepared as one pillar under the Let's Work Bangladesh Country Program,[1] which aims to support private sector–led job creation. The Jobs Diagnostic is intended to provide the evidence base to support policy dialogue across a range of areas that influence jobs outcomes, and ideally for the development of a national jobs strategy that focuses on the delivery of more, better, and inclusive jobs in Bangladesh.

KEY SOURCES USED IN THE ANALYSIS

Table 1 summarizes the main sources used for the Jobs Diagnostic. While the macro analysis draws primarily on internationally comparable data from sources such as the World Bank's World Development Indicators (WDI) Database, the primary sources for the analysis are microdata produced by the Bangladesh Bureau of Statistics (BBS), most notably: the Labor Force Survey (LFS), on the supply side; and the Economic Census and Survey of

[1] The Let's Work Partnership unites global institutions dedicated to harnessing the potential of the private sector to create more, better, and inclusive jobs. Its mission is to bring together governments, the private sector, and development partners with the aim of producing new knowledge and piloting interventions that can help remove constraints to private sector job creation and establish the conditions for raising the quality and inclusiveness of jobs.

Manufacturing Industries (SMI), on the demand side. As the Economic Census covers two periods (2003[2] and 2013) and the LFS began in 1999 and also covers the years 2003, 2006, 2010, 2013, and 2016,[3] most of the analysis in this report focuses on the 2003–16 time period. Note that data on employment drawn from the LFS refer to the working-age population (aged 15–64), unless stated otherwise.

Table 1
Summary of key sources used in the Bangladesh Jobs Diagnostic

Analysis	Main source	Years covered in the analysis	Source
Macro	World Development Indicators (WDI) Database	1970–present	World Bank
	National accounts	FY1981–FY2016	Ministry of Finance
Supply side	Labor Force Survey (LFS)	FY2003, FY2006, 2010, 2013	BBS
	Quarterly Labor Force Survey (QLFS)	FY2016	BBS
	Survey on Investment from Remittance (SIR)	2016	BBS
Demand side	Economic Census	2001/03; 2013	BBS
	Survey of Manufacturing Industries (SMI)	FY2006; 2012	BBS

Note: The Bangladesh government's fiscal year (FY) runs from July 1 through June 30; thus, FY2016 is July 1, 2015, through June 30, 2016.

STRUCTURE OF THE REPORT

The remainder of the report is organized in four broad sections, with a number of topical chapters in each.

- **Part 1. The Big Picture: Trends, Transformations, and Macro Drivers.** The first part of the report sets the context, providing a detailed analysis of the evolution of outcomes in terms of growth, poverty reduction, and labor markets over the past decade; and analyzes the process of economic transformation and its implications on jobs over this period. It then explores the recent slowdown in the pace of job creation, despite robust economic growth performance. The last part of the section looks forward to assess how changing demographics will influence labor markets and analyzes the requirements—in terms of growth, elasticity/productivity, and labor force participation (LFP)—to overcome existing jobs gaps.
- **Part 2. Labor Market Outcomes: Key Challenges.** Part 2 reviews the main labor market outcomes over the past decade and discusses key challenges related to LFP, type of employment, and job quality. It also includes a discussion of international migration as an increasingly important channel for Bangladeshi workers.
- **Part 3. Sources of Job Creation: Sectoral, Enterprise, and Spatial Transformation.** This part assesses the channels for job creation and focuses on three main transformations that have shaped the scale and nature of job creation: (1) structural transformation, analyzing changing sectoral patterns of employment; (2) transformation of the firm landscape, analyzing changes in firm type/size distribution; and (3) spatial transformation, analyzing patterns of job creation and their links to urbanization.
- **Part 4. Conclusions and Policy Direction.** The final part of the report reviews the main conclusions from across the three previous parts and outlines a broad framework for considering policies to address the jobs challenges identified.

[2] Note that the first Economic Census in the period was actually carried out in two waves: May 2001 in urban areas and April 2003 in rural areas. Throughout this report, wherever growth rates across the two census periods (2001/03 and 2013) are calculated, we assume an 11-year gap between the periods.

[3] Actual coverage periods in the LFS vary: the surveys here referred to as being for 2003 and 2006 cover their respective fiscal years, while those for 2010 and 2013 cover their respective calendar years; the survey referred to as 2016 covers the 2016 fiscal year and four quarterly reports from the new Quarterly Labor Force Survey.

PART 1

THE BIG PICTURE: TRENDS, TRANSFORMATIONS, AND MACRO DRIVERS

2. GROWTH AND JOBS: MACRO DRIVERS, TRANSFORMATIONS, AND RECENT TRENDS

GROWTH, POVERTY REDUCTION, AND JOB CREATION IN BANGLADESH

Bangladesh has enjoyed robust growth and rapid poverty reduction for more than a decade

Despite poor initial conditions at independence in 1971 with extreme vulnerability to natural disasters and climate change, and the constraints imposed by having one of the world's highest population densities, Bangladesh has made remarkable progress toward poverty elimination and shared prosperity over several decades. It also compares favorably with most low- and lower-middle-income countries (LMICs) in the achievement of a broad range of human development outcomes.

Since 2000, Bangladesh has consolidated progress through a period of sustained high growth. Between 2003 and 2015, real gross domestic product (GDP) per capita increased by 79 percent, with annual GDP growth rates averaging 5.7 percent (figure 1). The pace of growth accelerated in more recent years to above 6 percent, with per capita GDP growing above 5 percent annually between 2010 and 2015. While Bangladesh's growth has been above the average of LMICs overall, and particularly since the global financial crisis in 2008, it has trailed the South Asia regional average (figure 2). However, Bangladesh has enjoyed remarkable stability of growth over this period, with GDP growth not falling below 5 percent in any year since 2003. This stability may have yielded positive dividends in sustaining the pace of poverty reduction.

Indeed, growth over this period has coincided with sharp poverty reduction. The international poverty headcount rate fell from 33.7 percent to below 13 percent between 2000 and 2016,[1] meaning the number of extreme poor declined from more than 44 million to around 21 million (figure 3). Bangladesh also experienced improvements in shared prosperity, with per capita consumption growth for the bottom 40 percent of households well above that of the top 60 percent during the period 2006–10. Again, however, performance is mixed in international comparison. Figure 4 shows that the consumption increase in Bangladesh has been below that of regional peers;[2] while the relative growth of the bottom 40 percent was significantly higher than in India and Vietnam, it trailed Nepal, Pakistan, and Sri Lanka. These findings highlight that while extreme poverty has declined sharply, much work remains to address high levels of vulnerability and to ensure sustainable, shared prosperity. This will require further progress in generating jobs and raising the returns to labor.

[1] The international poverty headcount ratio is defined as the percentage of the population living below $1.90/day as estimated using 2011 prices at purchasing power parity (PPP). The projected extreme poverty rate in Bangladesh for 2016 is 12.9 percent.

[2] Data based on World Bank Shared Prosperity Database. Data cover years around 2007–12, but vary for each country. In addition, some countries are measured on consumption and others on income, depending on data availability.

Figure 1
Per capita GDP, 2003 and 2015

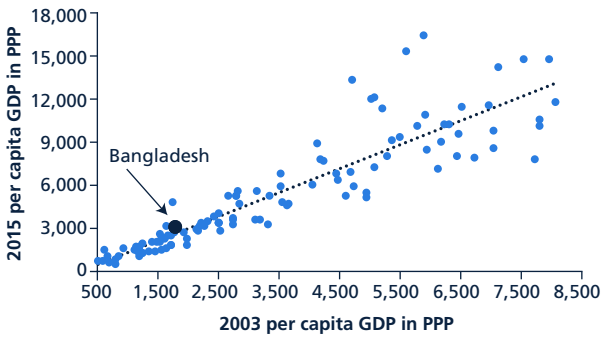
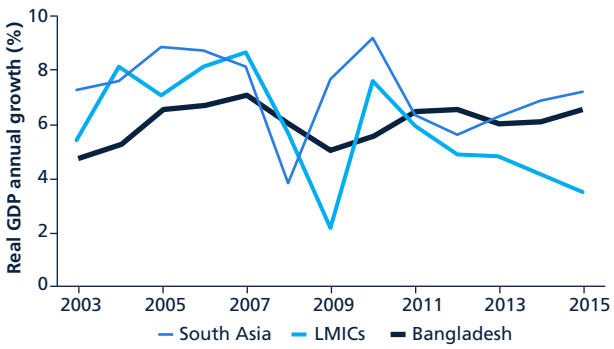


Figure 2
Real annual GDP growth, 2003–15



Source: WDI Database.
Note: Purchasing power parity (PPP) expressed in constant 2011 international dollars.

Figure 3
Bangladesh: growth and poverty trends

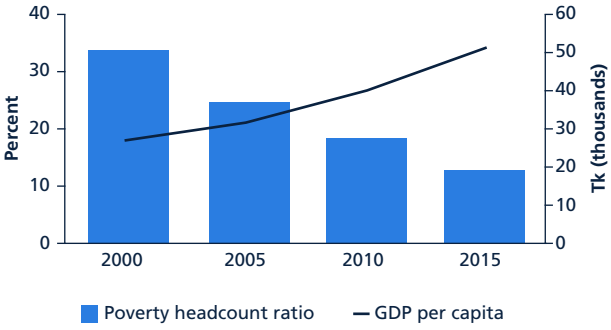
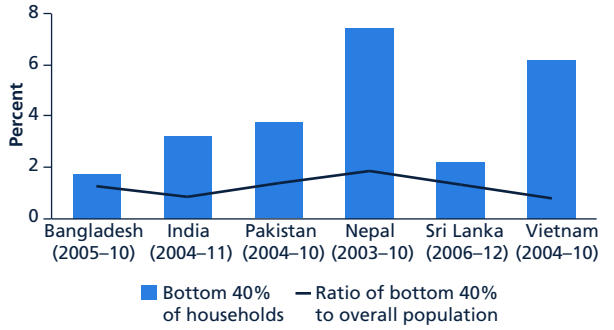


Figure 4
Regional comparison of consumption growth among bottom 40%



Sources: WDI Database; World Bank Shared Prosperity Database (circa 2007–12).
Note: In figure 3, the poverty headcount ratio is defined as the percentage of the population living below $1.90/day as estimated using 2011 prices at purchasing power parity (PPP). GDP is figured in constant local currency units. Data for 2015 are estimated.

Labor market gains contributed significantly to poverty reduction, although overall job creation has been relatively moderate in the context of rapid GDP growth

While Bangladesh benefited significantly from a demographic transition with a reduced fertility rate and growing share of the working-age population, labor earnings made by far the largest contribution to poverty reduction between 2000 and 2010 (figure 5). Increased agricultural earnings contributed the most; however, wage labor growth was also a substantial contributor. The Bangladesh economy generated more than 1.15 million new jobs per year on average since 2003,[3] with total employment among the working-age population (age 15–64) growing at 2.4 percent annually (figure 6). The total level of employment growth was above growth of the working-age population and of the labor force over this period. Moreover, employment outside the agricultural sector grew substantially faster (3.7 percent), and wage employment grew by 5.7 percent annually—driven in particular by large-scale job creation in manufacturing, mostly in urban areas. This growth in urban manufacturing jobs contributed to 4.4 percent annual growth in female employment, more than twice the rate of growth of the working-age population, bringing millions of women into the labor force. Along with employment growth came strong income growth, with real wages among wage employees rising 4.9 percent annually over this period.

[3] Net job creation (i.e., newly created jobs less jobs destroyed).

Figure 5
Contribution to reduction in headcount poverty, 2000–10

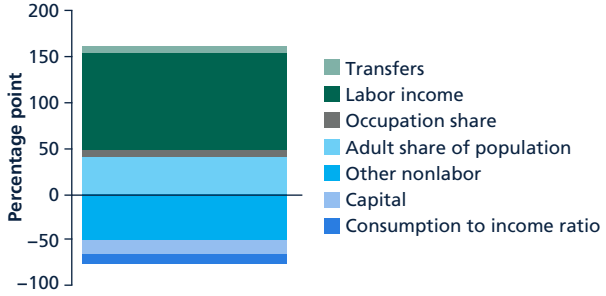
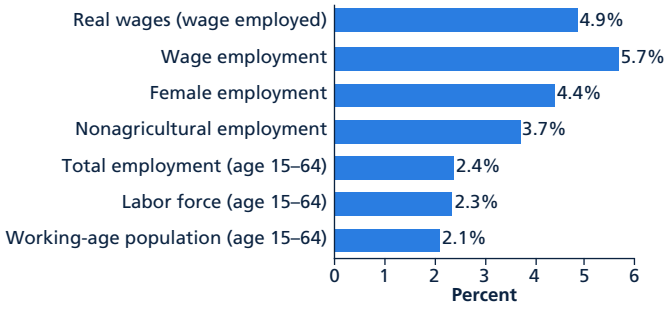


Figure 6
Key labor market developments: annual growth, 2003–16



Sources: World Bank 2013 (figure 5); LFS 2003, 2016 (figure 6).

In global comparative terms, Bangladesh's pace of job creation over this period was not remarkable. In fact, as figure 7 illustrates, job growth in Bangladesh was below expectations based on the country's level of GDP growth between 2003 and 2013. Compared with regional peers, Bangladesh's jobs elasticity to growth—at 0.38 over the period—was substantially higher than India's and even ahead of Vietnam's,[4] but trailed well behind Pakistan and Nepal (figure 8). A relatively low employment elasticity may seem surprising in a low-wage, labor-intensive economy like Bangladesh's. However, given that so few in the labor force can afford to be unemployed, overall employment levels would not be expected to respond quickly to GDP changes. Rather, the response may come more through a less easily comparable adjustment of working hours and type of jobs, which would be reflected through measures of working hours and earnings.

Figure 7
Annual GDP and job growth, 2003–13

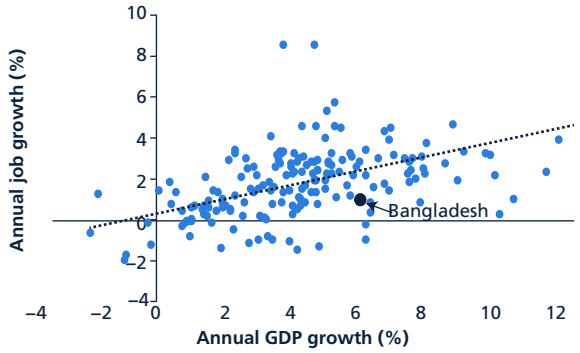
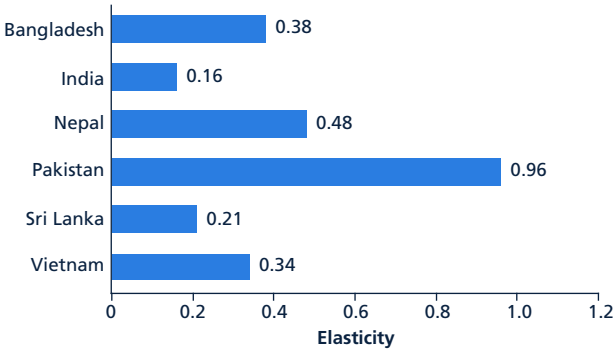


Figure 8
Jobs elasticity to growth, 2003–13



Source: WDI Database.
Note: Figure 8 is based on International Labour Organization modeled data; Pakistan figure is based on national data over the period 2005–13.

Data indicate that wage growth was robust—real wages grew at more than twice the rate of job growth over the period 2003–16 (figure 6). Rising wages, along with a shift in the nature of labor demand toward urban industrial employment, helped increase female LFP significantly, making the job growth over the past decade much more inclusive. In fact, women were the main beneficiaries of job creation over this period, capturing more than 70 percent of all new jobs. Growth in female employment was 4.4 percent annually, well over twice the rate of growth of the working-age population.

[4] Calculated as growth in jobs per unit of GDP growth; based on GDP in constant 2010 U.S. dollars.

ECONOMIC TRANSFORMATION AND SOURCES OF GROWTH

Growth was underpinned by strong productivity gains along with favorable demographics

A decomposition of the growth in per capita value added over the period 2003–16 (figure 9) highlights the large and increasing role of productivity (value added per worker) growth. Over the entire period, productivity grew by 4.25 percent annually and accounted for three-quarters of overall growth. In the latest period (2010–16), the contribution of productivity was even stronger—accounting for 89 percent of growth (with 4.6 percent annual growth). However, growth in value added per worker has not been matched by total factor productivity (TFP) performance. TFP growth averaged just 0.7 percent between 2003 and 2015, nearly one-sixth the pace of labor productivity growth (figure 10), which indicates that much of labor productivity growth was driven by capital deepening rather than efficiency gains. It is worth noting that TFP growth improved significantly to 0.9 percent in the period 2010–16 in the context of significantly changing labor market dynamics; this will be discussed in detail later in this chapter.

Figure 9
Decomposition of growth in per capita value added

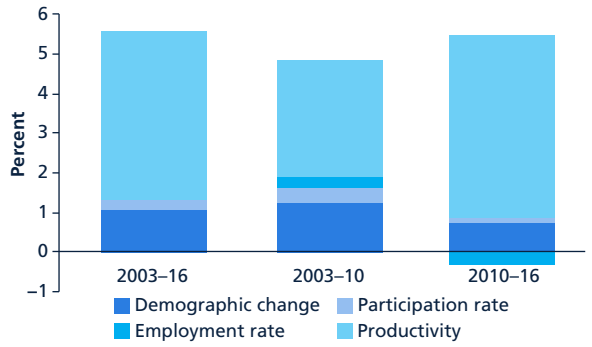
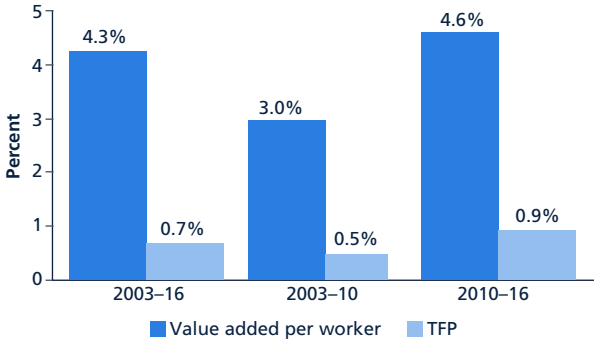


Figure 10
Comparison of annual growth in value added per worker and TFP



Source: Based on data from national accounts and LFS (figure 9); World Bank Long-Term Growth Forecast, based on data from national accounts (figure 10).
Note: Annual growth is calculated using the compound annual growth rate.

Figure 9 shows that virtually all the remaining growth not explained by productivity increases can be explained by demographic change.[5] The working-age population grew by 23.3 million between 2003 and 2016 (2.1 percent annually), which is nearly double the rate of overall population growth. Thus, the growth boost of demographics was significant even if both the employment rate and the overall LFP rate made a very small contribution to growth over this period.

While structural transformation and within-sector productivity gains contributed to substantial productivity growth, productivity levels remain low and productivity growth in manufacturing has been weak

Bangladesh has experienced broad-based growth over the period, with all main sectors of the economy expanding strongly. Agricultural output grew 4.3 percent annually, while services grew by 5.9 percent. The industrial sector grew by a remarkable 8.6 percent annually over this period, within which manufacturing grew by 9.1 percent and construction by 7.7 percent. Thus, while all sectors experienced growth, there has been a shift in the contribution of agriculture and industry to overall GDP. Agriculture declined from almost 21 percent of national value added in fiscal 2003 (FY2003) to 16.4 percent in FY2016, while industry grew from 25.3 percent to 33.8 percent; services declined by more than 2 percentage points to reach 56.9 percent in FY2016 (figure 11). From an employment perspective, the relative differences in growth, and therefore the shift, was more dramatic. With employment growth of less than 1 percent annually in agriculture compared

[5] Demographic change refers to changes in the size of the working-age population.

to 5.5 percent annually in industry, the share of workers employed in agriculture dropped by more than 9 percentage points over the period, to reach 41.7 percent in 2015; the share employed in industry increased from 13.8 percent to 20.5 percent (figure 12). With employment growth in services at 2.9 percent annually, its share of employment rose 2.4 percentage points to 37.8 percent in 2015.

Figure 11
Value added by broad sector

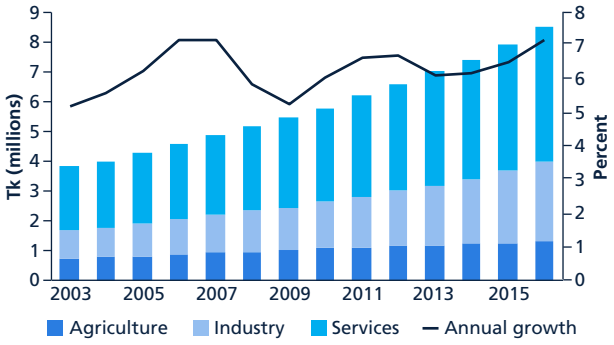
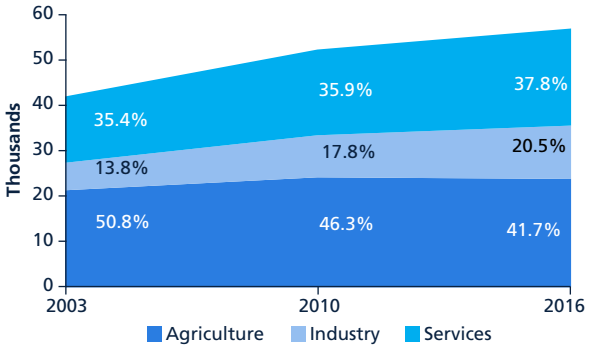


Figure 12
Number and share of jobs by broad sector



Sources: National accounts (figure 11); LFS 2003, 2010, 2016 (figure 12).
Note: Figure 11 data are in constant 2005–06 prices.

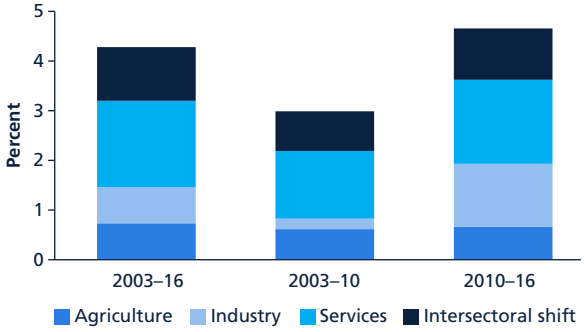
This pattern of structural change was productivity enhancing throughout the period, with the shift of workers across sectors contributing more than one-quarter to overall growth of value added per worker between 2003 and 2016 (figure 13). The main driver of productivity growth, however, came from within-sector changes—most notably, from the services sector, which accounted for more than 40 percent of total growth. While productivity growth in the industrial sector contributed just 7 percent to growth in per capita value added in the period 2003–10, this increased markedly to 27 percent in the period 2010–16, driven in particular by large output growth rather than dramatic productivity growth. By contrast, the contribution of agricultural productivity growth to growth in per capita value added declined from 1 percent to 14 percent between the two periods, with the services sector contribution also declining—by 9 percentage points—over this time.

Figure 14a compares the contribution of various factors to Bangladesh's growth in value added per worker compared to a group of 26 peer countries over the period 2003–15.[6] It shows that Bangladesh's overall growth performance was remarkable—Bangladesh was in the 93rd percentile among these peers. It was also among the leading countries both in contribution of demographics (growth in the working-age population) and of productivity, with Bangladesh in the 98th and 88th percentile, respectively. On the other hand (and partly as a consequence), Bangladesh's performance in labor market outcomes was below average, with growth from LFP in the 37th percentile and from the employment rate in just the 29th percentile.

Delving into the drivers of productivity in more detail, figure 14b shows that Bangladesh was among the highest-performing countries in the peer group across most components. Most important, Bangladesh was in the 78th percentile in terms of contribution of intersectoral shift to growth, and in the 83rd percentile in contribution of within-sector productivity changes. Within-sector productivity growth in agriculture and services was high relative to peers, but productivity growth in the industrial sector was just average (57th percentile). However, given the large productivity gap between agriculture and industry, the contribution of the large shift of workers to industry made the industry shift component in Bangladesh stand out (89th percentile); the impact of the shift of workers into the services sector was somewhat less significant in comparative terms.

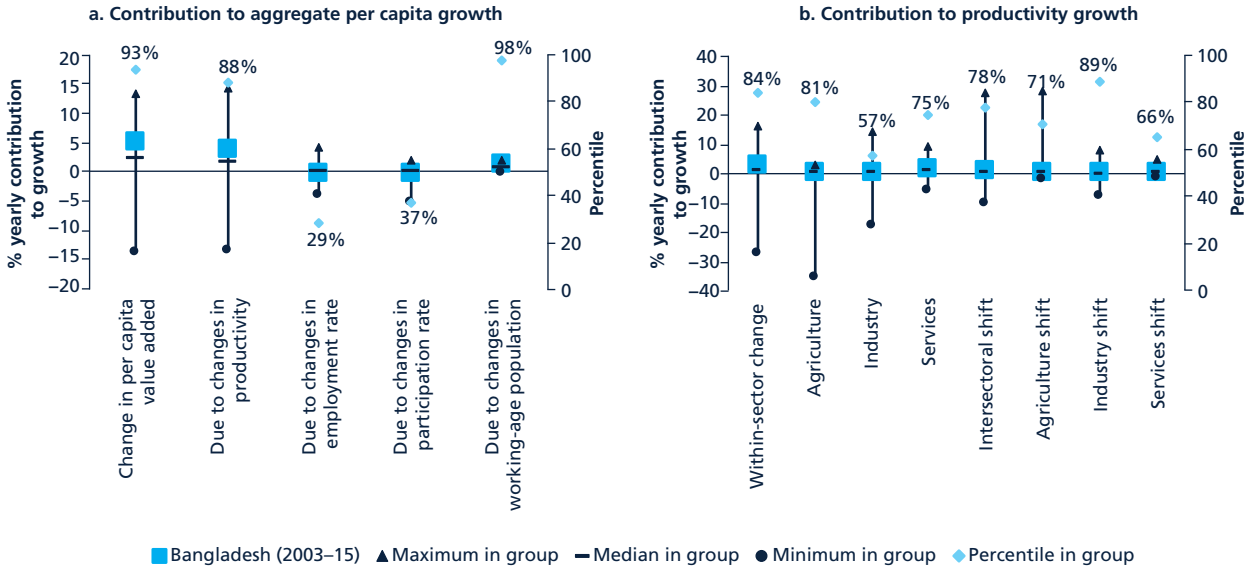
[6] Countries/economies were selected based on similarity in GDP per capita (±30 percent of Bangladesh) and filtered to cover growth episodes of five years or more; these are Armenia, Bhutan, Bolivia, Cambodia, Arab Republic of Egypt, El Salvador, Guatemala, Guyana, Honduras, India, Kyrgyz Republic, Lao People's Democratic Republic, Lesotho, Moldova, Mongolia, Morocco, Nicaragua, Pakistan, the Philippines, Tajikistan, Timor-Leste, Tunisia, Ukraine, West Bank and Gaza, and Zambia.

Figure 13
Productivity change decomposition by major sector and intersectoral shift



Source: WDI Database.

Figure 14
Bangladesh growth compared to a group of 26 peer countries: decomposition of aggregate per capita growth and of productivity growth



Source: Based on data from LFS and WDI Database.

Notwithstanding the comparison with the peer set above, however, productivity growth has not been exceptional in global comparative terms, and productivity levels remain extremely low by international comparison. Table 2 shows that productivity growth has slightly trailed the LMIC average (4.2 percent) and is well behind the South Asia region average (5.5 percent) as well as Vietnam (4.4 percent); productivity growth in Bangladesh between 2003 and 2014 was less than half that in China (9.2 percent). Moreover, by 2014 value added per worker in Bangladesh was still well below half the average in the South Asia region, only 35 percent of the average across LMICs, and just 17 percent of the global average. This finding is not surprising, given the low level of per capita income in Bangladesh. But it does highlight just how important rapid productivity growth will be for Bangladesh to meet the goal of reaching middle-income status in the near term. To put this into perspective, if Bangladesh sustained the annual productivity performance of the past decade (around 4 percent) and the rest of LMICs grew their productivity at just 1 percent annually, it would still take another 30 years for Bangladesh to converge to the LMIC average.

Table 2
Labor productivity: Bangladesh versus international comparators

	GDP per person employed in 2014		
	In 2014	Ratio to Bangladesh	CAGR (2003–14) (%)
Bangladesh	5,433	1.00	4.1
India	14,681	0.37	6.3
Pakistan	13,513	0.40	0.9
Sri Lanka	24,561	0.22	5.3
Nepal	4,229	1.28	2.4
Vietnam	8,914	0.61	4.4
China	21,630	0.25	9.2
South Asia average	13,299	0.41	5.5
LMIC average	15,404	0.35	4.2
World average	31,934	0.17	2.4

Source: WDI Database.
Note: CAGR = compound annual growth rate. GDP is figured in purchasing power parity (PPP) expressed in constant 2011 U.S. dollars.

While the broad productivity growth story is positive, important concerns remain. Most notable is productivity performance in the manufacturing sector, which has consistently been below all other major sectors of the economy. As shown in figure 15, manufacturing sector productivity growth was just 1.6 percent annually in the period 2003–10. Although it rose in the period 2010–16, it only reached 2.2 percent. In both periods, this was more than 50 percent below the average rate of productivity growth in the overall economy. Failure to deliver faster productivity growth in the manufacturing sector will put significant constraints on the sector's potential to attract investment for continued large-scale job growth, as well as on its potential to raise the quality of those jobs.

Also, while agricultural productivity is growing, it is not converging with the rest of the economy, and remains at around one-fourth that in other sectors (figure 16). In fact, agriculture's share of GDP actually declined even faster than its share of employment over the past decade. Moreover, there is some evidence of slowing growth in land productivity (yields). For example, rice yields—the typical proxy for Bangladesh's agricultural sector—fell from over 3 percent annually during the 1990s to 2.2 percent in the period 2000–10, and further to 1.6 percent annually from 2010 to 2014 along with declining production volumes. The rise of agricultural productivity has relied in part on continued strong growth in prices. Bangladesh may have reached a tipping point, where urban demand (supported by growing incomes) sustains continued growth in agricultural labor productivity. If this is not the case, sustainability of agricultural (labor) productivity growth may be at risk.

Raising productivity growth in agriculture matters for jobs in Bangladesh in several ways. First, given the links between agriculture and the nonagricultural rural economy (Shilpi and Emran 2016), weaker productivity growth (if it translates to weaker earnings growth) may slow the growth of the nonagricultural rural economy. This can, in turn, slow job creation in rural areas typically concentrated in nonagricultural activities, and weaken the counterweight to the forces that are pushing—arguably too rapidly—toward urbanization in the Dhaka megacity. Second, in the absence of continued rapid growth in demand for labor from the industrial sector, there is a risk that the transformation process may push agricultural workers into low-quality services jobs. Increasing agricultural productivity will depend on a number of factors, including skills, technology, and land management. But it will also rely on diversification of agriculture into higher value-added crops, with linkages to downstream processing activities.

Figure 15
Annual productivity growth by sector

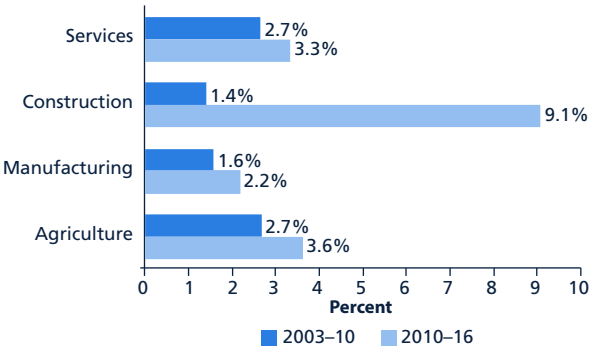
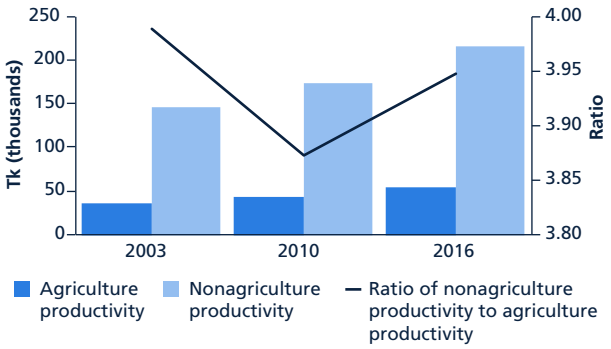


Figure 16
Agricultural productivity gap



Source: National accounts and LFS (figure 15); FAOStat (figure 16).
Note: Productivity gap is calculated in Tk per worker.

Structural transformation has been accompanied and supported by rapid spatial transformation

Despite its being one of the most densely populated countries in the world, the large majority of Bangladeshis still reside in rural areas. According to the most recent population census in 2011, just 28.4 percent of the population lives in urban areas. Figure 17, which uses an internationally comparable definition of urbanization that puts Bangladesh's urban share of the population in 2016 at 35.0 percent,[7] shows that Bangladesh is among the countries with the lowest share of urbanization (in the 20th percentile globally). This level of urbanization is broadly in line with expectations given the country's level of income (which proxies the reliance of households in agricultural employment, and is thus correlated with the rural population share). However, it also shows that urbanization has increased significantly over the past two decades.

This picture is illustrated starkly in figure 18, which underlines not only how rapidly Bangladesh has urbanized relative to regional peers but also that the pace of urbanization continues to increase. For example, in 1995, just 21.7 percent of Bangladeshis lived in urban areas compared to 26.6 percent in India. By 2015, Bangladesh had surpassed India with an urbanization rate of 34.3 percent compared to 32.7 percent. Overall, urbanization in Bangladesh over the past 20 years has increased at twice the rate of the South Asia region as a whole and the LMIC average. Given that the level of urbanization remains low, it is expected that its pace will continue to be rapid for the next 20 years, as Bangladesh progresses toward becoming an upper-middle-income country.

Figure 17
Relationship between GDP per capita and urbanization, 2016

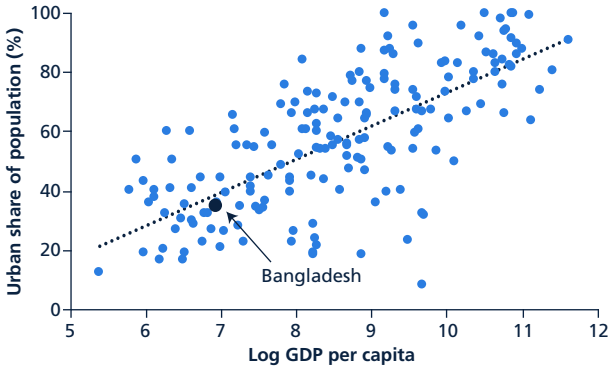
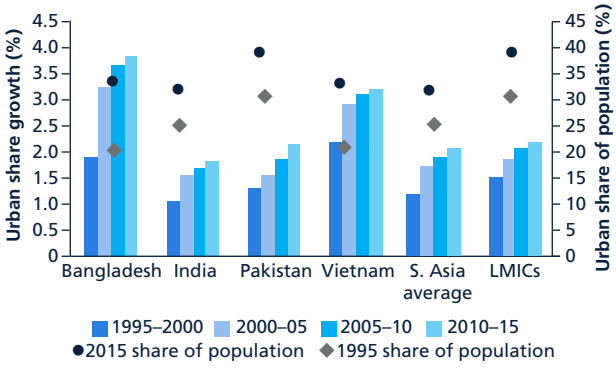


Figure 18
Urban share of population and growth in urban share, 1995–2015



Source: WDI Database.

[7] Urban population refers to people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from United Nations World Urbanization Prospects (https://esa.un.org/unpd/wup/).

Global market integration through trade and remittance flows, along with robust domestic demand and increased investment, has been a major driver of the growth, transformation, and jobs story

Growth and structural transformation in Bangladesh has also been driven through rapid integration into global markets. The pull of large export markets, particularly in the ready-made garment (RMG) sector, was the biggest driver of large-scale industrial job creation in Bangladesh during the 2000s. Exports grew by more than 16 percent annually in constant taka terms between 2003 and 2015, contributing to a tripling of the export share of GDP over that period. In comparable U.S. dollar terms, exports from Bangladesh grew at double the global average rate. Notably, Bangladesh's export performance decoupled from regional and global trends at the time of the 2008 global financial crisis—when global trade experienced a major setback and relatively slow growth since—has maintained a strong upward trend (figure 19). Since 2008, annual export growth in U.S. dollar terms has been over 11 percent in Bangladesh compared to just 1 percent globally.

Along with integration of goods trade, one of the biggest sources of income for Bangladeshis comes through trade in services—specifically Mode 4,[8] or international migration. Over half a million Bangladeshis go abroad for work each year; this is equivalent of one in every four Bangladeshis reaching working age each year. In 2015, the value of remittances from international migrants was Tk 1,200 billion, making Bangladesh among the top 10 largest remittance-receiving economies in the world. In the period 2003–15, remittances grew by 14 percent annually in current U.S. dollar terms (figure 20) and by almost 17 percent in taka terms.[9]

Evidence suggests that remittances contribute significantly to domestic demand through their consumption and investment effects (see chapter 7), and domestic demand has in fact been the single largest contributor to growth over the period. Indeed, while export growth has been remarkable, imports have also increased sharply, resulting in a widening nominal trade deficit and in trade contributing negatively to growth over the period (table 3). By contrast, GDP growth was driven fully by increased domestic demand, which increased 6 percent annually (in constant taka terms).

Table 3
Annual growth and contribution to GDP growth by expenditure category, FY2003–15 (%)

Expenditure category	Annual growth			Contribution to GDP growth		
	2003–15	2003–10	2010–15	2003–15	2003–10	2010–15
Consumption	5.4	5.5	5.2	65.8	68.0	63.5
Investment	8.6	8.7	8.5	39.4	36.6	42.2
Net trade	–9.4	–9.3	–9.4	–5.2	–4.6	–5.7
Domestic demand	6.2	6.3	6.1	105.2	104.6	105.7
GDP	6.1	6.2	6.0			

Source: National accounts.
Note: Net trade = exports minus imports; domestic demand = consumption plus investment; GDP = consumption plus investment plus net trade. Annual growth is calculated using the compound annual growth rate in constant Tk.

In the face of robust but cyclical growth in domestic demand, the relative importance of consumption declined steadily from around 78 percent of GDP to 71 percent between FY2003 and FY2015, with its contribution to GDP growth falling to just 63.5 percent in the period since FY2010 (table 3). While import penetration increased substantially in the early 2000s, it has remained steady at around 20 percent of demand since then (figure 21). Thus, despite the high import content of value added in key export-oriented sectors such as RMG, domestic

[8] The World Trade Organization General Agreement on Trade in Services (GATS) identifies four modes of trade in services: (1) cross-border supply, (2) consumption abroad, (3) commercial presence, and (4) presence of a natural person.

[9] Figure 20 presents remittances as a share of GDP to give a sense of their scale in Bangladesh relative to other countries; this does not imply that remittances make a contribution to GDP in an accounting sense.

Figure 19
Export growth, 2003–15

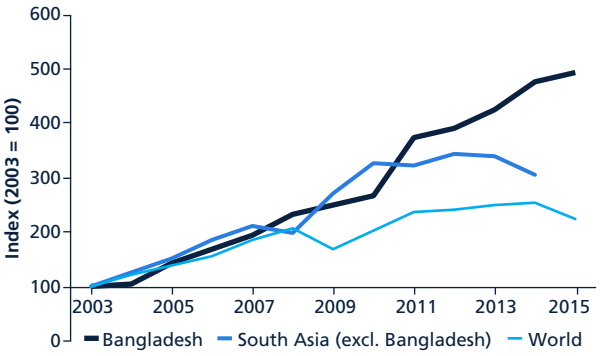
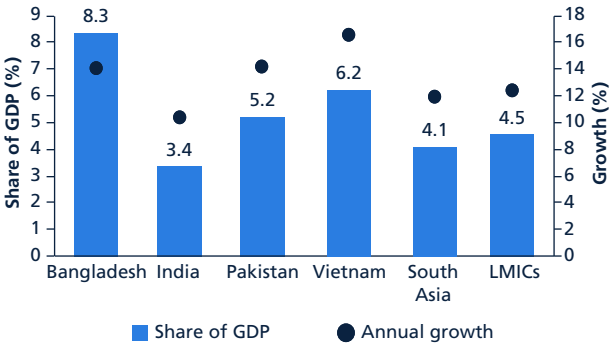


Figure 20
Remittances as a share of GDP and remittance growth, 2003–15



Sources: UN Comtrade Database via World Integrated Trade Solution (WITS) (figure 20); WDI Database (figure 21).
Note: In figure 20, share of GDP is calculated as an average of 2003–15; annual growth is the compound annual growth in U.S. dollars between 2003 and 2015.

output captures the majority of domestic demand and will have increased in line with recent growth. Certainly, the degree to which demand is satisfied by imported content versus domestic production has important implications on the employment effects of growing domestic demand.

In contrast to consumption trends, the investment contribution to GDP growth increased from 24 percent to 31 percent in the period 2003–15 (figure 22). Data from national accounts indicate investment share of GDP rose from an average of 25.8 percent in FY2003–10 to 28.0 percent in FY2010–15 (in current taka), with an annual growth rate broadly steady at over 8.5 percent in real terms over this period. Notably, private investment—which accounted for over 80 percent of the total through 2010—grew by over 14 percent annually in each period, while the pace of growth of government investment almost doubled in the period 2010–15 to reach more than 22 percent annually. The rapid growth of investment contributes to expanding capital stock, boosting both output and productivity, but it may also contribute to the weaker TFP performance observed.

Figure 21
Evolution and source of domestic demand, 2003–15

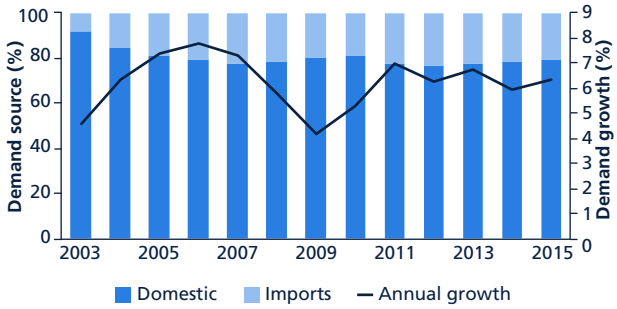
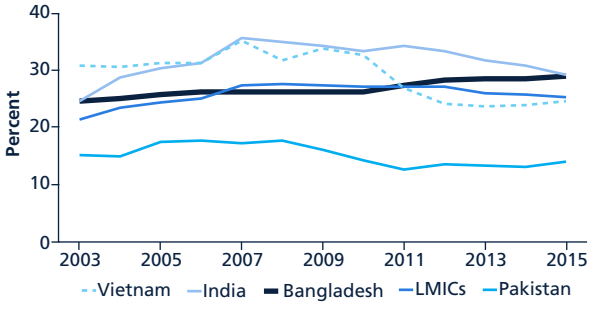


Figure 22
Gross fixed investment as a share of GDP, 2003–15



Sources: National accounts (figure 21); WDI Database (figure 22).

SLOWING JOB GROWTH AND PERSISTENT CHALLENGES OF QUALITY AND INCLUSIVITY

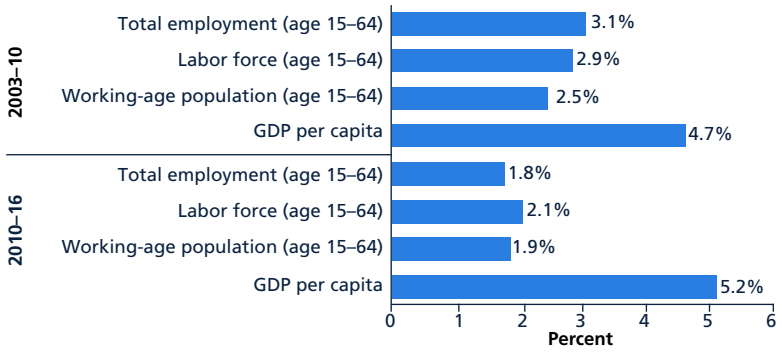
The pace of job creation has slowed sharply in recent years

The overall story of job creation discussed in the previous sections masks important changes over time. From 2003–10, total employment in the working-age population grew by 3.1 percent annually. This rate was well above that of either working-age population growth (2.5 percent) or of labor force growth (2.9 percent), meaning that job creation was enough to absorb the large number of youth coming of working age and pull

some new workers into the labor force, as well as absorb some of the unemployed. However, since 2010 job growth has slowed sharply (figure 23). In the period 2010–16, employment grew more slowly than the working-age population, at just 1.8 percent. This slowdown in job growth comes despite growth in real GDP per capita increasing from 4.7 percent to 5.2 percent annually. Thus, the employment elasticity to growth fell by almost half between the two periods. The result is that labor market outcomes have reversed since 2010—slow job growth in the 2010–16 period resulted in declining LFP and higher unemployment.

The sections that follow consider possible reasons for the decline in the pace of job growth, including (1) the increasing pace of labor productivity growth combined with ongoing structural transformation (in the absence of higher aggregate demand), (2) tightening export markets and implications for the growth of labor-intensive sectors, (3) a slowdown in the growth of remittances, (4) a slowdown in agricultural productivity convergence, and (5) poor efficiency of capital. It may be worth noting that the patterns illustrated in figure 23 suggest a market where the bulk of job creation is "pushed" from demographic forces rather than "pulled" by growth. This situation is perhaps not surprising in a market like Bangladesh, where survivalist self-employment accounts for a large share of jobs.

Figure 23
Annual growth in GDP per capita and labor market outcomes



Sources: LFS 2003, 2010, 2016; national accounts.

The combination of structural change and differential rates of sectoral productivity growth naturally reduces employment intensity in the absence of higher aggregate demand

Looking simply at a static model (where output is fixed), Bangladesh's pattern of productivity growth and structural transformation would be expected to lead to lower job creation per unit of economic output. Indeed, given the large productivity gap between agriculture and industry, any situation whereby agricultural value added grows more slowly than industry will result in a significant decline in employment intensity if the productivity gap persists and aggregate demand remains fixed. Figures 24 and 25 show that the industrial sector's contribution to GDP growth increased by more than 8 percentage points in the period 2010–16 versus 2003–10. Meanwhile, the agricultural sector experienced a similarly large fall in its contribution (by 6.9 percentage points), reflecting substantial disparities in sectoral growth rates. We estimate that intersectoral movements of labor explain at least 60 percent of the decline in employment elasticity to growth during the period 2010–16. The remaining decline in employment intensity is explained by within-sector productivity growth, which increased in every sector over the latter period.

Of course, both effects described above do not reflect how increasing productivity (the opposite of high jobs elasticity) drives job creation through enhancing growth. In practice, increasing productivity of the workforce should lead to more job creation, even if this happens with a lag. The extent to which labor productivity gains will translate into higher employment with a multiplier effect depends on various factors, including whether (1) labor productivity gains are accompanied by TFP growth, (2) increased production value added through efficiency gains can be sold in the market (i.e., through exploiting sources of increased demand in domestic or

export markets), (3) the added value is shared with workers (through higher wages), and (4) wages are consumed or invested domestically. As described below, some constraints may be appearing across each of these.

Figure 24
Sectoral contribution to GDP growth by period

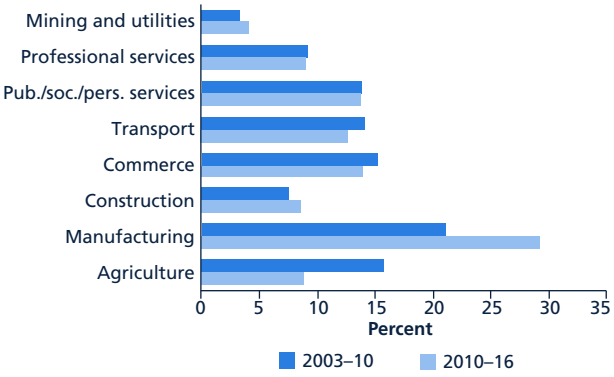
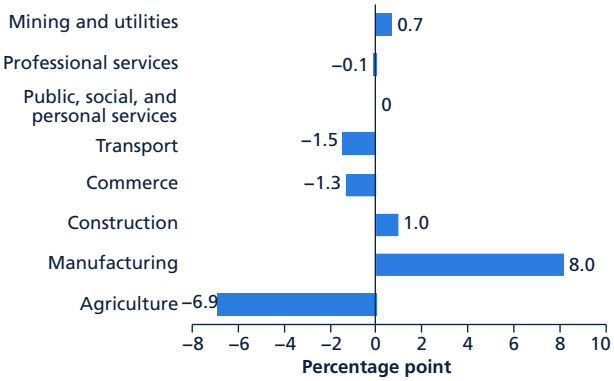


Figure 25
Change in contribution to GDP growth between 2003–10 and 2010–16

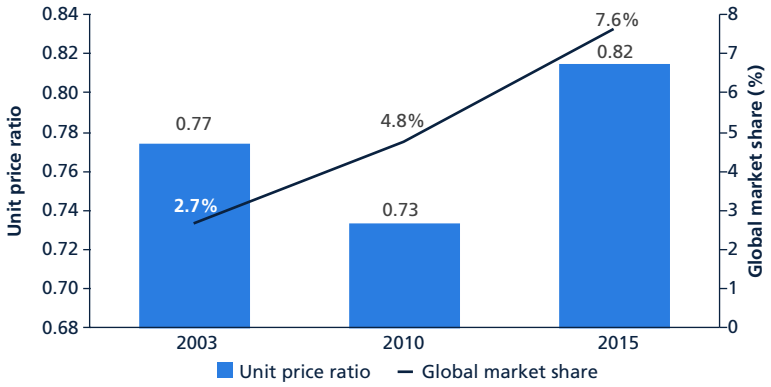


Sources: LFS 2003, 2010, 2016; national accounts.

RMG exports remain robust, but face cost pressures; growth outside of RMG is still not taking full advantage of its potential to exploit scale

Intensifying competition in the RMG sector may have resulted in productivity gains being primarily labor reducing rather than labor creating. The pace of growth of RMG exports declined only marginally in 2010–15, down to 13 percent annually from 15 percent in 2003–10; and Bangladesh experienced a substantial increase in its global market share, from 4.8 percent in 2010 to 7.6 percent in 2015 (figure 26).

Figure 26
Bangladesh RMG export performance



Source: WDI Database; national accounts.
Note: Unit price ratio is calculated as Bangladesh's prices relative to the global average.

The unit price of Bangladesh's RMG exports remains low (around 20 percent below the global average) despite increasing global market share. Moreover, global unit prices are stagnating, due to increasing buyer power and intensifying competition among suppliers. Between 2010 and 2015, average growth in unit prices for Bangladesh exporters was just 3.5 percent in current U.S. dollar terms—which implies declining real prices in

taka terms.[10] In fact, a recent study (Anner 2015) found that the U.S. dollar price for a pair of cotton trousers (Bangladesh's leading export to the United States) declined by 9.3 percent in real terms since 2013. Such a competitive environment inevitably places a focus on higher productivity and puts pressure on wages and hiring. So, while Bangladeshi exporters are improving their quality positioning in global RMG markets, this may not be translating into gains for workers in terms of more jobs and higher wages. Evidence suggests firms may be substituting technology for workers—even between 2006 and 2012 (the latest year available), the average capital stock per worker in RMG grew by 15 percent annually, and anecdotal evidence suggests investments in technology have increased substantially since then.

Outside of RMG, growth in the manufacturing sector has been remarkable, with employment increasing at a pace similar to that of RMG in the early 2000s (see discussion in chapter 8). But non-RMG sectors have not yet gained a significant foothold in export markets. Annual export growth outside of RMG fell by more than half after 2010 (figure 27). Among key export sectors, agricultural exports declined by 1 percent annually over this period (after experiencing 20 percent annual growth between 2003 and 2010); fisheries exports were stagnant; iron and steel exports declined by 21 percent annually; and pharmaceuticals grew by only 7 percent annually. There were some important bright spots, particularly in globally traded and labor-intensive manufacturing sectors. Footwear exports grew by 23 percent annually and processed leather by 43 percent, both starting from very low bases. While import penetration is declining in many sectors—most notably food—overall, domestic manufacturing outside of textiles and RMG has failed to keep pace with demand, relying increasingly on imports (figure 28). Thus, while job growth in non-RMG manufacturing has been significant in recent years, it could have been even faster if the sector were more successful in penetrating export markets.

Figure 27
Annual export growth by sector, 2003–10 and 2010–15

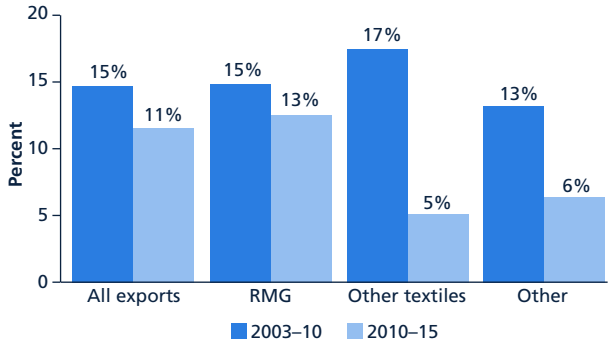
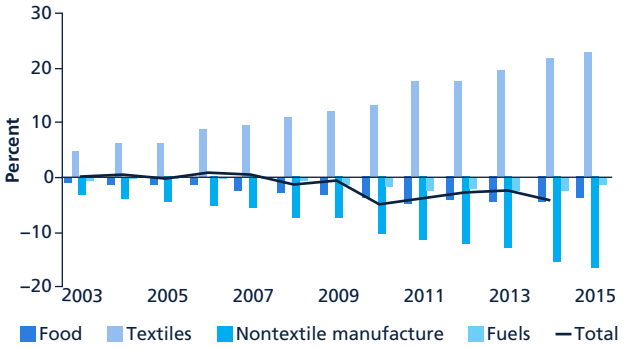


Figure 28
Trade balance evolution by sector, 2003–15



Source: UN Comtrade Database via World Integrated Trade Solution (WITS).

Remittances from migrant workers have slowed sharply, although there is no clear evidence on whether this is affecting employment

The increasing difficulties for the export-oriented manufacturing sector to deliver jobs-intensive growth is mirrored in the overseas employment sector, where remittances have slowed sharply after reaching a peak of 10.6 percent of GDP in 2012 (figure 29). Between 2012 and 2015, nominal growth in remittances was less than 4 percent annually in U.S. dollar terms, down 80 percent from the growth rate between 2000 and 2010.

This decline in the growth of remittances in Bangladesh is broadly in line with peer and global trends, although somewhat faster (figure 30). It is potentially important, given the levels of remittances flowing into the economy largely for consumption and household investment purposes (i.e., it is an important source of domestic demand). Remittances are seen to have also played an important role in stimulating growth of the

[10] During this period, the Bangladesh taka has weakened against the U.S. dollar, with the exchange rate increasing from Tk 70/$1 in 2010 to close to Tk 80 in 2016.

Figure 29
Remittances as a share of GDP, 2003–15

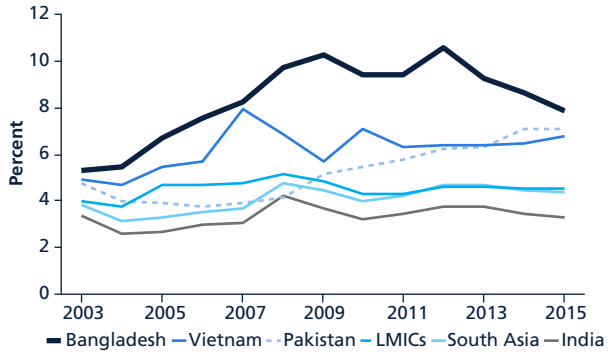
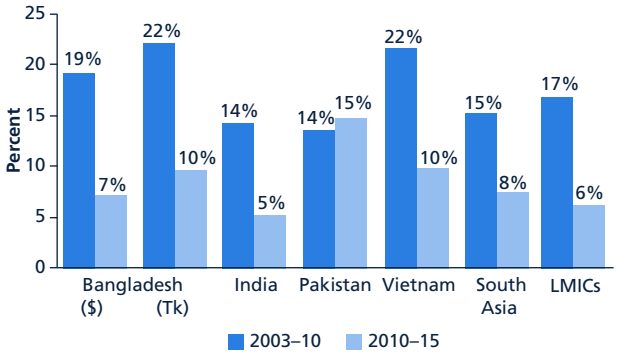


Figure 30
Annual growth in remittances



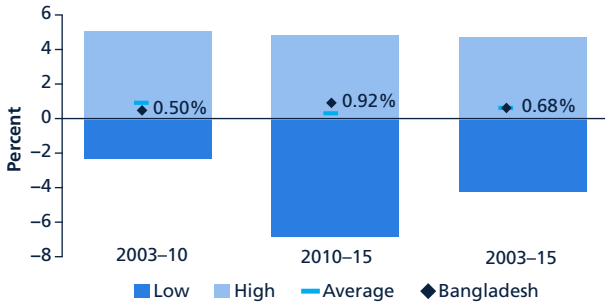
Source: WDI Database.
Note: Annual growth in figure 30 is calculated in U.S. dollars using the compound annual growth rate.

labor-intensive nonagricultural rural economy. However, while national accounts data show a sharp decline in net income flows from abroad (especially since 2013), private consumption growth has not fallen significantly (its contribution to GDP growth declined from 61.2 percent in 2000–10 to 52 percent in 2013–15). It is possible that investment-driven growth (which increased its contribution in line with the decline from consumption) has been less jobs intensive. Further research is needed to understand how declining remittances are affecting consumption and investment, and how these in turn affect employment.

Weak TFP performance suggests investment may be translating into growth that remains well below the capacity of the economy

While much of the discussion above focuses on the elasticity of jobs to growth, it is also the case that the level of growth (and therefore of job creation) may be below potential, given the level of capital formation in the economy. While Bangladesh's TFP performance over the past decade or more has been around the mean for LMICs (figure 31), it is far below their leading performance in labor productivity. In nominal terms, TFP growth has averaged below 0.7 percent annually.[11] If TFP growth had been higher, by using inputs more efficiently and intensely and through a more efficient allocation of capital and labor, labor productivity gains (which define the employment elasticity) would be translated into substantially higher output growth. In such a case, lower employment elasticity to growth would be less of a concern because nominal job growth would be higher.

Figure 31
Range of average annual TFP growth by period: Bangladesh versus all LMICs



Source: World Bank Long-Term Growth Forecast.

[11] TFP performance improved markedly in 2010–15, which is precisely when labor productivity growth surged.

The situation of high labor productivity growth and weaker TFP growth suggests inefficiency in the deployment of capital. This inefficiency could result from problems of allocative efficiency (i.e., capital not flowing to the most productive sectors and firms) or problems of technical efficiency (i.e., weak capability of converting inputs to outputs, which tends to derive from insufficiencies in knowledge or capabilities). Box 1 discusses some possible explanations for Bangladesh's relatively poor returns to capital. Why does the private sector, which accounts for the large majority of fixed capital formation, continue to invest if returns to capital are poor? One reason may be that returns (i.e., profits) are actually strong, despite TFP growth being weak, which would point to factor distortions in the economy.

BOX 1: WHAT ARE THE POSSIBLE EXPLANATIONS FOR RELATIVELY INEFFICIENT CAPITAL INVESTMENT?

At the aggregate (rather than the firm) level, there are a number of potential explanations for why capital investment appears to be relatively inefficient in Bangladesh. These include the following:

- **Insufficient levels of public investment.** Historically, Bangladesh has underinvested in infrastructure. World Bank estimates indicate that reaching sustained 7.5–8.0 percent growth rates will require significant increases in investment to at least 33 percent of GDP from the current level of around 28 percent between 2010 and 2015—including an increase in infrastructure investments to around 10 percent of GDP per year. Thus, while public investment has increased sharply in recent years, it may still be below the threshold required to unblock key constraints on connectivity, electricity, etc.

- **Inefficient delivery of investment.** Weak planning and implementation of investment, through inefficiency, waste, or corruption, may undermine the impact of investment.

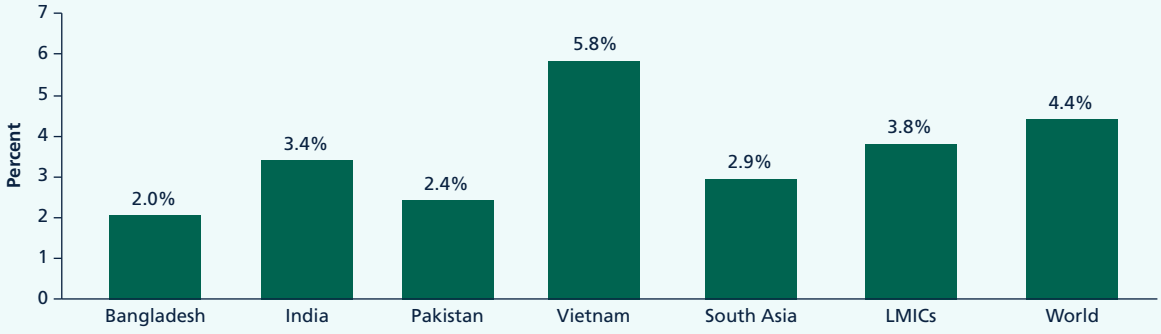
- **Misaligned spending (failure to maintain).** While substantial public investments have been made in recent years, maintenance of existing infrastructure is lacking. The effect may offset the potential gains from existing investments. Participants from large public works programs investing in construction and repair of rural infrastructure also report that maintenance lags behind.

- **Factor distortions/poor allocative efficiency.** Barriers to entry and exit of firms and regulatory failures, for instance, may result in capital not flowing to the most efficient firms and sectors.

- **Weak management capacity.** With the majority of investment coming from the private sector, failure to translate this to a significant TFP boost suggests a technical efficiency problem, which may relate to managerial capacity (along with the knock-on effects of poor public investment efficiency noted above).

- **Workforce skills gaps.** The other explanation for technical efficiency gaps is that investments in technology are failing to be absorbed by the workforce, due to lack of skills. This skills gap suggests the need for substantial increases in investment not only in fixed capital but also in education and training, as well as improvements in quality. Indeed, public investment in education is substantially lower than in other comparator countries (figure 32), highlighting the need for further expansion in this area.

Figure 32
Public investment in education as a share of GDP



Source: WDI Database.

3. LOOKING AHEAD: DEMOGRAPHICS AND PROJECTIONS

Rapidly changing demographics offer a significant opportunity, but with a relatively narrow window, for Bangladesh to exploit the demographic dividend

Changing demographics will have a significant impact on labor market developments in the coming decades, not to mention on growth and poverty reduction. The total fertility rate (births per woman) declined substantially from 6.4 in 1980 to just 2.3 in 2014. This translated into a rapidly declining population growth rate (figure 33). The result of this slowing population growth is that the dependency ratio (the ratio of nonworking-age to working-age population) declined from 91.9 (per 100 people of working age) in 1980 to 52.5 in 2015—the second largest decline after Vietnam among comparator countries (figure 34).

Figure 33
Population growth, 1980–2015

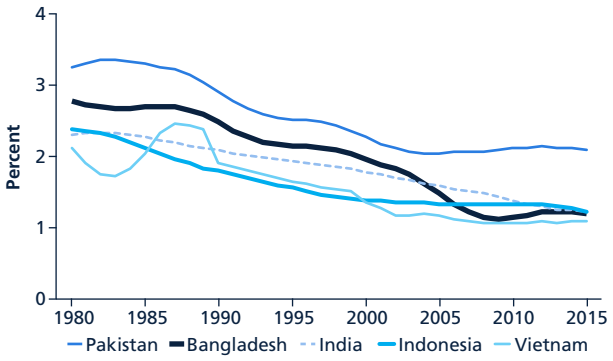
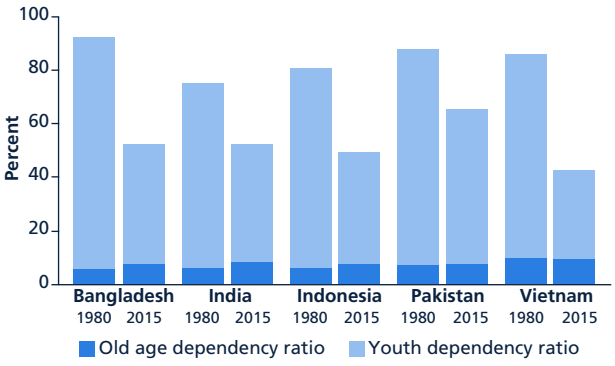


Figure 34
Dependency ratio, 1980 and 2015

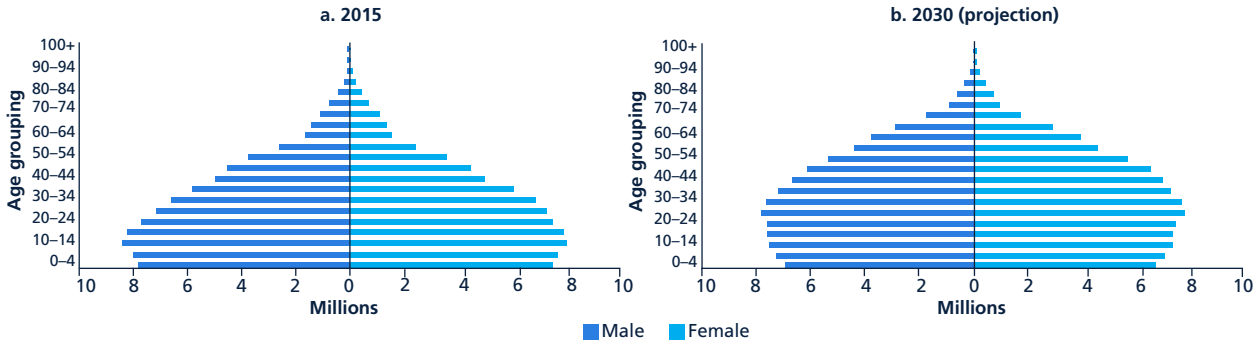


Source: Based on data from WDI Database.

As of 2015, Bangladeshis of working age account for 63 percent of the total population, while children account for 33 percent and the elderly 4 percent. By 2030, the demographic profile will have shifted considerably (figure 35): youth will account for less than one-quarter (23.0 percent) of the population, while the elderly will reach 7.4 percent. Thus, the working-age population will account for 69.6 percent of the population in 2030, before increasing longevity and leveling fertility rates together begin to reverse the declining dependency ratio.

Bangladesh thus has a large opportunity, but a relatively narrow window, over the next 15 years to take advantage of the demographic dividend to drive growth and poverty reduction. It also means that Bangladesh has a "youth bulge," which will put significant pressure on the labor market. Thus, the availability of sufficient opportunities for productive employment (along with ensuring youth are equipped with the skills to take advantage of them) will be critical for Bangladesh to exploit the demographic dividend. This will require sustaining and improving the pace of structural change, productivity growth, and quality job creation over the next decade and longer.

Figure 35
Population by five-year age group, 2015 and 2030 (projection)



Source: Based on data from WDI Database.

Projecting future labor market outcomes based on past trends looks promising if longer-term trends prevail, but less so for recent trends

Figure 36 shows how the forecast for growth and its components over the next decade compare to the period 2003–16, assuming the growth trends of 2003–16 persist and taking into account how demographic trends will play out over the next decade. The changes in the working-age population are calculated based on projections from UN Population Prospects;[1] while LFP, sectoral employment distribution, and value-added growth are calculated using historical growth rates (2003–16) to project to 2025. The results indicate that the working-age population will grow considerably faster than the population overall, which explains the considerable contribution of demographic change to growth. Figure 37 shows that the employment rate will still have a positive contribution to growth, with the employment rate rising from 54 to 59 percent over the decade, while unemployment falls. Under this scenario, LFP is assumed to rebound from its 2010–16 decline, rising above 60 percent by 2025, while annual productivity (value added per worker) growth declines modestly to 3.5 percent.

Figure 36
Decomposition of per capita value-added growth: past and projected

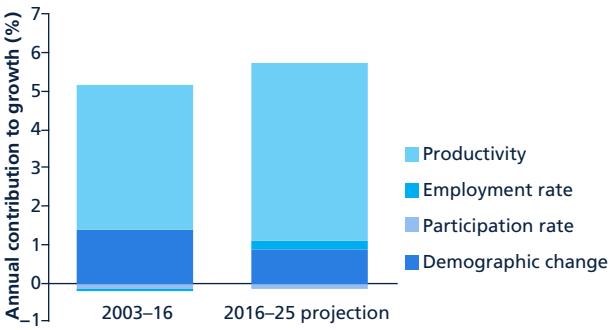
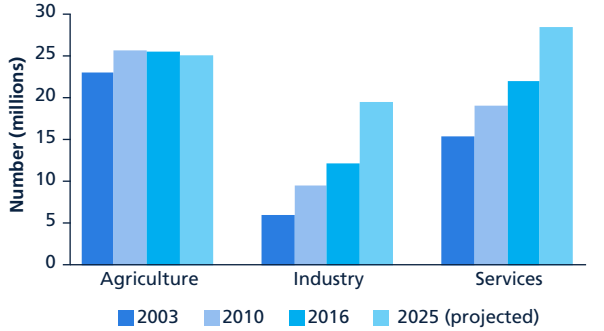


Figure 37
Employment by sector: past and projected



Source: Based on data from WDI Database.

Under this relatively long-term trend scenario, the economy would generate close to 2.1 million new jobs in the 15+ population annually (3.1 percent), in the context of the 15+ population growing by 2.5 million annually (2.1 percent). Projections on the sectoral distribution of employment use annual historical growth of each sector over the period 2003–16 to project employment and value-added growth to 2025. The results indicate

[1] Based on medium fertility assumptions.

continued rapid structural change in the trend scenario, with agricultural employment growing at less than 1 percent annually, industry employment jumping by 6.5 percent annually (more than 1 million annually), and services employment rising by 3.2 percent annually (figure 37).

The picture looks somewhat different if forecasts assume that more recent (2010–16) trends prevail. In this case, strong GDP growth would be accompanied by faster growth in labor productivity, leading to substantially lower relative job creation. This scenario would deliver close to 1.4 million jobs annually to the 15+ population—thus, job creation (at 2.15 percent annual growth) still slightly outpaces growth in the 15+ population (2.09 percent). But this outcome would essentially be sufficient to deliver only a steady state in the labor market.

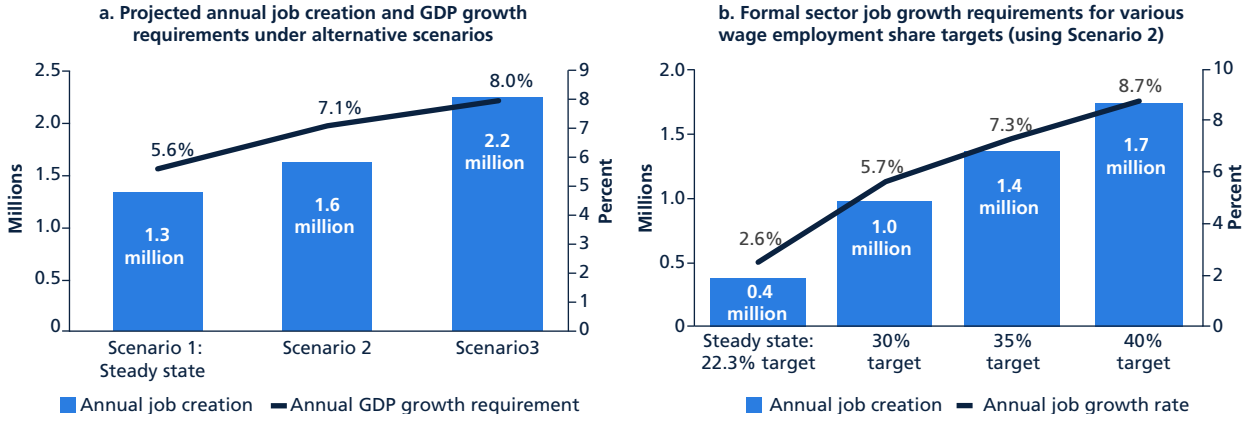
Delivering more formal sector jobs and higher earnings for all workers will require faster GDP growth, driven by sustaining productivity growth and increasing aggregate demand

Analysis of labor market scenarios over the next decade indicates that annual GDP growth of around 5.6 percent would be sufficient to deliver a steady state in the labor market, based on 2003–15 productivity growth trends (Scenario 1 in figure 38a). With faster productivity growth (in line with more recent trends), higher GDP growth would naturally be required to deliver the same number of jobs. Scenario 2, which combines 2010–15 average productivity growth (4.6 percent) with an objective of returning LFP to 2010 levels, suggests growth would need to increase to above 7 percent. Further expanding LFP modestly and making inroads on unemployment (Scenario 3) would require growth at the 8 percent target set in the National Development Plan.

Simply maintaining a steady state in the labor market should not be seen as a sufficient objective. First, as discussed above, Bangladesh has a relatively limited window over the next 15 years to exploit the demographic dividend. During this period, the priority is to deliver large-scale job creation in order to maximize the potential of the low dependency ratio and deliver large and sustained poverty reduction. Second, gaps in job quality remain pervasive even within the employed population. The current base of the employed population includes a significant number of unpaid and underemployed workers. It also includes large numbers of wage employees in low-quality jobs, with low pay and no protection. Delivering higher wages and better working conditions will depend in part on creating more, better quality formal jobs, to raise the competition for workers and increase the potential for labor mobility.

Improving job quality is likely to require even faster economic growth in order deliver large-scale formal sector job creation. Figure 38b shows that, e.g., reaching a target of 35 percent of workers in wage employment by 2025 (from 22.3 percent today) would require the creation of close to 1.4 million wage jobs each year over the

Figure 38
Job creation projections for 2015–25 under alternative scenarios and formal sector job creation requirements



Note: Figure 38a assumptions: Scenario 1: 2003–15 productivity, 2015 LFP and unemployment (3.5% productivity growth, 57% LFP, 5% unemployment); Scenario 2: 2010–15 productivity; 2003–15 trend LFP, 2015 employment (4.6% productivity growth, 59.3% LFP, 5% unemployment); Scenario 3: 2010–15 productivity, increased LFP, reduced unemployment (4.6% productivity growth, 62.5% LFP, 2.5% unemployment). Figure 38b assumptions: LFP figures are taken as a share of the 15+ population and will not match figures presented in part 2, which are based on the working-age population (15–64).

next decade.[2] This amount is more than 2.5 times the number of wage jobs created in the period 2003–15, and implies that the formal sector will need to grow several times faster than the overall economy in order to sustain a sufficient pace of quality job creation.

The discussion above again underscores the importance of reaching, at minimum, the 8 percent growth target—and, indeed, of going beyond it. Reaching the 8 percent target entirely through raising labor productivity is unlikely. And higher output will, of course, need to be sustained through increased aggregate demand. There is certainly endogeneity in this: increased formal sector job creation, increased earnings, and improved social protection will all contribute to a virtuous circle of domestic demand. However, in the short to medium term a large share of increased demand will need to come from higher investment and deeper exploitation of export markets as a source of demand. While higher rates of investment—from both domestic and foreign sources—are needed, addressing technical and allocative efficiency barriers that prevent more efficient use of capital will be vital.

[2] While data on the share of wage and salaried workers is not available in many countries, available relevant comparisons for Bangladesh include Indonesia: 38.7 percent (2015), Vietnam: 39.3 percent (2015), Peru: 47.1 percent (2015), and Sri Lanka: 56.4 percent (2014). Source: WDI Database.

SUMMARY OF KEY FINDINGS: PART 1

- Bangladesh has experienced robust, sustained growth over a period of more than a decade, allowing for large-scale poverty reduction and shared prosperity.
- Jobs and labor earnings played an important role in recent poverty reduction successes, although job quality remains a pervasive problem in Bangladesh.
- Strong job growth through 2010 was complemented by robust (labor) productivity growth. Productivity was the biggest contributor to GDP growth, with growth in the working-age population also a significant contributor.
- Labor productivity growth was relatively robust, driven by structural transformation, supported by rapid urbanization, along with stable within-sector productivity growth.
- Notwithstanding, productivity levels remain low, and productivity growth in the manufacturing sector has been very weak—only around 50 percent that in the overall economy. Some concerns also remain over the sustainability of agricultural productivity growth and the risk of workers being pushed into low-productivity segments of the services sector.
- While the economy generated 1.15 million jobs in the working-age population per year over the past decade and job creation outpaced growth in the working-age population, the scale of job creation was still lower than would be expected given the rate of economic growth.
- The pace of job creation slowed markedly since 2010, despite GDP growth increasing moderately.
- A number of factors may explain the declining pace of job growth, including the ongoing process of structural transformation, which is shifting workers rapidly out of the most labor-intensive activities (agriculture), combined with robust productivity growth; tightening price competition in export markets along with other RMG and manufacturing-specific factors; and declining remittances.
- Raising growth must be a top priority to absorb the growing labor force and, even more important, to address pervasive low-quality jobs. This will require sustaining productivity growth and exploiting additional sources of demand, notably from investment and export markets.
- Weak TFP performance, a symptom of poor capital efficiency, holds back faster growth, highlighting possible technical and allocative efficiency barriers.
- Looking ahead, favorable demographics offer the potential to boost the pace of growth and poverty reduction over the next decade. But the flip side is that Bangladesh faces a youth bulge that will put increased pressure on labor markets. Thus, delivering rapid job creation will be paramount.
- Maintaining a steady state in the labor market will require job growth broadly in line with trends over the last decade. However, making significant inroads into addressing low-quality employment over the next decade will mean that virtually all of this job creation needs to come in the formal (wage) sector—and implies formal sector job creation at a pace much faster than has been achieved over the past decade.

Overall, reaching the government's growth target and addressing jobs challenges go hand-in-hand. Closing the jobs gap and raising quality require GDP growth at or above 8 percent and growth of jobs-intensive, diversified sectors of the economy. But the growth target can only be met through increased participation by women in the labor force and continuing productivity gains. Continuing these gains will need to include increased formalization and urbanization, as well as addressing other factors (such as skills and regulations) affecting efficiency. It requires exploiting additional sources of demand, most notably by increasing investment and expanding participation in export markets.

PART 2

LABOR MARKET OUTCOMES: KEY CHALLENGES

4. TRENDS IN LABOR MARKET OUTCOMES

With the strong, steady growth in GDP per capita and relatively robust job growth, a number of key labor market outcomes improved over the past decade (table 4). While overall LFP and employment rates changed only modestly over this period, there was a steady increase in female LFP. The increases in the share of wage and salaried employment, as well as of nonagricultural employment, are in line with the structural transformation pattern discussed earlier and suggest progress in job quality. Improvements in job quality are also evidenced by a modest increase in the share of formal employment (those who have a written contract with employers) among wage employees. However, positive overall labor market trends mask uneven progress and a clear segmentation among different types of workers in employment patterns and quality of jobs; this is detailed in the following sections.

Table 4
Summary of key labor market outcomes: working-age population (%)

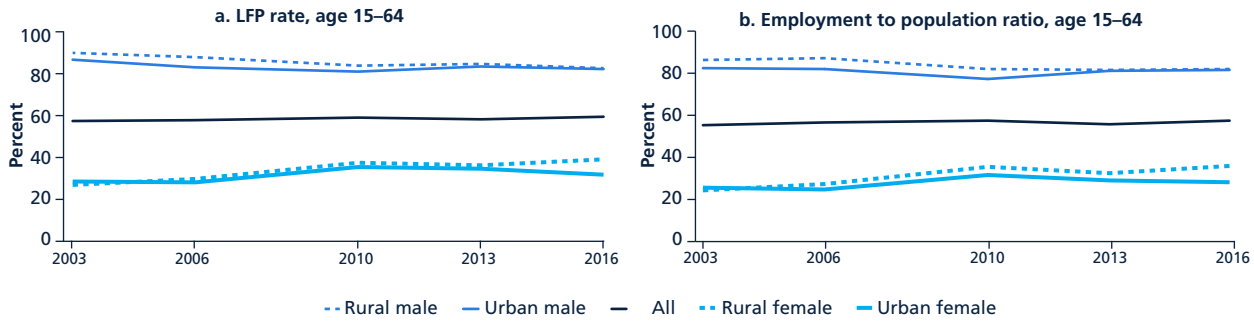
Year	LFP rate (all)	LFP rate (females)	Employment ratio	Share of wage employment in total employment	Share of formal employment among wage employees	Share of nonagricultural employment
2003	58.6	27.5	56.1	15.1	—	49.2
2006	59.0	29.0	57.2	17.9	32.6	52.9
2010	60.0	37.0	58.1	18.5	33.8	53.7
2016	60.5	37.4	57.9	22.5	34.6	58.3

Sources: LFS 2003, 2006, 2010, 2016.
Note: — = not available.

LFP has grown only marginally, and female participation stagnated after rapid growth in the 2000s

When disaggregated by sex and region, clear disparities in LFP and employment are observed (figure 39). The LFP rate and employment ratio for men remain very high with a slight decline over time and an increase in recent years; in contrast, female LFP increased over time, but recently declined in urban areas. The mirror image of male and female outcomes suggests that, at the margin, female workers may be substituted for males, as female educational attainment catches up with that of males (Das and Tas 2015). The recent decline in female LFP is driven by urban females, whose participation and employment ratios are generally lower than those of their rural counterparts.

Figure 39
LFP rate and employment ratio: by sex and location, 2003–16

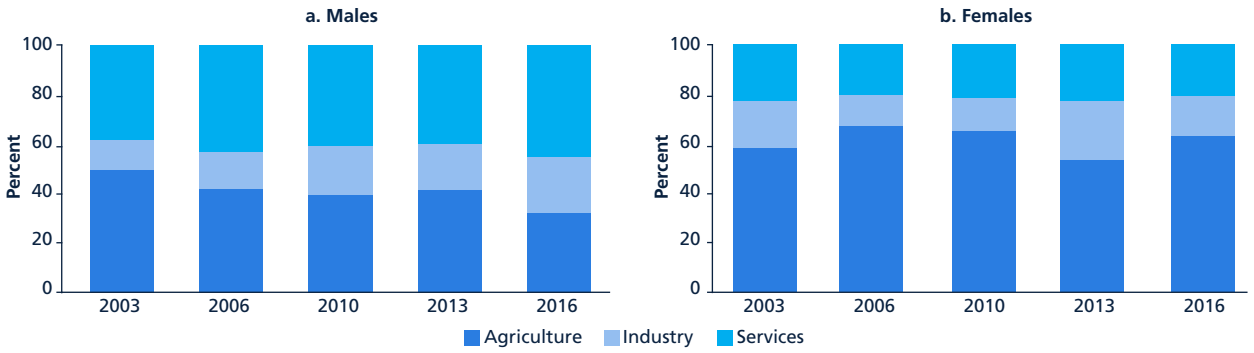


Source: LFS 2003, 2006, 2010, 2013, 2016.

The workforce has shifted steadily from agriculture to industry and services, with a modest shift to wage employment

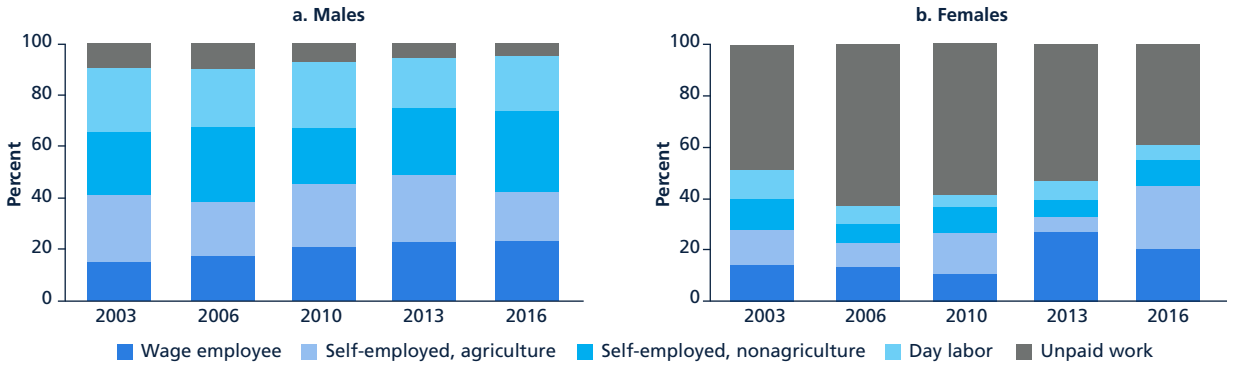
The employment shares in agriculture have experienced decreases, while the employment shares in services have experienced increases (figure 40), as the economy has undergone structural transformation (as discussed in chapter 8). Greater shares of workers have been gradually moving from lower- to higher-quality employment status (figure 41). The pace of this shift in the composition of total workers by employment status has been more stable for men than for women. Regular wage employment for men has increased from 15 percent to about 24 percent between 2003 and 2016. Modest increases in wage employment and nonagricultural self-employment and declines in day labor and unpaid work suggest gradual shifts to better quality jobs for men. For women, the trend is too volatile to make a conclusive observation. In particular, the share of agricultural self-employment changed greatly from 2010 to 2013, and further to 2016, along with those of wage employment and unpaid work. Nonetheless, the general pattern of a declining share of the combination of unpaid and agriculture work over time can be seen as progress in the quality of jobs.

Figure 40
Distribution of employment by broad sector over time by sex



Source: LFS 2003, 2006, 2010, 2013, 2016.

Figure 41
Composition of employment status over time



Source: LFS 2003, 2006, 2010, 2013, 2016.

Such shifts came with rapid spatial changes. Over time, the pace of population growth has significantly varied by division due to active internal migration and urbanization (figure 42). The population size has significantly increased in Dhaka and to a lesser extent in Rajshahi and Rangpur. In 2016, the Dhaka and Chittagong divisions hosted over half of the country's population. Along with population growth, employment growth in Dhaka, Rajshahi, and Rangpur has been strong (as discussed in chapter 10). While jobs in Dhaka and Chittagong tend to be concentrated in urban and peri-urban areas with the urban share of jobs increasing over time, increases in jobs—notably in Rajshahi and Rangpur—appear to take place in rural areas (figure 43).

Figure 42
Population size over time by division

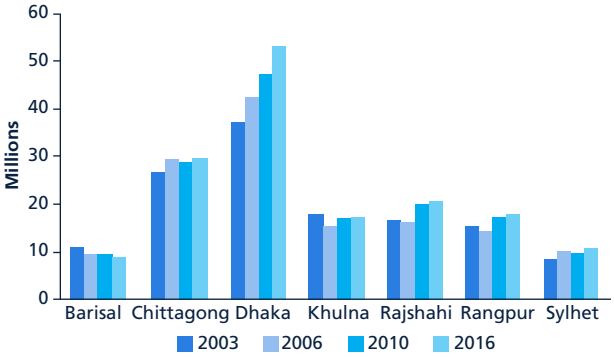
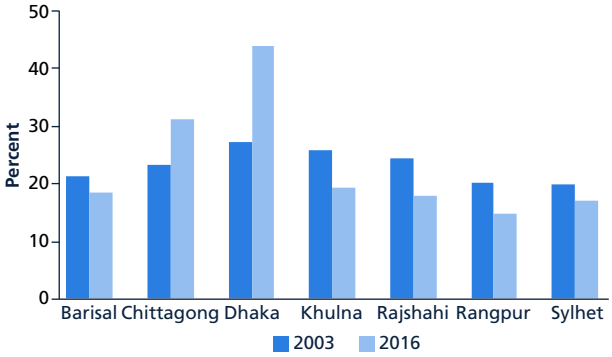


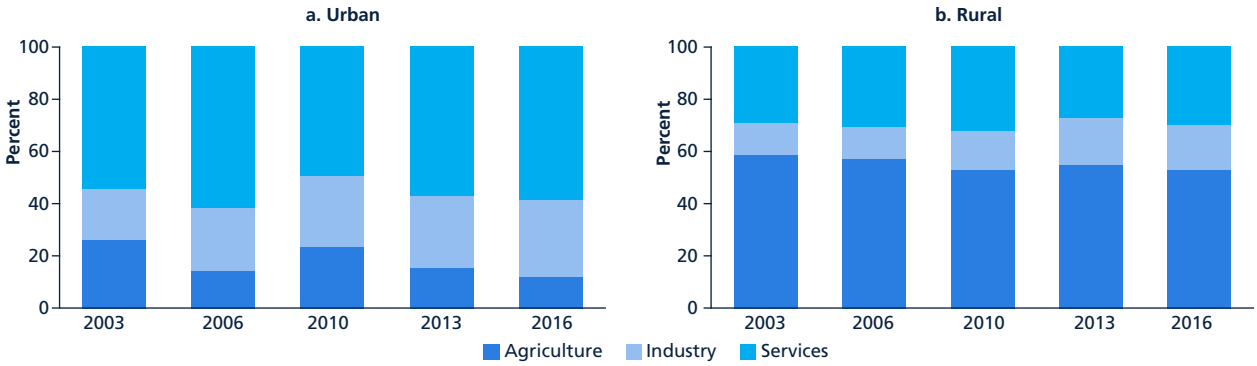
Figure 43
Share of urban employment 2003–16 by division



Source: LFS 2003, 2006, 2010, 2013, 2016.

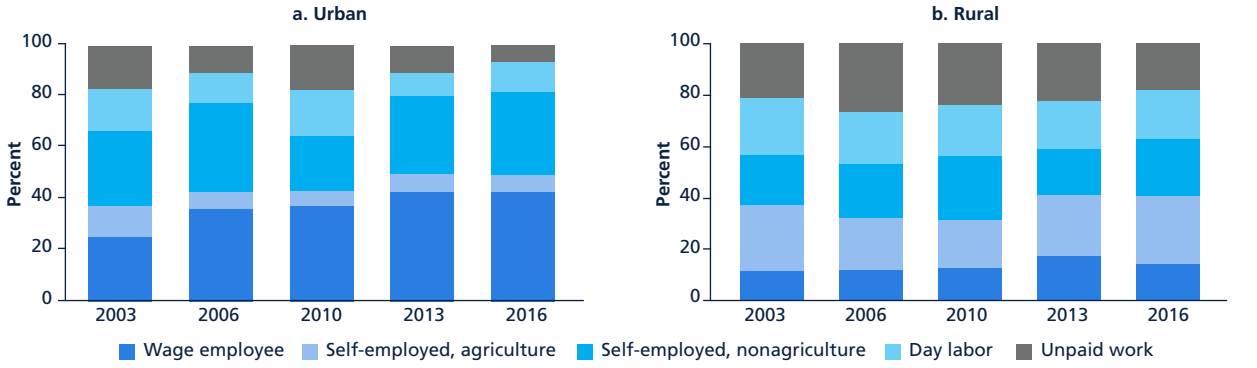
Between urban and rural labor markets, the composition of the sector and status of employment shows clear disparities in both levels and progress over time (figures 44 and 45). The steady shift from agriculture to industry and services shown earlier seems largely due to the reduction in agriculture and expansion in industry among urban workers. However, increases in industry and services sector jobs are associated with many workers taking on unpaid work and day labor; this is in line with earlier findings that many urban workers appear to have transitioned from agriculture to low-quality industry and services jobs. Meanwhile, the high prevalence of unpaid work in rural areas is mostly driven by rural women in agriculture (about 70 percent of unpaid employment is concentrated in female employment in rural areas, with 87 percent in agriculture). Disparities by region in labor market outcomes and employment transformation are associated with the process of urbanization in Bangladesh.

Figure 44
Composition of employment sector over time by locality of residence



Source: LFS 2003, 2006, 2010, 2013, 2016.

Figure 45
Composition of employment type over time by locality of residence



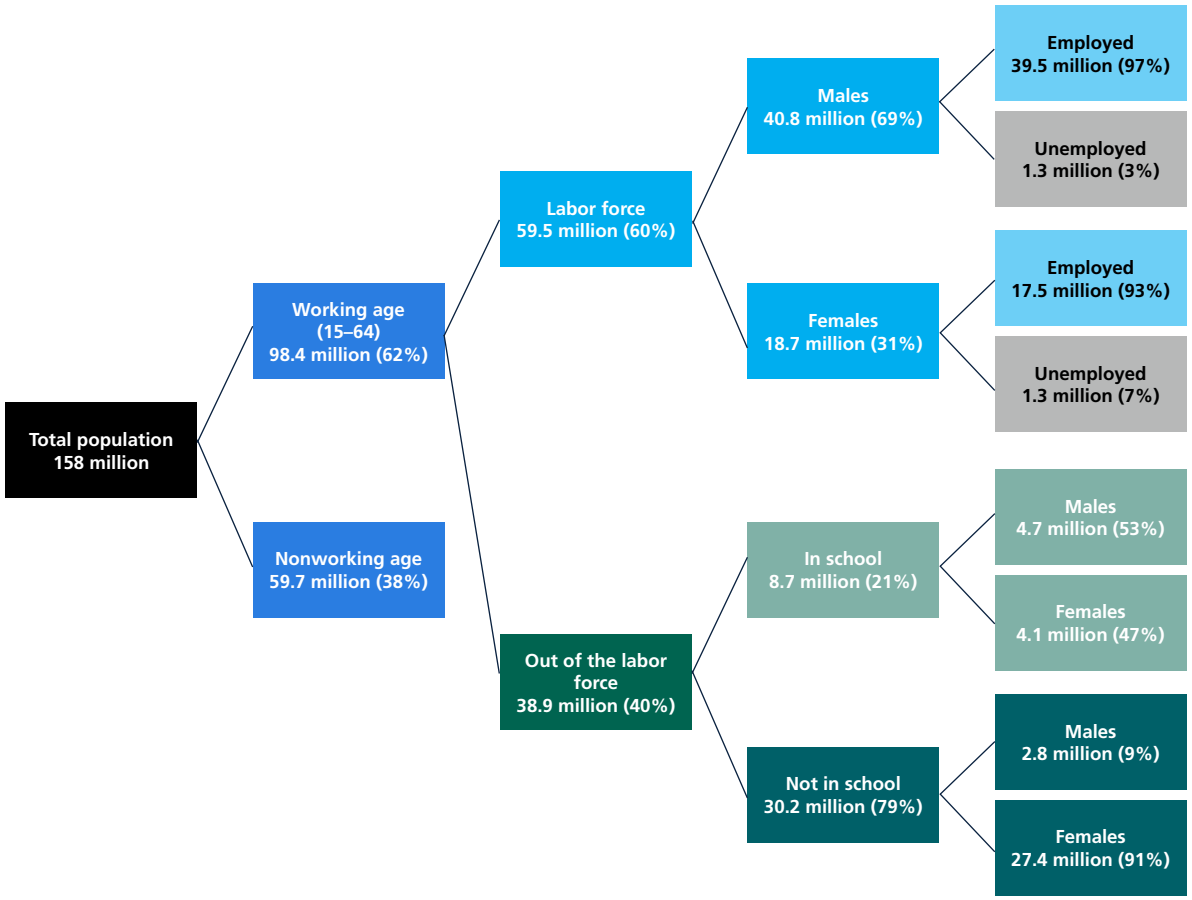
Source: LFS 2003, 2006, 2010, 2013, 2016.

Despite overall progress, the snapshot of Bangladesh's labor market in 2016 highlights significant underutilization of the female labor force

The current status of the labor market in Bangladesh suggests significant underutilization of human resources in the country where 40 percent of the working-age population remains out of the labor force (figure 46). This situation is largely driven by very low female LFP—the female LFP rate was about 37 percent in 2016, compared with almost 90 percent for men. Moreover, a large majority of inactive women are neither in school nor in employment.[1] Female LFP in Bangladesh remains below the average for LMICs (39 percent) and middle-income countries (48 percent). As discussed above, engaging the working-age population in productive activities has been acknowledged around the world as one of the most important factors to promote growth. Thus, understanding female LFP decisions and promoting women's activation in the labor market has long been an important policy issue in Bangladesh.

[1] In discussing the female LFP rate reported in the LFS, note that some studies such as Mahmud, Shah, and Becker (2012) and Das and Tas (2015) have highlighted that economic activities performed by women tend to be underreported, mainly due to social perceptions of what constitutes work. In particular, unpaid family help or paid work conducted from home, which are typically performed by females, may not be considered work by respondents, despite the reference to family help as work in the LFS questionnaire. Such underreporting tends to be done not only by males who do not consider female work as labor market activities, but also by females who are reluctant to report market work. To illustrate the implications of these limitations, Mahmud, Shah, and Becker (2012) conducted a sample survey in eight districts of Bangladesh, and found that official statistics from data collected through the LFS greatly underestimated female LFP compared to the results of their survey.

Figure 46
Snapshot of the Bangladesh labor market, 2016



Source: LFS 2016.

In general, the LFP rate is greatly associated with an individual's age and educational attainment, but the strong life-cycle pattern observed for males is not prominent for females (figure 47). In addition, a significant difference between rural and urban females is observed. The relationship between education and LFP is not monotonic (figure 48). The likelihood of participating in the labor force slightly decreases with education except for the highest level (postsecondary). Though counterintuitive given the returns to education in the labor market, this situation is not uncommon in the South Asia region, where the highest- and lowest-educated women participate in the labor force, whereas those with a midlevel education have neither sufficient returns nor the necessity to participate. Those with midlevel education are likely able to gain from the marriage market, and stay out of the labor force based on intra-household decisions. Overall, the LFP rates are higher for rural women than urban women, due to the availability of agriculture and unpaid work in rural areas.

The share of those not in education, employment, or training (NEET) again highlights the issue of low female labor market participation. Figure 49 shows that the share of NEET individuals is not very different by sex at age 15, but that the gender gap increases sharply for both urban and rural individuals with age. The share of NEET decreases steadily with age for men: by age 40, only a negligible share of males falls under the NEET category. In contrast, the NEET share rapidly increases between ages 15 and 20 for women, which suggests that women exit the labor market once they leave school. For younger women age 25 or less, the NEET share is higher for rural than urban females, but the pattern is reversed as women get older.

Figure 47
LFP by age, sex, and location

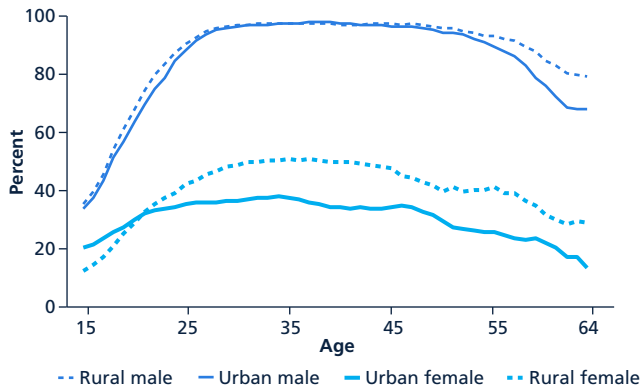
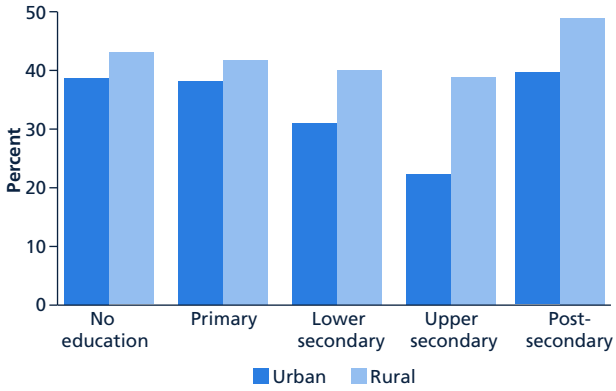


Figure 48
Female LFP by level of education and location



Source: LFS 2016.

Low levels of labor market participation among women are likely associated with high rates of early marriage, concentration of household responsibilities, mobility constraints, and employer perceptions, in the context of social and cultural norms

This high rate of NEET is associated with early marriage among women. For instance, rural women are more likely to be NEET than urban women when young, as they tend to get married earlier (figure 50).[2] Indeed, the typical marrying age for women in Bangladesh—the average age at first marriage was about 19.3 in 2013[3]—is substantially younger than in comparator countries: 20.7 in India (2011), 21.8 in Indonesia (2012), 22.3 in Vietnam (2011), and 23.1 in Pakistan (2013).[4] Early marriage has implications on education and labor market activities, as individuals drop out of school and exit the labor force with marriage. The majority of inactive women (almost 80 percent) report household responsibilities, which increase with marriage, as the main reason for not seeking labor market opportunities. Meanwhile, the reason for rural females to be less likely to be NEET than their urban counterparts when older is associated with their more often engaging in unpaid work, mainly in agriculture. When excluding unpaid work, NEET shares are similar for rural and urban women.[5]

Time use patterns highlight unique barriers for married women to participate in the labor market (figure 51). Females spend on average 26 hours on household chores per week, compared to only about 8 hours for males. The number of hours spent on household chores is significantly higher for married females than unmarried ones, but vary little with the marital status of men. Hours of household work decrease for employed women, but remain significantly larger than those of employed males. When investigating only females (figure 52), it is observed that rural women spend about the same time in household work than their urban counterparts, although employed rural females tend to spend slightly more time on household chores than urban females with work activity. These findings suggest that given social and gender norms with household responsibilities falling mostly upon women, participating in the labor force and balancing work and family is likely a significant challenge.

Associated with gender norms, mobility constraints are also likely a great impediment to female LFP. The majority of working females are either working at home or close by it, with a noticeable urban-rural disparity—the shares of those working at home or near the house are about 42 percent and 70 percent in urban and rural areas, respectively (figure 53). The large urban-rural discrepancy is largely explained by agriculture prevalence

[2] Norms of status and seclusion, combined with the pressure to marry off daughters so that responsibility for their safety shifts to the husband, continues to be a factor in early marriage (Das and Tas 2015).

[3] Source: Bangladesh 2012–13 Multiple Indicator Cluster Survey.

[4] See World Bank Gender Statistics (http://datatopics.worldbank.org/gender/).

[5] Similarly, LFP rates are similar for urban and rural women (28.8 percent and 27.6 percent, respectively) when unpaid work is excluded.

Figure 49
NEET share by age, sex, and location

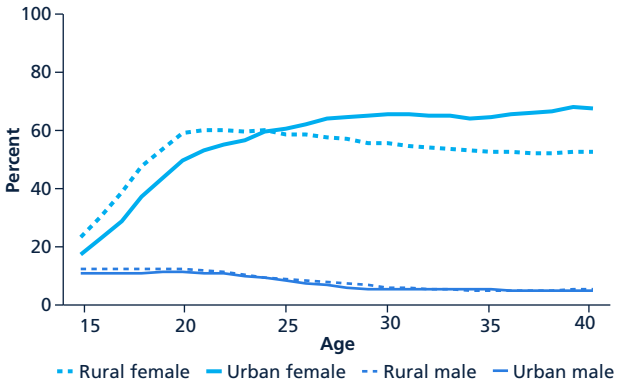
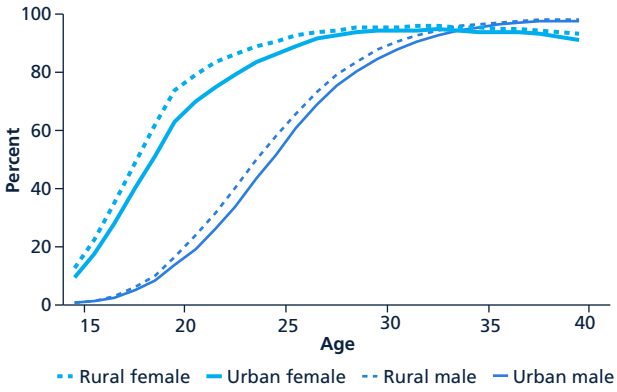


Figure 50
Share of married individuals by age, sex, and location



Source: LFS 2016.

Figure 51
Hours spent in last week on household work among the working-age population, by sex and status

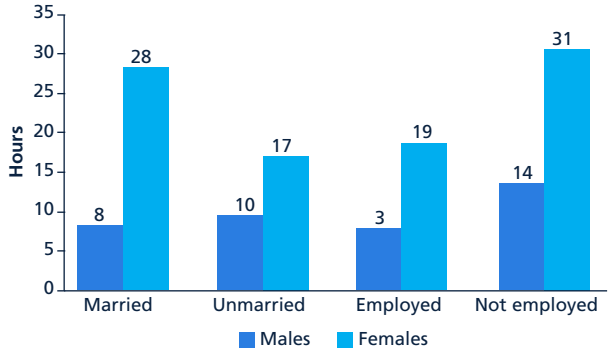
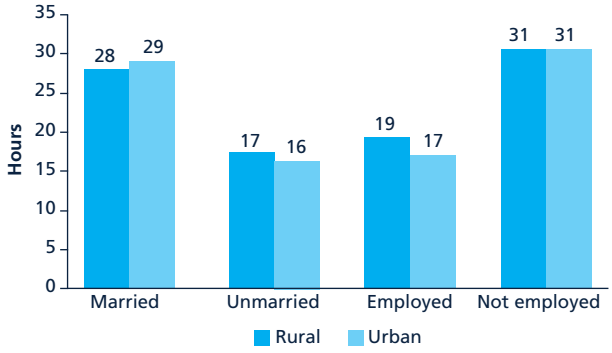
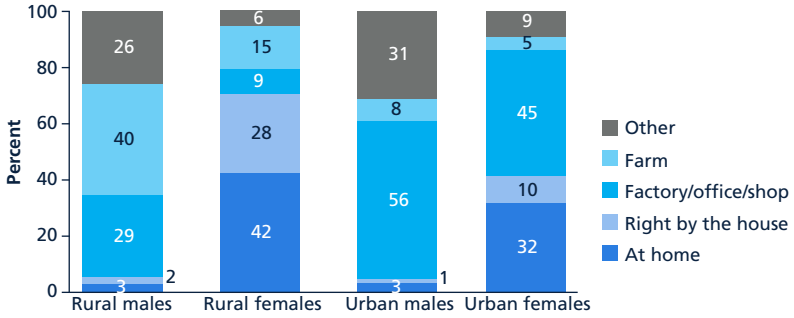


Figure 52
Hours spent in last week on household work among working-age females, by location and status



Source: LFS 2016.

Figure 53
Location of employment by sex and type of area



Source: LFS 2016.

in rural areas. Once women in agriculture are excluded, the share of females working inside or near the home in rural areas is comparable to urban areas (46 percent). In contrast, over 95 percent of males in both urban and rural areas work outside the home, regardless of agriculture prevalence. The relative high share of "others" for the location of employment among men is likely due to their high presence as day laborers and construction workers. This finding suggests that social and household responsibilities, in addition to the nature of economic activities in each sector, play a role in the location and thus type of work to which females have access.

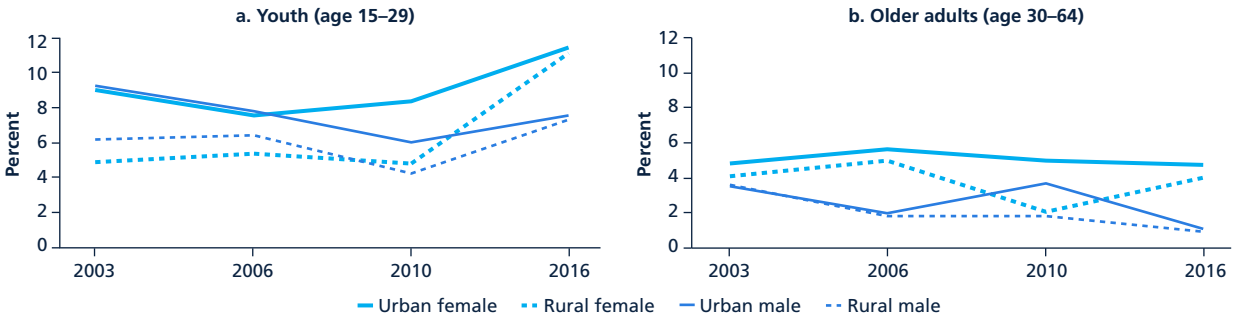
Demand-side constraints also likely affect women's labor market participation decisions. Some employers value women's docility, dexterity, tolerance for monotony, and willingness to accept lower wages especially in the RMG sector (Hossain, Mathbor, and Semenza 2013), which could work positively for female employment. However, the majority of employers still express reservations about hiring women for a variety of reasons, including additional expenses for providing separate workplace facilities and potential implications in workplace dynamics.

Weakening of these binding constraints as well as the increasing availability of work opportunities for women (e.g., agriculture work for rural women; manufacturing for urban women) is likely associated with an overall increase in female labor market activities over time.[6] However, since 2010, female LFP has stagnated. In urban areas, female LFP has declined by 2.7 percentage points, from 34.7 percent in 2010 to below 32 percent in 2016. After a small decline in 2013, female LFP in rural areas picked up in 2016 to reach 39.6 percent—about 7.5 percentage points higher than for urban females. One potential explanation for the LFP decline in urban areas may simply be a compositional change with increases in those with secondary education, which is associated with much lower participation than other levels of educational attainment. However, a regression analysis indicates declining participation among urban females remains even when controlling for changing educational composition, thus requiring other explanations for the recent decline of female LFP. One explanation may be lower demand for female labor, associated with the rapid slowdown in job creation in the RMG and textiles sectors—which is by far the most prominent for urban female employment—since 2010.

Unemployment is rising among youth, particularly during the recent period of slowdown in job growth

Unemployment among youth has been traditionally higher than for the rest of the workforce, and the gap appears to be increasing rapidly in recent years. The unemployment rate among older adults remains low and slightly decreased over time, whereas the rate for young workers increased between 2010 and 2016 for all population groups (figure 54). This finding suggests that youth appear to be bearing the brunt of the recent

Figure 54
Trends in unemployment rate by sex and location: youth and older adults



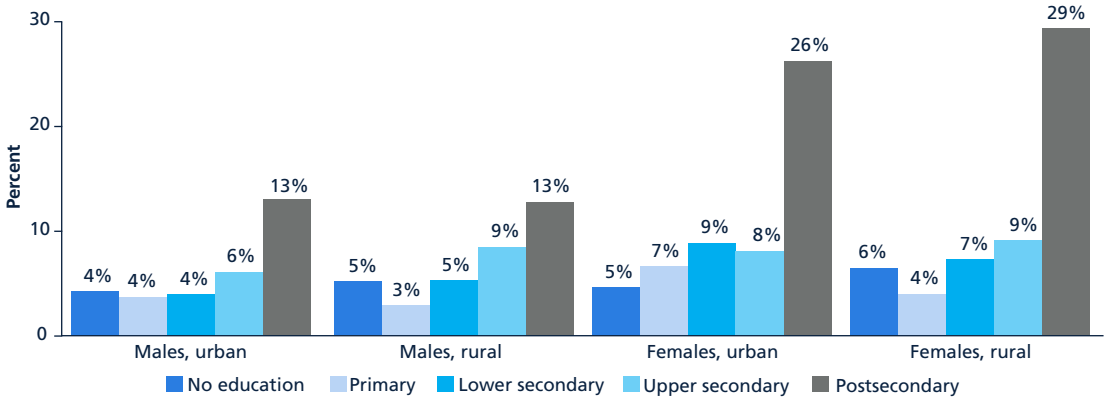
Source: LFS 2003, 2006, 2010, 2016.

[6] For instance, the share of married women at age 20 decreased from 80 percent in 2003 to 73 percent in 2015. And Heath and Mobarak (2015) have shown that the growth of the manufacturing sector has played a critical role in increasing LFP and employment, and in delaying early marriage and childbirth.

slowdown in job creation (2010–16). Increase in the unemployment rate was particularly significant among young women. This, together with reduced LFP among urban women in recent years, may imply tighter labor market conditions for young women.

Youth unemployment is concentrated among workers with high levels of education. Figure 55 shows that unemployment is highly associated with level of education. The unemployment rate among youth who have completed secondary school and above is over 10 percent, and higher for females than for males; the unemployment rate among postsecondary-educated youth is close to 20 percent. Therefore, part of the increase in youth unemployment observed in recent years might be driven by a change in the educational composition of new labor market entrants. Better educated youth who enter the labor market may have a high reservation wage, while high-paying jobs are unavailable given the slowdown in the labor market in recent years. Toufique (2014), investigating the school-to-work transition patterns in Bangladesh, found that more than half of unemployed youth describe their family background to be fairly well off, indicating that those who can afford to be unemployed take time to find suitable employment options.

Figure 55
Youth unemployment rate by sex, location, and educational attainment



Source: LFS 2016.

5. ACCESS TO QUALITY JOBS

While job quality is a multifaceted concept that is not easily measurable, it is typically assessed based on information on the sector, status, formality, and wage level of a job. There exists a strong association between these proxy variables and workers' educational attainment (figures 56 and 57). As expected, the likelihood of working in agriculture, day labor, and unpaid work decreases significantly with education, whereas that of working in the services sector and wage employment rises with education. The share of industry and nonagricultural self-employment increases with education up to the primary/lower secondary level, but decreases with higher education. Moreover, the average earnings and likelihood of being employed with a written contract (formality) increase monotonically with educational attainment. These measures of job quality also have a strong correlation with household wealth, with individuals from higher quintiles more likely to work in nonagriculture, paid, and formal jobs. These findings corroborate our approach, which characterizes better quality jobs as those that are outside agriculture, better paying, and formal.

Figure 56
Employment sector by educational attainment

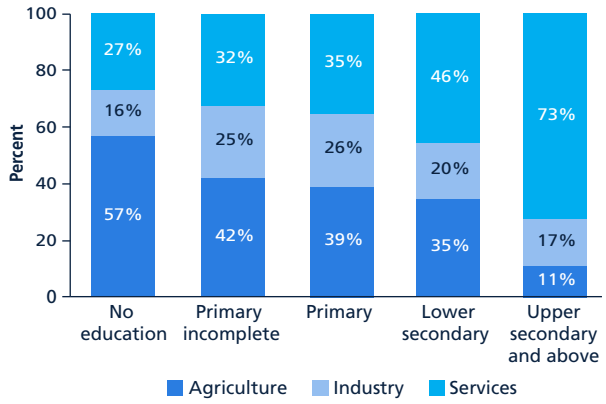
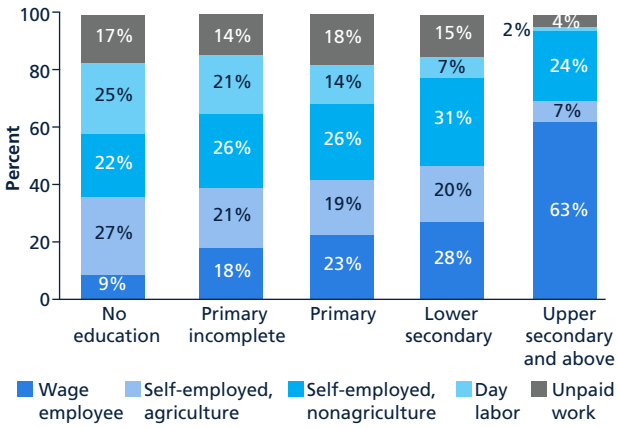


Figure 57
Employment status by educational attainment



Source: LFS 2016.

The current status and sectors of employment highlight the low quality of jobs in Bangladesh, although structural transformation is bringing moderate progress toward better jobs

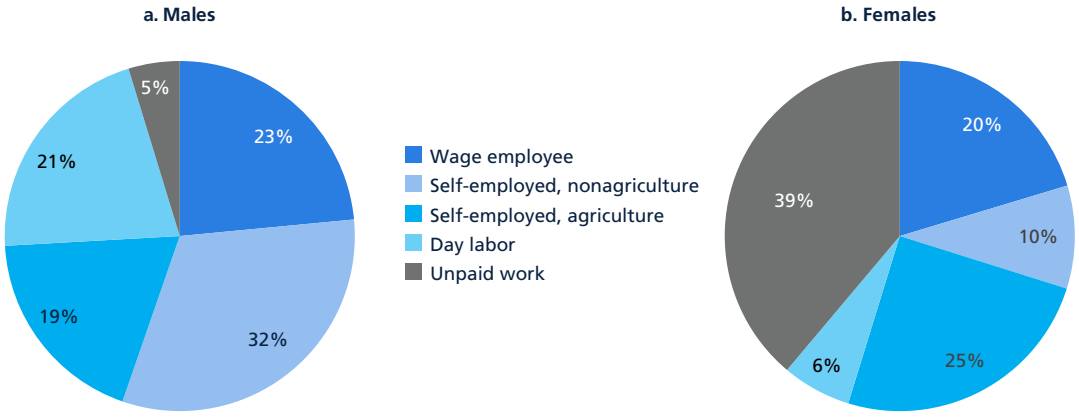
Despite the progress in structural transformation discussed above, agriculture is still the largest sector with respect to employment. A higher share of working females is employed in agriculture than men, while women's presence in services is far less than men's (figure 58). Apart from agriculture, manufacturing (15 percent) provides more employment and earnings opportunities for women than men; this is particularly the case for urban women due to the strong RMG sector. Higher-productivity services such as transport and communications do not really serve as a source of employment for women.

With respect to type of employment, a large share of workers is either unpaid or day laborers. The share of unpaid workers—close to 39 percent for women and 5 percent for men—also highlights the gender discrepancy in job quality, although women are far less likely to work as day laborers (figure 59). The share of wage

Figure 58
Distribution of employment sector by sex

Source: LFS 2016.

Figure 59
Distribution of employment type by sex

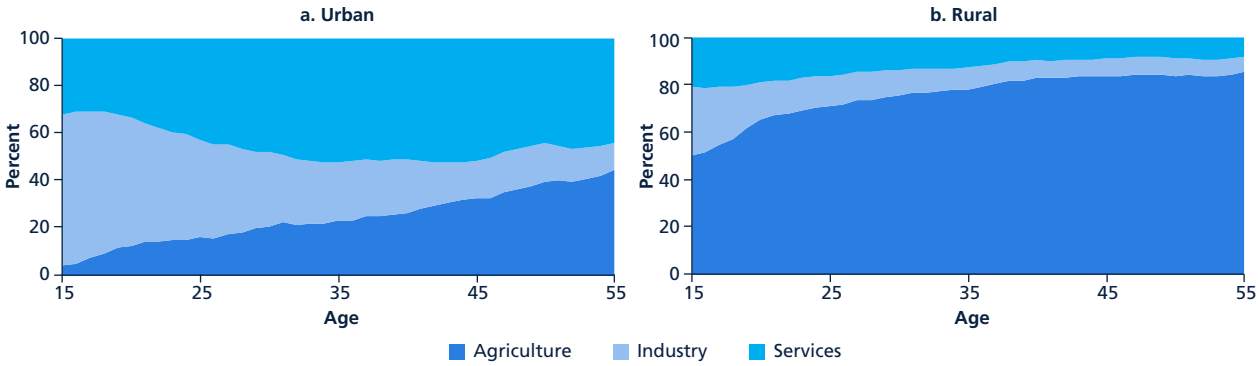


Source: LFS 2016.

employment is similar for men and women, but nonagricultural self-employment, typically nonfarm business activities, is also less common for women than men; this underscores the pertinent challenge of the quality of jobs among women.

Access to better quality jobs for women is largely driven by young urban females—in particular for wage employment and employment in manufacturing (figures 60 and 61). Among urban women under 25, almost half work in the manufacturing sector, and over 60 percent work as wage employees. In contrast, only 40 percent of older urban females are wage employees. The services sector provides almost half of the employment opportunities for urban women across all ages. Within services, education is the main employer of females (24 percent), followed by domestic work (22 percent) and other personal services activities (21 percent). Demand from services sector jobs, including health care workers, needs to be better understood. Despite being female friendly, the health care sector represents only 4.6 percent of female employment in services, and only 2 percent of total employment. A study (OECD 2014) found that the average number of nurses per 1,000 people in Bangladesh is about 0.2—far lower than in Indonesia (1.2), Sri Lanka (1.9), and Malaysia (2.4)—despite a large need for such a workforce. In rural areas, the change in the distribution of employment by sector and status among younger cohorts was less drastic, with employment still largely dominated by agriculture and unpaid work despite a slight increase in manufacturing and wage employment.

Figure 60
Distribution of female employment sector across working age: urban versus rural



Source: LFS 2016.

Figure 61
Distribution of female employment type across working age: urban versus rural

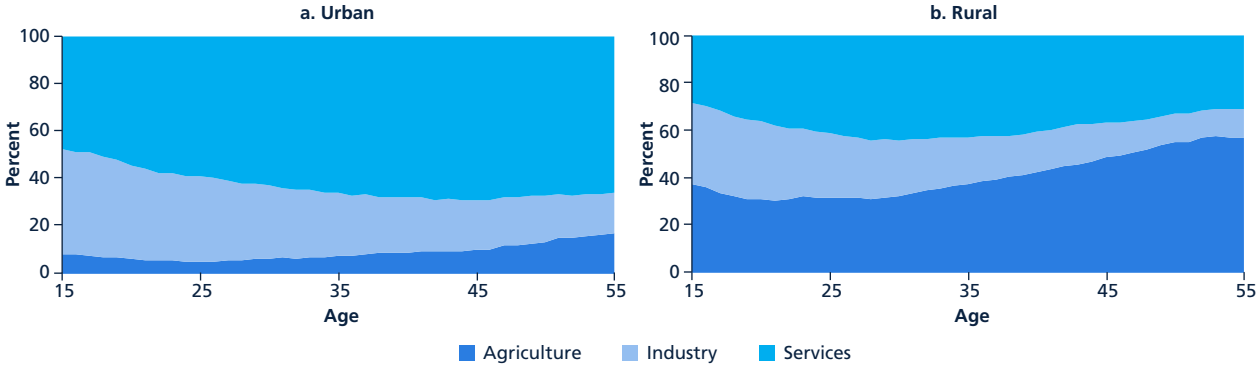
Source: LFS 2016.

Overall, the broad trends for men are similar to those for women (figures 62 and 63), but the pace of change taking place is dramatically faster for women. The sectoral changes along with age are more gradual for men. The large urban-rural disparity is also less for men than women, although the dominance of agriculture in rural areas remains clear. With respect to the status of employment, focusing on the share of wage employment, the pattern along age is again less prominent among men than women. The shares of industry and wage employment are higher for females than males among urban youth, whereas this is not the case in rural areas.[1]

The quality of jobs of today's youth looks quite different from that in the early 2000s. While the type and sector of jobs of old workers have not changed much over time, those of young workers have changed significantly. Only a third of young workers in 2016 worked in agriculture, compared with more than a half in 2003 (figure 64). The share of nonagriculture employment was similar for both youth and older adults in 2003; by 2016, it was much higher for youth (about 68 percent) than older adults (56 percent). Similarly, more recent cohorts of youth are significantly more likely to work as wage employees and less likely to be unpaid family workers (figure 65). When disaggregated by sex, as discussed above, the most rapid and striking change is experienced by urban young females with a huge increase in manufacturing and wage employment.

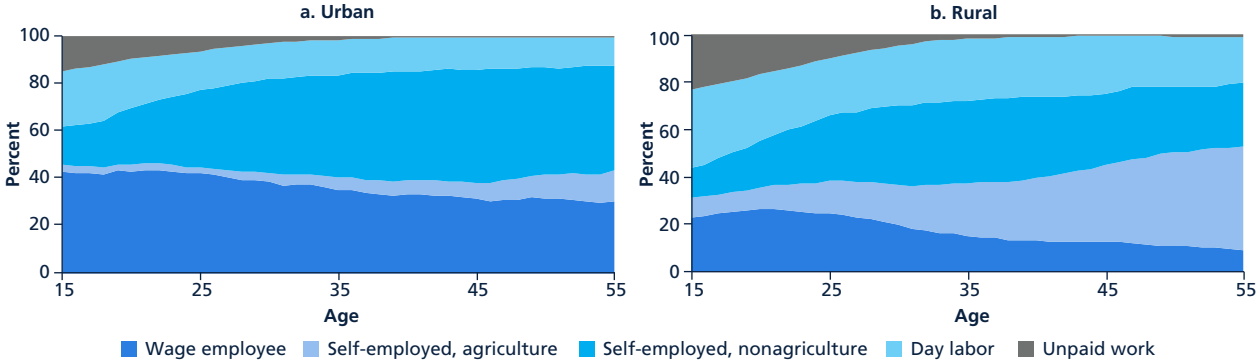
[1] When 2003 data are examined in an attempt to differentiate the age effect from the cohort effect, the prevalence of industry and wage employment among youth compared to older groups was found to be less evident.

Figure 62
Distribution of male employment by sector across working age: urban versus rural



Source: LFS 2016.

Figure 63
Distribution of male employment by employment type across working age: urban versus rural



Source: LFS 2016.

Figure 64
Distribution of employment sector over time, for adults and youth

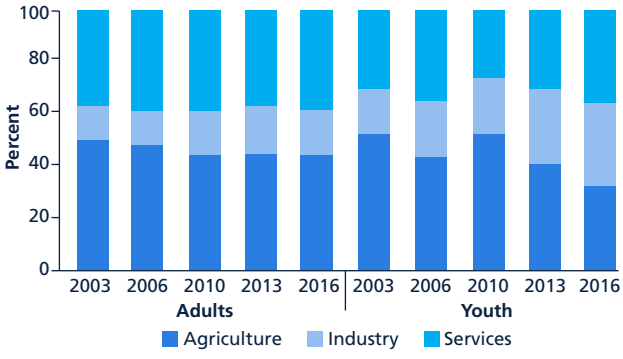
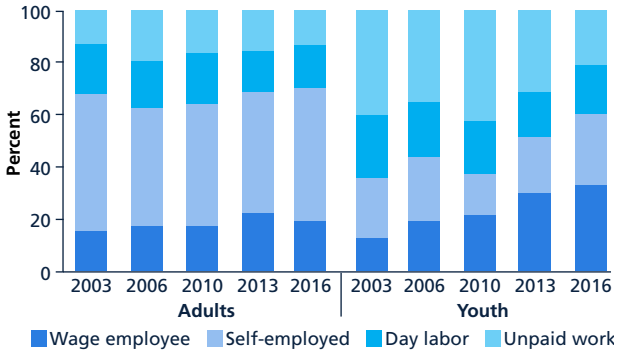


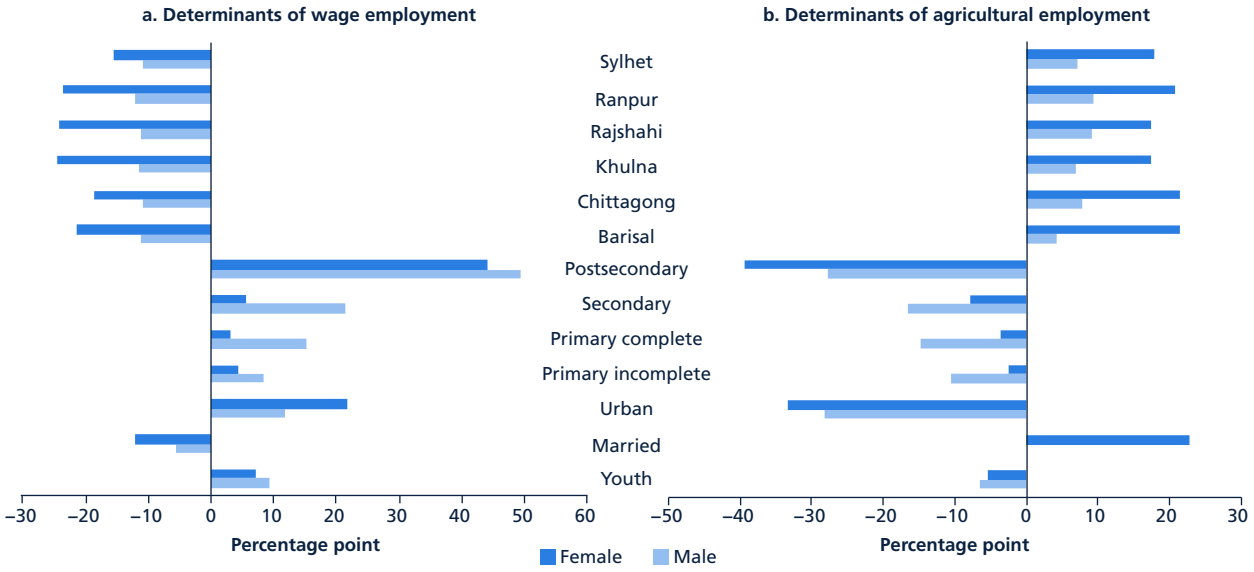
Figure 65
Distribution of employment type over time, for adults and youth



Source: LFS 2003, 2006, 2010, 2013, 2016.

The microdeterminants of employment status and sector suggest uneven access to quality jobs by sex and region, as well as age groups. Figure 66 presents the results of multinomial logit regressions on the determinants of working in wage employment (compared to agricultural self-employment) and agriculture (compared to service). As discussed, education has a positive [negative] effect on the probability to be a wage employee [agricultural worker], although primary education for females is not strongly associated with positive outcomes. The results show that location indeed matters most. Living in an urban area is greatly associated with working as a wage employee, while living in regions other than Dhaka has a significant and negative association with the chances of being a wage employee for both males and females. The reverse holds for the likelihood of working in agriculture. The marginal effects of these variables are dramatically larger for females, suggesting that labor market segregation by region is more prominent for women than men. Married women are significantly less likely to work as wage employees, but more likely to work in agriculture, suggesting that marriage for females is associated with engaging in agriculture activities, which are flexible and conducive for balancing work and family responsibilities.

Figure 66
Determinants of the likelihood of being employed in wage and agriculture jobs



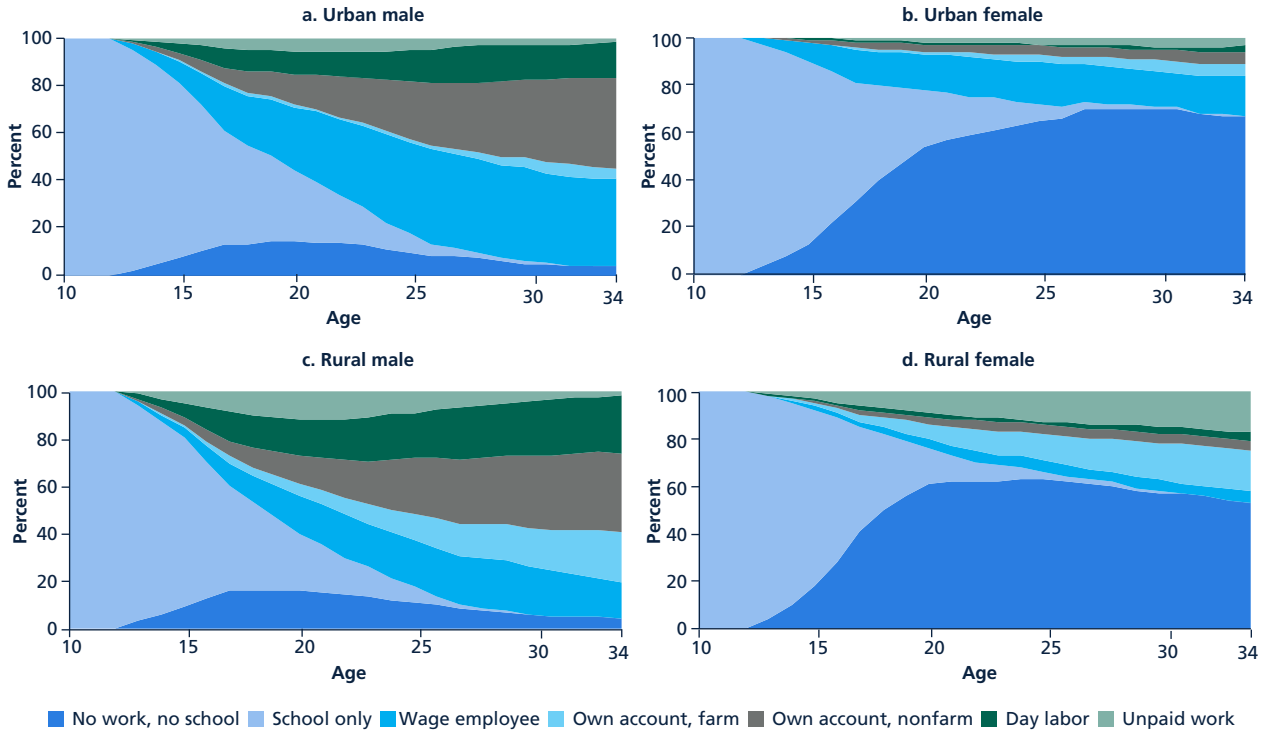
Source: LFS 2016.
Note: Multinomial logit regressions—status (wage employment, self-employment, and day labor and unpaid work) and sector (agriculture, industry, services) of employment—were examined. The relative likelihoods (in percentage points) of working in wage employment compared to self-employment and in agriculture compared to services are presented.

School-to-work transitions highlight the challenges of youth entering the labor market; access to skills training beyond formal education is limited

Analysis of school-to-work transitions highlight persistent challenges faced by youth (figure 67). Educational attainment has progressed significantly, but the bulk of the youth workforce is still composed of individuals with relatively low skill levels: close to half of the youth entering the labor market are primary school completers with no or incomplete secondary education. By age 16, close to half of young individuals are already out of school. Most females drop out of the labor force as they exit formal schooling. Males are largely employed, but a substantial share of them are working as day laborers. While occupational selection varies, school-to-work transitions look broadly similar between urban and rural areas, particularly for men (for women, there is a slightly larger wedge of women still in education in their 20s relative to rural areas).

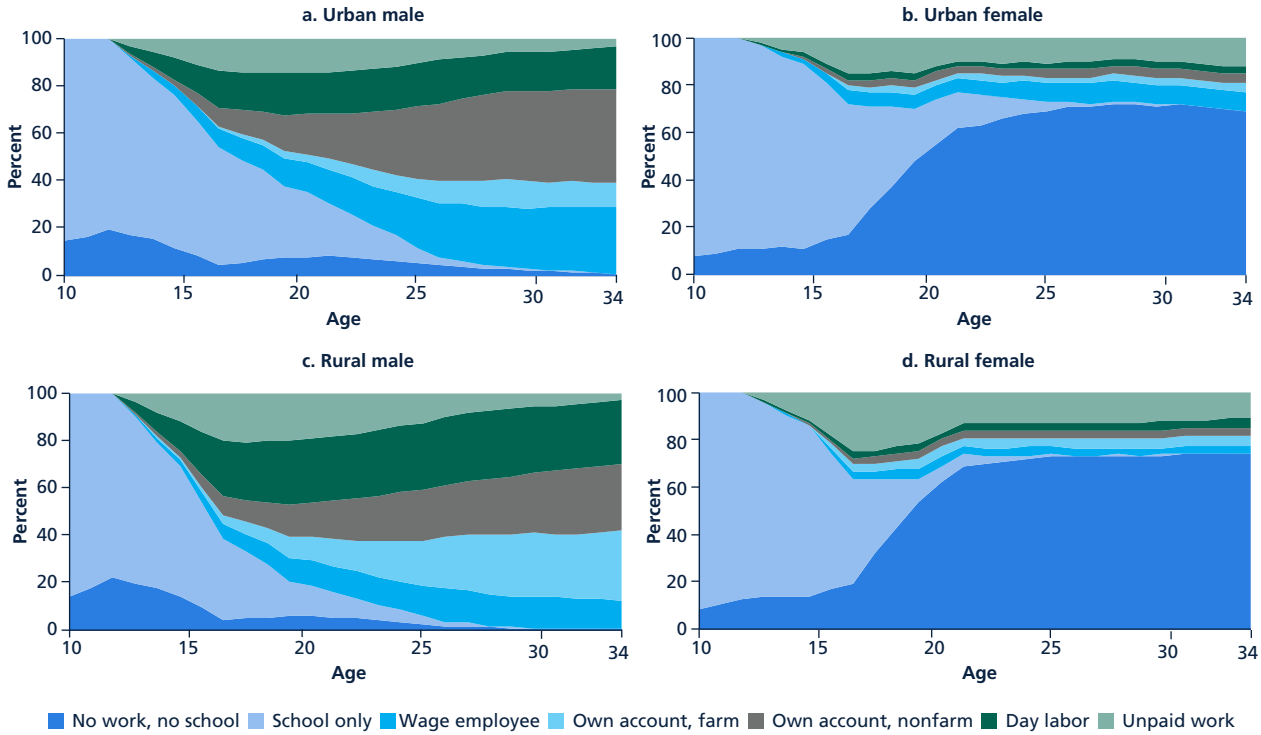
Despite these shortcomings, there has been much progress in the transition pattern since 2003 (figure 68). The share of no work, no school among boys (age 10–16) who likely work informally substantially decreased

Figure 67
Labor market transitions: by sex and location (2016)



Source: LFS 2016.

Figure 68
Labor market transitions: by sex and location (2003)



Source: LFS 2016.

in 2016, reflecting increases in schooling and reduction in child labor. Nonfarm activities in rural areas have increased for males. Increases in female labor activities are notable, particularly in wage employment in urban areas and farm activities in rural areas. This certainly differs from the pattern in 2003, when the majority of youth began labor market activities from unpaid family work and tended to transition to other types of employment (males) or exit the labor market (females).

After formal schooling, opportunities for skills development are limited, with a significant discrepancy between those who desire training and those who actually receive training. The percentage of the Bangladeshi workforce that has taken training is low overall, with about 2 percent of the overall workforce and of youth reporting they have received training in the past 12 months. A series of figures suggests that access to skills development is limited for individuals from lower-income households (figure 69),[2] younger youth (age 15–24) (figure 70), and less-educated workers (figure 71), regardless of their desire for training opportunities. Training opportunities tend to be concentrated on better educated urban males.

Apart from technical and vocational training, few other active labor market programs exist in Bangladesh to facilitate access to jobs for disadvantaged populations. Compared to the disparities described above across sex, location, and age groups, policy responses have been quite limited. Frequently used instruments in other parts of the world generally targeted to unemployed youth—such as wage subsidies (to increase labor demand for youth), apprenticeship and internship (to foster labor market experience), counseling or mentoring (to foster socio-emotional skills), and job search assistance and employment services (to provide intermediation and matching services)—are widely unavailable in Bangladesh. Interventions to promote entrepreneurship and self-employment, which may be more applicable in an environment where labor demand is limited, are also lacking despite widespread microfinance institutions.

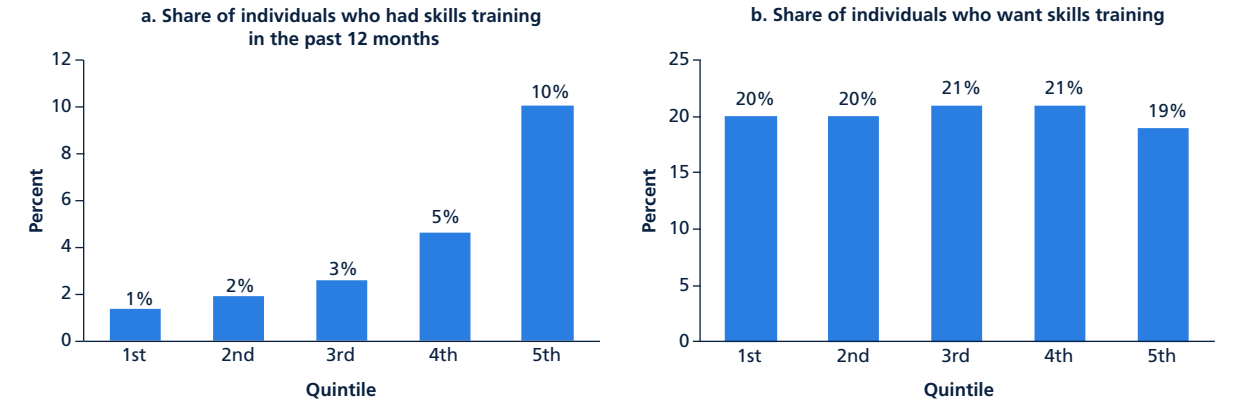
Significantly fewer working hours among women contribute to their lower quality of jobs compared to men

Associated with the sector and status of employment, large variation in hours of work presents differences in job quality across different types of workers (figure 72). Employed females work on average significantly fewer hours than males: 33.3 hours a week compared to 54.0 hours for males. There is a notable difference in working hours between agriculture and nonagriculture for both males and females: the median number of hours worked by males in agriculture is around 40 hours, compared to close to 50 hours in services or industry; the number of hours worked by females in agriculture is particularly low, with half working less than 20 hours. Thus, the higher share of agriculture for females than males likely explains the huge gender difference. When agriculture is excluded, the gender difference in working hours is reduced, with females and males in manufacturing spending a similar amount of time at work, although females in services work fewer hours than males.

The lower number of hours of work for females compared to males in the nonagricultural sector reflects two factors. First, women may not have full access to regular, long-hour work opportunities, but rather engage in petty activities, considering many labor market constraints. Studies suggest that women face significant constraints in traveling and distance to work, and the availability of opportunities within a reasonable range matters (World Bank 2012b). Employers are required to provide a safe and separate place for women when they hire female workers, and this may impose an extra burden on a business and reduce incentives to hire women. Moreover, women may not have social networks to provide information on available jobs; most worker recruitment and job matching takes place through informal channels. On the other hand, women may choose a job that allows shorter hours of work to manage both economic activities and household responsibilities. Despite working shorter hours, a very small share of females working less than 35 hours a week report being willing and available to work more hours (figure 73).

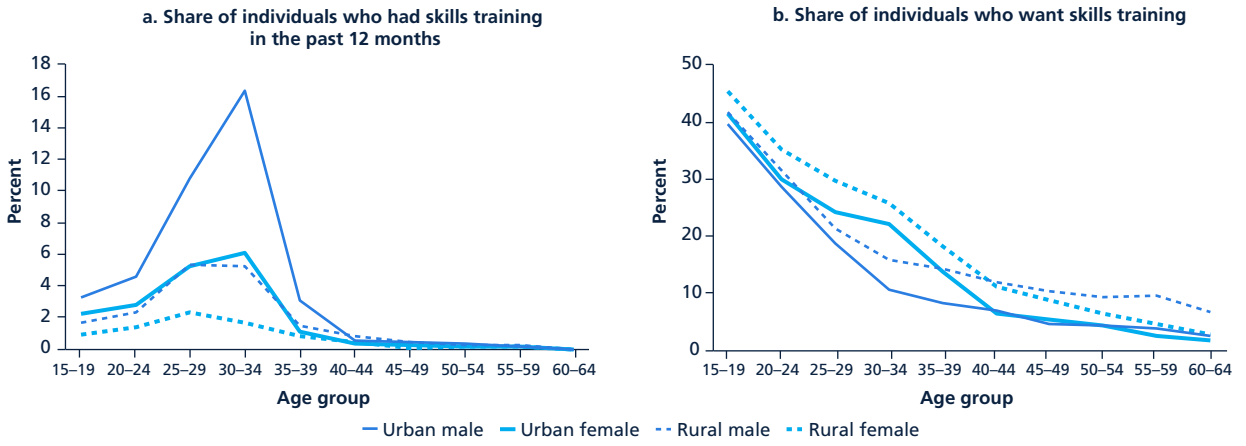
[2] While the LFS does not collect information on household income or consumption, it does include key variables used for the proxy means test (PMT) method. Thus, the household income quintiles here are calculated based on PMT score. See Sharif (2009) for detailed discussions on PMT in Bangladesh.

Figure 69
Access to training and interest in training by household income quintile



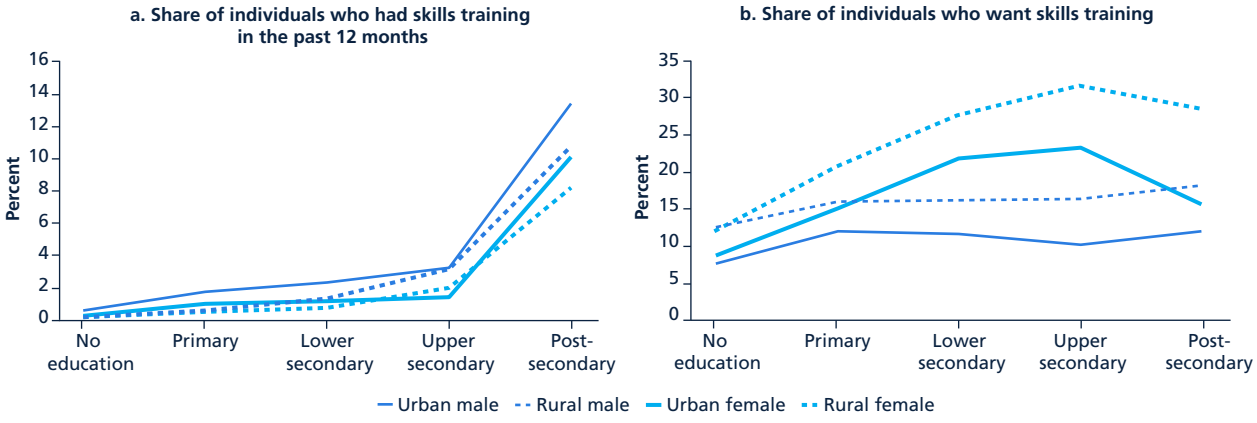
Source: First quarter QLFS 2016.

Figure 70
Access to training and interest in training by age group



Source: LFS 2016.

Figure 71
Access to training and interest in training by education group



Source: LFS 2016.

Figure 72
Average weekly hours worked by sex and location

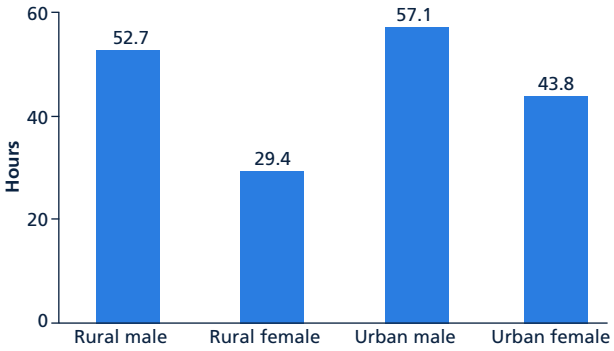
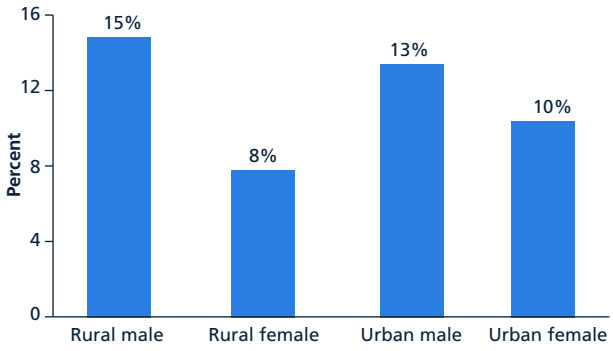


Figure 73
Share of those working less than 35 hours per week willing and available to work more



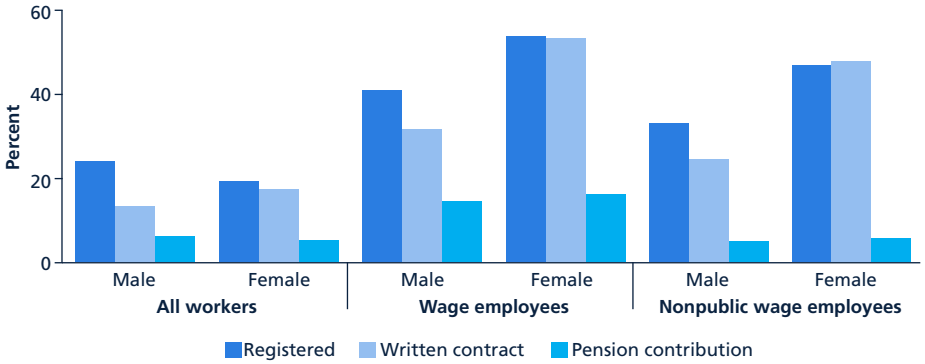
Source: LFS 2016.

The determinants of hours worked (based on a regression analysis) are similar to those of LFP. Marital status and number of young children, as well as educational level and sector of employment, are key determinants of hours worked. Being married is negatively associated with female labor supply but positively associated with that of males, as married men tend to be the main breadwinner in the household. Increases in the number of young children further decrease the number of hours supplied for women, whereas this has little effect on male labor supply. As discussed above, nonagricultural work is strongly associated with hours worked for the main job for both sexes. However, agricultural workers are more likely to report having a second job (15 percent) relative to workers in other sectors (9 percent).

Rates of formality have increased over time in manufacturing and for urban women, but have stagnated for other groups and other sectors of employment

Formality can be measured in various ways such as shares of workers in wage employment, those working in registered firms, those with a written contract, and those with a pension contribution. Depending on the indicator used and the population group of interest, the prevalence of formal employment varies widely (figure 74).[3] Firm registration is more common than written contracts or pension contributions, with the latter available almost only in public firms. Based on the criterion of holding a written contract, 35 percent of wage workers are formal, with the female share of formality much higher than that of the male. Higher formality among female wage employees is likely associated with the dominance of manufacturing jobs for females.

Figure 74
Share of formal workers by alternative measures and population groups

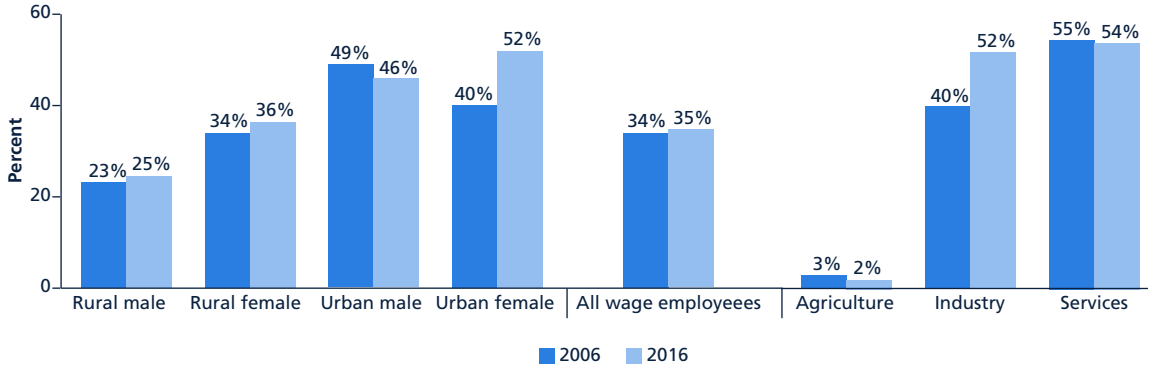


Source: LFS 2013.

[3] See Kumar et al. (2017) for further discussion of the definitions of formality in Bangladesh.

When job quality is measured by formality of employment with a written contract, it also shows very mild progress over time (figure 75). The overall share of formal workers increased by only 1 percentage point—from 34 to 35 percent—between 2006 and 2016, driven by the increase in share among urban females (from 40 to 52 percent), particularly in industry. For other groups and other sectors, rates of formality have stagnated or even slightly decreased. It is also clear that agriculture is predominantly informal, and thus formality among rural workers is low. This regional disparity in formality decreases sharply when agriculture is excluded, although formality is still considerably more common in urban areas (49 percent) than in rural (37 percent).

Figure 75
Share of wage workers with a written contract over time



Source: LFS 2006, 2016.

Rates of formality among wage employees vary by firm size and sector. Formal employment is very rare in microenterprises with fewer than five employees, which employ the large majority of Bangladeshi workers. In contrast, over 60 percent of workers in firms with more than 25 employees are employed in a formal job (figure 76). Formal jobs are very rare in construction or mining as well as in agriculture, but widespread in manufacturing, finance/business services, and community/family services (figure 77). Despite relatively low levels of education among workers in manufacturing, the sector offers better opportunities for formal work relative to other sectors with a similar use of low-skilled labor.

Figure 76
Percentage of formal workers by firm size

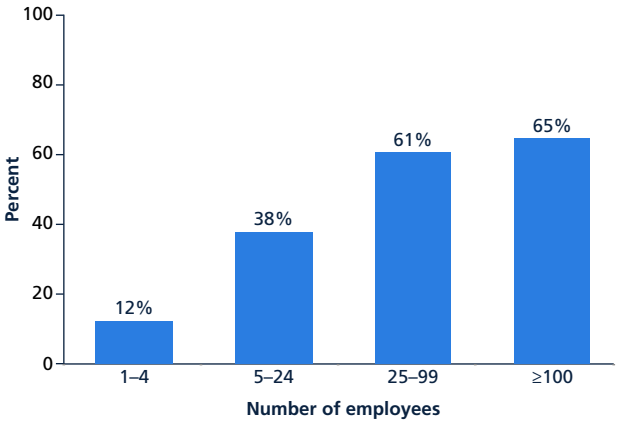
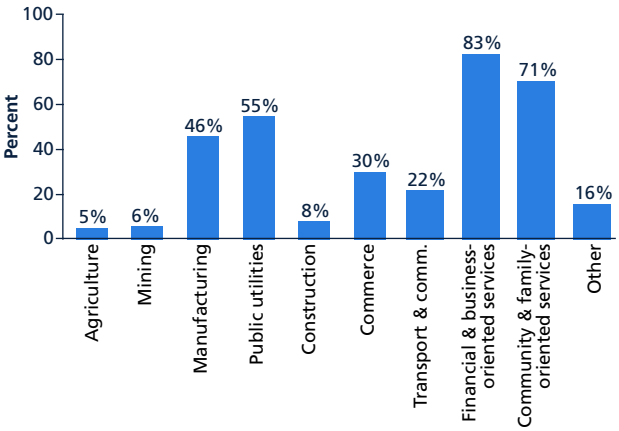


Figure 77
Percentage of formal workers by sector



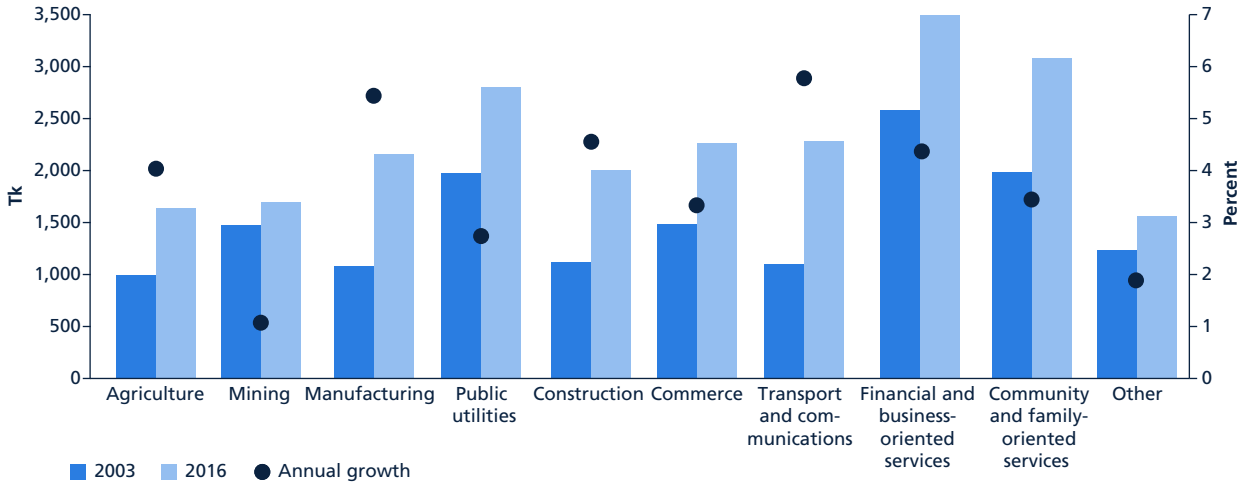
Source: LFS 2016.

6. DETERMINANTS OF EARNINGS

Earnings growth has been robust among wage workers, but varies widely across sectors

We examine the issue of job quality with data on wages, although they are available only for wage employees. There are significant differences in earnings and the pace of their growth across employment sectors among wage employees (figure 78). In 2016, earnings from financial and business-oriented services, public utilities, and community and family-oriented services continued to be the highest, as they were in 2003. However, wage growth was modestly equalizing, with higher-paying sectors experiencing lower growth rate. While the annual growth rate of the three high-productivity services sectors was around 3.8 percent per year between 2003 and 2016, that of the lowest-earning sectors (including agriculture, manufacturing, construction, and transport and communications) in 2003 was about 5.5 percent on average.

Figure 78
Real weekly wage in 2003 and 2016



Source: LFS 2003, 2016.

Youth are benefiting from rapidly improving educational outcomes as well as increases in better forms of employment, which are translating into improved earnings

The increase in earnings over time is likely associated with the expansion of education. Both men and women have achieved significant progress in education over time, but women's progress was more rapid, and the gender education gap declined substantially. The decrease in the share of those with no education and the expansion of secondary and higher education is notable (figure 79).[1] The diminishing gender education gap is clearly presented in educational attainment by birth cohort (figure 80). The number of years spent in school by females born in 1960, for instance, was half the number completed by males; but females born in the 1990s

[1] Although the 2013 sample seems to have a slight overrepresentation of those with secondary and above education, overall education trends show steady progress.

stay in school almost as long as males, with the average years of schooling being 7.0 and 7.5 for females and males, respectively.

Figure 79
Distribution of educational attainment by sex

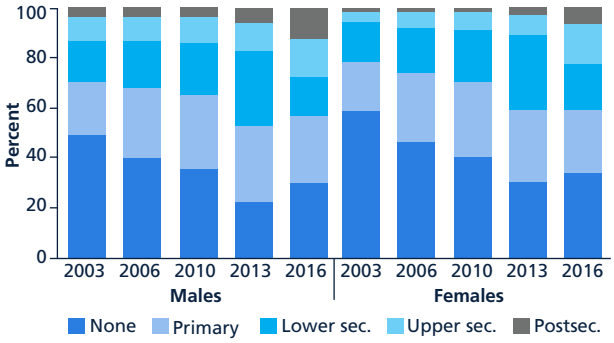
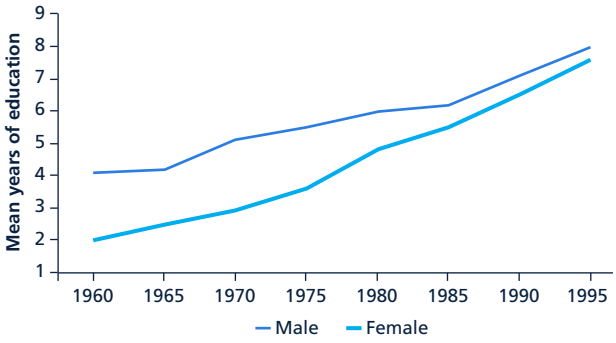


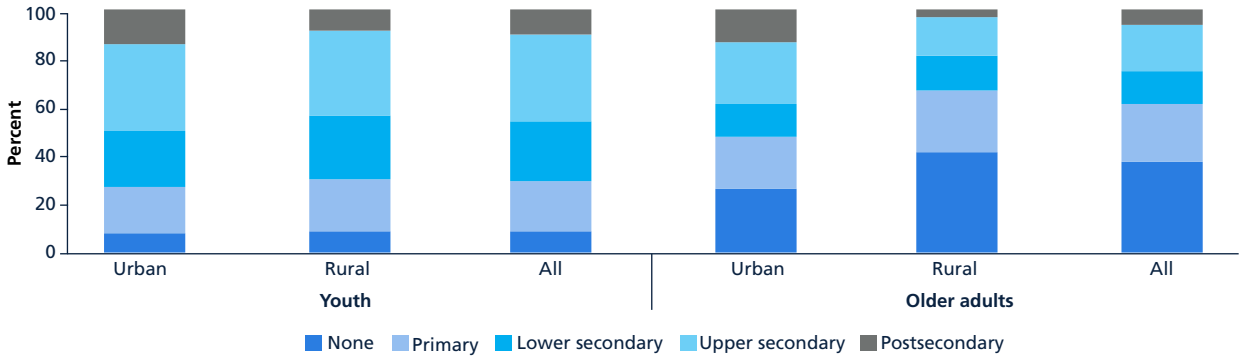
Figure 80
Mean years of schooling by birth cohort



Source: LFS 2003, 2006, 2010, 2013, 2016.

Educational attainment has been increasing steadily among younger cohorts, providing favorable conditions to accessing better jobs among youth. With the substantial and rapid progress in education, youth today have far better educational outcomes than their older counterparts (figure 81). The striking difference between youth and older adults in their educational attainment is not only the progress in education, notably the expansion of primary schooling replacing the "no education" group, but also the equalization of access to education. The educational attainment of youth varies little with location except for the postsecondary level, whereas that of the older group shows significant urban-rural disparities.

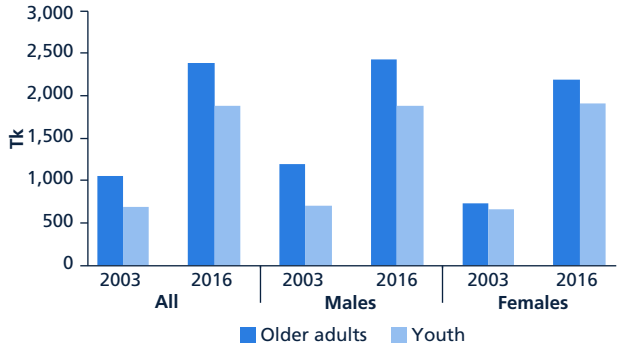
Figure 81
Distribution of educational attainment by youth versus older adults: by sex and location



Source: LFS 2006, 2016.

With this notable progress in education, the wage ratio between older adults and youth has decreased over time (figure 82). Given their limited experience in the labor market, young workers tend to receive less compensation than their older counterparts; however, the gap is partially offset by better education. In 2003, the wage of older adults was 53 percent higher than that of youth, but it is only 26 percent higher in 2016. Such a reduction in the wage gap is not as prominent for females compared to males, despite the faster progress in education and transformational changes experienced by young women. This disparity may be because the pool of the young female workforce was broadened in 2016 compared to 2003, when only selective and highly educated female workers tended to engage in wage employment.

Figure 82
Trends in weekly wages by sex: youth versus older adults

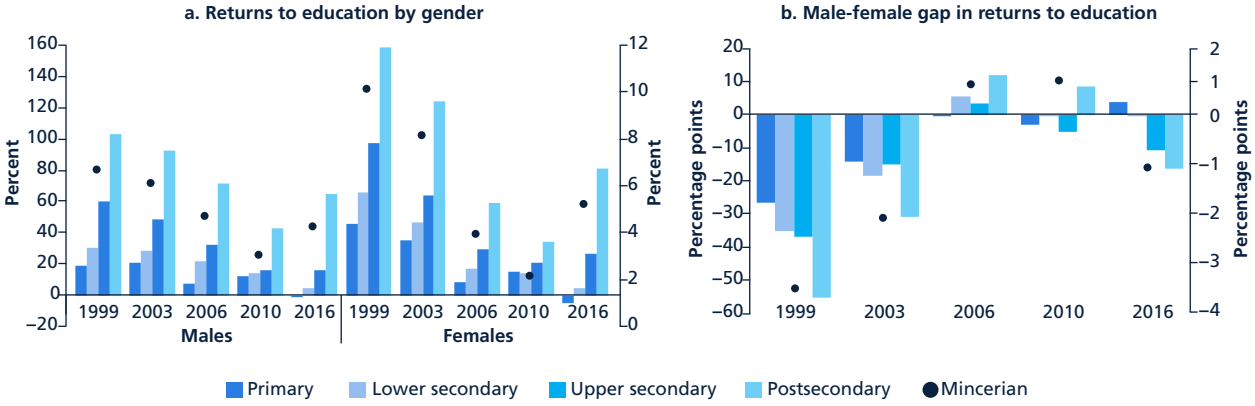


Source: LFS 2003, 2016.

There are significant returns to education, but they are decreasing over time

Earnings are positively correlated with education level, with the largest effect at the postsecondary level, but the returns to education have been declining. In 2016, those with postsecondary education earned over two times more than those with secondary education. An observed trend is that the returns to education (at each level of education or average years of schooling in the Mincerian results) have been declining over time for both sexes, but more rapidly for women, probably due to an increased supply of educated individuals (figure 83a). Along with this, the strong selectivity of female workers in earlier periods became muted (figure 83b), as the female premium in the returns to education substantially decreased. This muted selectivity is likely associated with the major expansion of education opportunities over the last generation, including the virtual elimination of the previously large gender gap.

Figure 83
Returns to education by sex and male-female gap in returns

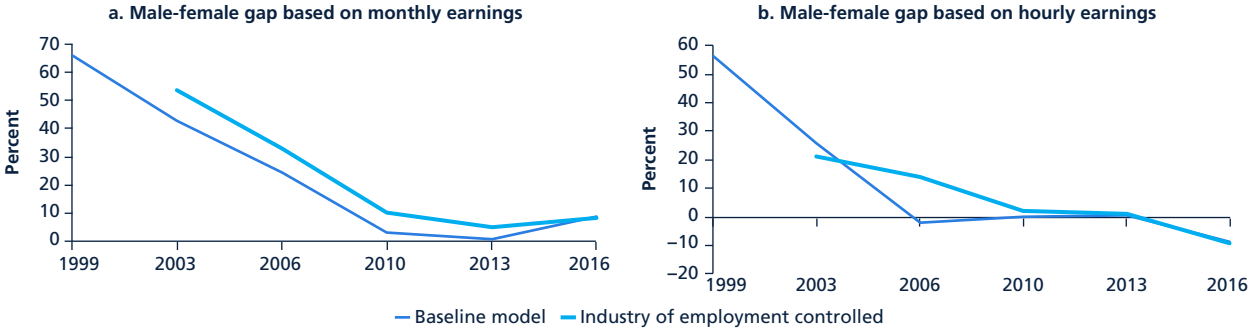


Source: LFS 1999, 2003, 2006, 2010, 2016.
Note: Wages and earnings are reported only for wage employees and day laborers; thus, a subpopulation of the labor force with earnings information is used in the analysis.

Reflecting changes driven largely by the urban industrial sector, the gender wage gap among wage employees has declined steadily over time for both monthly and hourly wages (figure 84). A small gap remains with regard to monthly wages but disappears entirely when measuring hourly wages, indicating that the gender earnings gap derives from shorter hours of work for females compared to males. The reduced gender wage gap also implies that the appealing aspect of female labor (i.e., lower wage rate) compared to the male counterpart

with equivalent educational attainment is now less pertinent and indicates a more competitive environment for female workers. With the recent slowdown in manufacturing job growth, this changing environment for women may in part explain the recent reversal in female LFP for urban females.

Figure 84
Trends in gender wage gap



Source: LFS 1999, 2003, 2006, 2010, 2013, 2016.
Note: Demographic characteristics (age and education), urban, and localities, are all controlled for in the regression analysis.

The formal sector enjoys a wage premium, although even within the formal sector wage levels and working conditions remain challenging

Earnings increase significantly with formality even after controlling for other differences. Figure 85 reports the monthly wage of wage workers by their formality status with written contracts. Dispersion in wage across different sectors is larger among formal workers, and there is a significant gap between formal and informal employment within the same sector. The wage gap in hourly wages between formal and informal employment is further investigated using a regression model in figure 86. The results show that the wage rate gap remains significant when worker's individual characteristics and location are accounted for, although the magnitude decreases. Based on the full specification, it is observed that the gap is significant; formal workers earn on average 10 percent more per hour than informal workers with similar characteristics.

Figure 85
Worker productivity (proxied by wages) in the formal and informal sectors

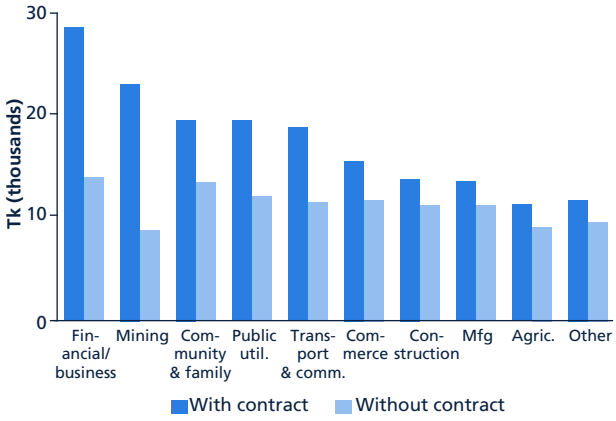
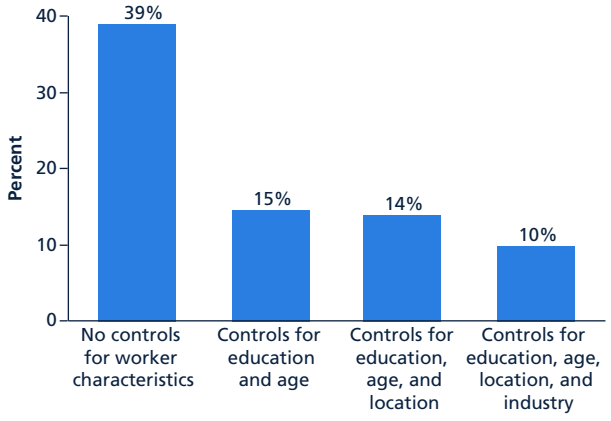


Figure 86
Ratio of worker productivity in formal to informal sector (proxied by hourly wages)



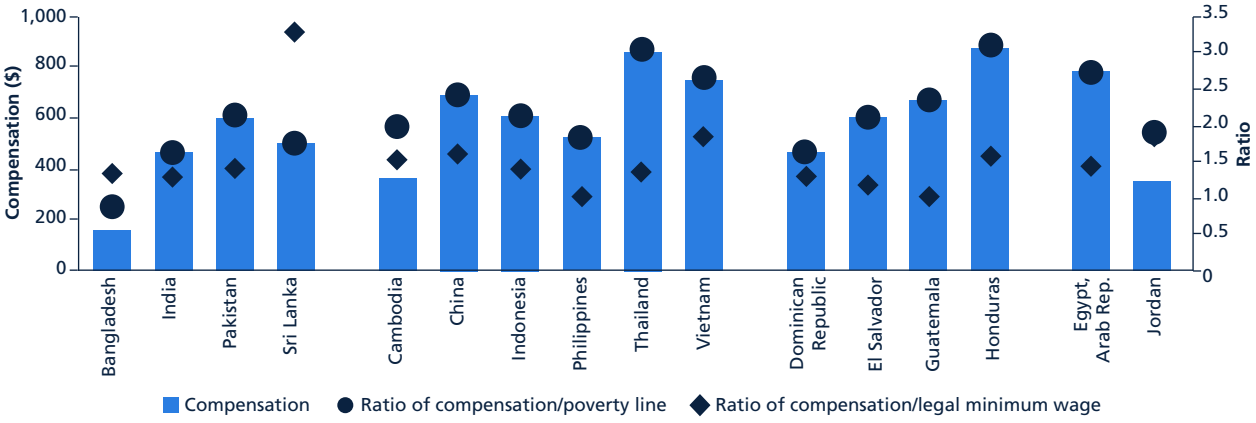
Source: LFS 2016.

Labor regulations established by government—including hiring and firing rules, terms of employment contracts, provision of paid and unpaid leave, minimum wages, and rules on workplace health and safety—can

affect formal sector worker wages. Issues related to labor regulations tend to receive little attention, particularly in low-income countries, because a large share of employment is not wage and salary work. However, in 2013, the Bangladesh government carried out a nationwide reform to introduce and enforce more stringent labor laws, particularly in the export-driven RMG sector. The most recent labor law before 2013 was the Bangladesh Labour Act in 2006, which extensively consolidated more than 25 labor-related acts and ordinances. Despite significant improvements in the act,[2] it had limitations in terms of providing adequate worker protection and faced significant pressures for reform in response to the factory collapse in 2013.[3] Increased international scrutiny over working conditions and worker rights also added pressure for significant reforms. As a result, the act was substantially amended in 2013, extending the scope of the law beyond health and safety regulations and promoting the overall bargaining power and well-being of workers.

The monthly minimum wage in the RMG sector increased from Tk 3,000 ($38) to Tk 5,300 ($68), as part of reform in labor regulation. The average monthly wages in the garment sector have increased from Tk 6,500 to Tk 9,200—over 40 percent—between 2010 and 2016; in contrast, monthly wages in the nongarment manufacturing sector increased from Tk 7,200 to Tk 9,000, or 25 percent. Despite recent increases in the minimum wage and the fact that factories typically pay above the minimum wage, average pay in Bangladesh factories is lower in nominal terms compared with international peers. Moreover, average factory compensations are among the lowest relative to the minimum wage—and by far the lowest relative to national poverty lines (figure 87). More efforts are being made toward worker welfare: for instance, the new law requires that factories establish a workers' welfare fund in which they set aside 5 percent of net profits to improve worker living standards.

Figure 87
Average RMG factory compensation, minimum wage, and poverty lines: Bangladesh versus global peers in RMG sector, 2015



Source: Fair Labor Association 2016.
Note: Compensation measured in 2015 prices at purchasing power parity (PPP); poverty line based on three adults equivalent.

[2] See Cho (2016) for a detailed discussion.

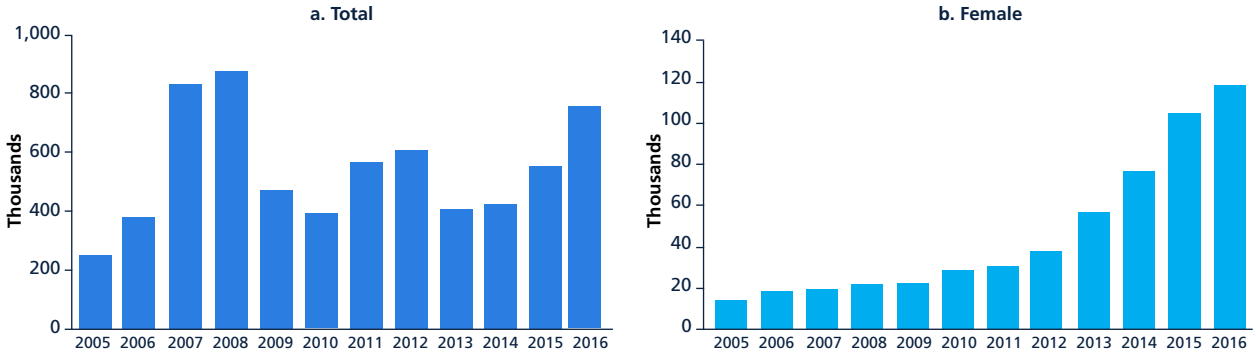
[3] In April 2013, an eight-story building containing several clothing factories—Rana Plaza—in Savar (near Dhaka) collapsed, killing more than 1,100 and injuring 2,500. The disaster highlighted serious endemic health and safety problems in the Bangladesh RMG sector (and beyond) and led to a major response by the government, RMG brands, and donors to address problems in compliance with health and safety standards across the supply chain.

7. INTERNATIONAL MIGRATION

In the context of a more challenging domestic labor market in recent years, a growing number of workers are seeking overseas employment. For the past 10 years, an average of 400,000 Bangladeshi workers have been migrating abroad each year, although the number has fluctuated annually (figure 88a).[1] The number of outmigrants peaked between 2007 and 2008, before the global recession, when the demand for labor was still high. After slowing during the recession (2009 and 2010), it rebounded in 2011 and 2012, and has been rising steadily since 2013. In 2016 alone, more than 750,000 Bangladeshi workers left the country, representing a 35 percent increase over the previous year, which was already 30 percent more than the number of migrants in 2014.

A rapid increase in the number of female migrants after 2012 is particularly striking and contrasts with the low labor market participation rates among women in the domestic market (figure 88b). The increase was particularly pronounced between 2014 and 2015, boosted by a memorandum of understanding (MOU) signed with Saudi Arabia, which focused specifically on recruiting female migrants. In 2016, close to 120,000 Bangladeshi women migrated abroad, comprising 16 percent of the total migrants that year and pointing to the rising importance of migration as an employment strategy for women. Saudi Arabia received more than half of the female labor migrants from Bangladesh in 2016. Noting that LFS 2016 shows that the number of working-age women employed in the labor market was 16.5 million, the number of outmigrants is equivalent to as much as 0.7 percent of the total employed. The increase in female migration is phenomenal in a region where a strong gender norm exists and often limits women's economic activities, and where a ban on female migration used to be imposed. In other South Asian countries—including India, Nepal, and Pakistan, which are also experiencing a growing outmigrant population—the female share of outmigrants is meager (less than 5 percent in Nepal and below 1 percent for Pakistan).[2]

Figure 88
Annual number of outmigrants, 2005–16



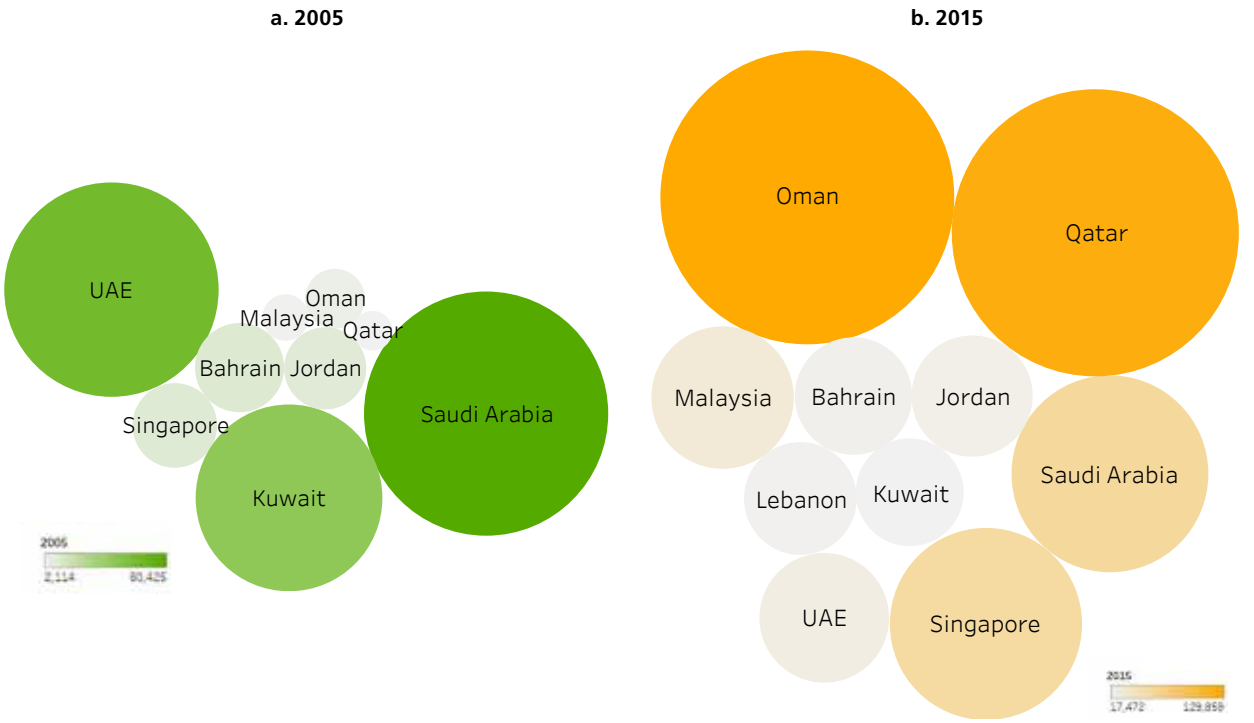
Source: Bureau of Manpower, Employment and Training.

[1] These data imply that about 0.7 percent of the labor force has been leaving Bangladesh every year, a figure that has risen to over 1 percent in recent years (2015–16).

[2] By comparison, in East Asian labor-exporting countries such as Indonesia and the Philippines, women make up more than two-thirds of migrant workers. Women also constitute around half of the estimated 214 million migrants worldwide (World Bank 2012b).

Bangladeshi outmigrants are concentrated in a small number of destination markets, although the destination countries are becoming more diversified over time (figure 89). In 2005, the five main destinations of Bangladeshi workers received 82 percent of migrants, with Saudi Arabia, the United Arab Emirates (UAE), and Kuwait among the leading destinations. In 2015, while the Middle East still remained by far the largest destination markets for Bangladeshis, Oman and Qatar became the largest receiving countries, with Singapore emerging as the third largest destination; this shift partly reflects changes in economic conditions and political relations with the host countries. The share of migrants going to the five largest destinations has declined, with 72 percent of Bangladeshi workers going to the top five destinations in 2015 compared to 82 percent in 2005. Looking only at female migrants, the concentration of destination is more evident, with the majority heading to Saudi Arabia (20 percent in 2015; 58 percent in 2016), Jordan (21 percent in 2015; 19 percent in 2016), the UAE (23 percent in 2015; 4 percent in 2016), and Oman (16 percent in 2015; 11 percent in 2016), mostly as domestic workers.

Figure 89
Countries of destination, 2005 and 2015



Source: Bureau of Manpower, Employment and Training.

Job types are also undiversified, and labor outmigration from Bangladesh has traditionally been dominated by unskilled occupations.[3] Key words based on the occupations of outmigrants in 2015 capture the dominance of a few select jobs (figure 90). Many male migrants went abroad for jobs associated with construction, but the types of occupations seem diverse within the sector. In contrast, women are predominantly employed as domestic workers or house workers, followed by garment-related manufacturing such as machine operations, tailoring, and sewing.

[3] See ADB and ILO (2016) for further discussion.

Figure 90
Key words for occupations in 2015 by sex

Source: Derived from Bureau of Manpower, Employment and Training data (2015).
Note: Only occupations with more than 20 observations are included.

A combination of push-and-pull factors, both internal and external, has spurred large-scale outmigration from Bangladesh

In the domestic labor market, as discussed in previous chapters, quality job creation lags behind the increase in number of workers resulting from demographic transition, pushing workers to seek outside options. The major pull factor comes from greater earnings in the overseas market. Some studies that have investigated the labor market outcomes of foreign workers in the UAE find that the annual average wage of workers from Bangladesh, India, Pakistan, and the Philippines, in a sample of 10,954 people, was about $7,000 (Al Awad 2010; Tong 2010). Similarly, the average annual earnings of temporary migrant workers through the Employment Permit System in the Republic of Korea is about $14,800 (Cho et al. 2017).[4] Given that GDP per capita measures of annual income are estimated to be $1,200, $1,600, $1,400, and $2,900 for Bangladesh, India, Pakistan, and the Philippines, respectively, the earnings gains by seeking employment opportunities in overseas markets are substantial.[5]

Simultaneously, there exists a strong demand for low- and semi-skilled labor in the nontraded services sector of countries particularly in the Middle East. The Gulf Cooperation Council (GCC) countries, where national workers are mostly employed in the public sector, attract many foreign workers to fill labor shortages in occupations in the private sector that nationals are unwilling to take. The share of foreign workers in GCC countries has been high and increasing (figure 91), and there is strong prospect for further demand for foreign labor based on the simulation of job creation and size of the labor force in GCC countries (figure 92).[6] Overall demand for foreign workers is expected to continue in the GCC labor market, and some notable projects (e.g., Qatar's 2022 World Cup Stadium and associated large-scale infrastructure construction, metro and airport projects in Kuwait, megacities and real estate development in Abu Dhabi and Dubai in the UAE) suggest positive job prospects for foreign workers, the majority of whom are from South Asia (GIZ and ILO 2015). Nonetheless, Bangladeshis face competition from other countries including Egypt and Pakistan, which share similar religious and cultural norms, as well as India and Nepal from within the region. This likely affects the number of Bangladeshis heading to these destinations.

[4] Korea's Employment Permit System is a government-to-government arrangement between Korea and the governments of 15 Asian countries—Bangladesh, Cambodia, China, Indonesia, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, Timor-Leste, Uzbekistan, and Vietnam.

[5] WDI Database. GDP per capita is measured in current 2015 U.S. dollars.

[6] See IMF (2014) for a more detailed analysis.

Figure 91
Numbers of national and foreign workers in select GCC countries

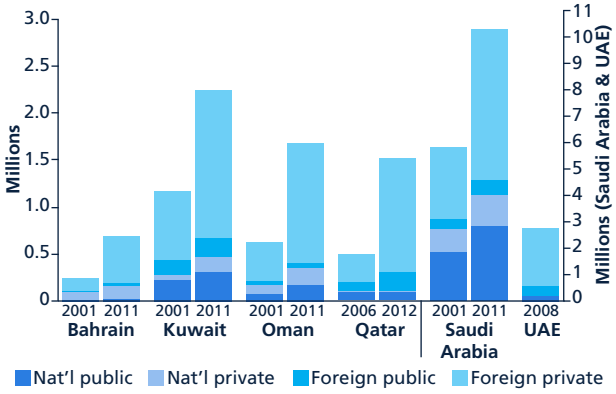
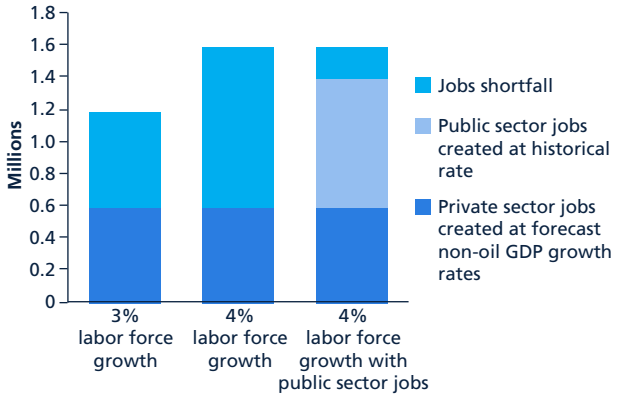


Figure 92
Prospect of foreign labor demand 2013–19



Source: IMF (2014).

Government support to facilitate employment in the overseas market likely has contributed to increases in the volume of outmigration. The government of Bangladesh signed bilateral agreements with Malaysia and Saudi Arabia in 2012 and 2015, respectively, and has government-to-government (G2G) and MOU arrangements in place with several other countries.[7] G2G discussions with the government of Malaysia were initiated with a demand for 30,000 Bangladeshi workers in Malaysia's plantation sector in 2012. In 2016, after a few years of implementation challenges, the G2G was amended as a G2G Plus scheme, in which private recruitment agencies are allowed to facilitate worker recruitment with an employment target for 1.5 million Bangladeshi workers in the next three years in sectors beyond plantations. In 2015, Bangladesh and Saudi Arabia signed an MOU for employment arrangements with the lift of a six-year ban for Bangladeshi workers in Saudi Arabia. This agreement placed an emphasis on recruiting domestic workers from Bangladesh to be deployed to Saudi Arabia, which is one of contributing factors to the rapid increase in female migrants.[8]

A decrease in Middle East demand for workers from India may also be associated with increases in migration among Bangladeshis. In 2013, the government of India introduced an eMigrate System for online recruitment and worker registration, while revising minimum wage referrals for Indian workers upwards. For instance, the demanded minimum wage per month for Indian workers increased from around SRI 670–800 ($179–$213) to around SRI 1,200–1,500 ($320–$400) in Saudi Arabia. The difficulties associated with navigating the online system and the higher minimum wages demanded may have driven employers away, as reflected in the drop in number of Indian workers heading to Saudi Arabia from 330,000 in 2014 to 165,356 in 2016—with simultaneous increases from other countries such as Bangladesh and Pakistan.[9]

Migrant workers tend to be young males with a moderate level of education

Data from the SIR (2016) indicate that most migrants are young, with close to three-quarters below the age of 40 (box 2). This pattern is consistent for both men and women and can be explained partly by the physically demanding nature of the work carried out by most migrants. Considering that migrants are generally young, we compare their educational attainment with the general population between ages 20 and 40 (figure 93). As migrant workers tend to engage in low- and semi-skilled jobs, the share of migrant workers with upper

[7] These include countries in the Middle East such as Jordan, Kuwait, Oman, Qatar, and the UAE.

[8] The G2G with Saudi Arabia, like the G2G Plus arrangement with Malaysia, significantly involves private sector recruiting agencies for intermediation of employment and is often referred to as B2G (business to government) instead of a G2G arrangement. The Bangladesh Association of International Recruiting Agencies has acquired a separate agreement with its Saudi counterpart to facilitate migration and receive commissions from employers while utilizing the Bureau of Manpower, Employment and Training infrastructure for registering, tracking, and training workers.

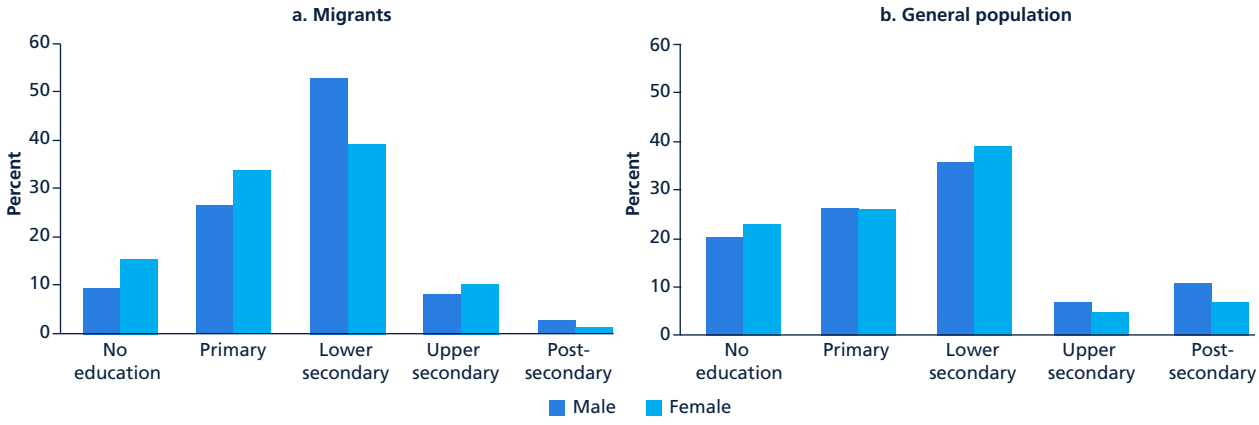
[9] Source: eMigrate System at https://emigrate.gov.in.

BOX 2: DATA AVAILABLE AND USED FOR PROFILING MIGRANT WORKERS

Despite the growing size of the workforce gaining employment in the overseas market, significant data limitations mean that little is known about their profiles and determinants of migration. This report references or analyzes the following data sets.

- **The Household Income and Expenditure Survey.** The international migration module of this nationally representative survey conducted in 2010 by the BBS provides useful information on migrant workers' profiles, but is outdated, considering the rapidly changing international migration environment.
- **The Returning Workers Survey.** This survey, conducted by the International Labour Organization and Bangladesh Institute of Labour Studies from November 2013 to February 2014, focuses on returnees, and is thus useful in understanding their characteristics and motivations, but provides limited information on outmigrating workers or workers currently abroad.
- **The Survey on Investment from Remittances.** The SIR, conducted in 2016 by the BBS, is the newest addition to the list of surveys providing information on migrant workers. The caveat is that the data are constructed for a sample of households reporting positive remittances received from overseas migrants (instead of having a household member work in the overseas market). Therefore, households surveyed on these data may not be a representative sample for migrants. However, the data provide useful information on the characteristics of migrant workers as well as remittance-receiving households, and describe patterns of remittance use. Therefore, this report uses the SIR to better understand the characteristics and remittance patterns of international migrant workers while referencing studies that use other data sets.

Figure 93
Distribution of educational attainment for all migrants versus the general population age 20–40



Source: SIR 2016.

secondary or higher education is smaller than that of the general population. However, the majority of migrants' educational attainment is concentrated around primary and lower secondary education, with a smaller share of those with no education than the young population as a whole. Findings from the World Bank (2012b), using the 2010 Household Income and Expenditure Survey, show similar results that migrant workers are generally young, with the probability of migration increasing up to age 43 and then declining. With respect to education, it is found that the probability to migrate increases with years of education, up to secondary level, after which it declines.

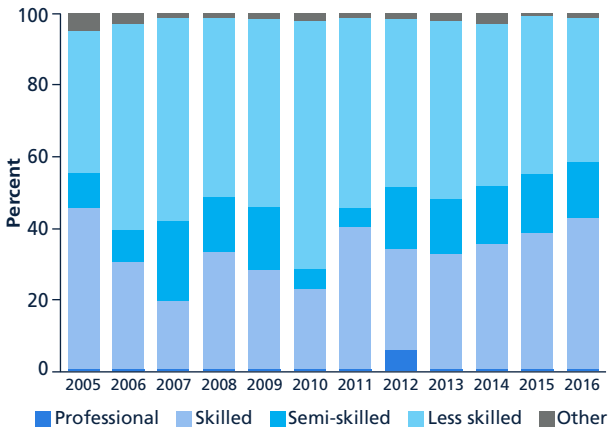
The Bangladesh Bureau of Manpower, Employment, and Training (BMET) classifies workers as professional, skilled, semi-skilled, and less skilled, according to type of occupation (figure 94). The share of less-skilled workers among labor migrants has been volatile, but steadily declining since 2013 with the overall increase

of migration (figure 95). While this partly reflects the progressive increase in educational attainment in the population, the change in skills composition over the years is also driven by changing environments from the demand side in destination markets. Such changes in skills demanded are expected to continue in the coming years as destination countries increase their intake of migrant workers in booming sectors beyond construction such as hospitality and retail. The share of professionally skilled migrants with postsecondary education remains extremely low, however.

Figure 94
Skills classifications of major occupations

Professional	Skilled	Semi-skilled	Less skilled
Doctors	Mechanics	Farmers	Cleaners
Engineers	Welders	Gardeners	Housekeepers
Architects	Masons	Helpers in trades	Laborers
Teachers	Carpenters		General workers
Accountants	Electricians		
Computer programmers	Painters		
Pharmacists	Cooks		
Nurses	Drivers		
Foremen	Plumbers		
Sales personnel	Tailors		
	Blacksmiths		
	Tile Fixers		
	Operators		

Figure 95
Skills distribution of outmigrants

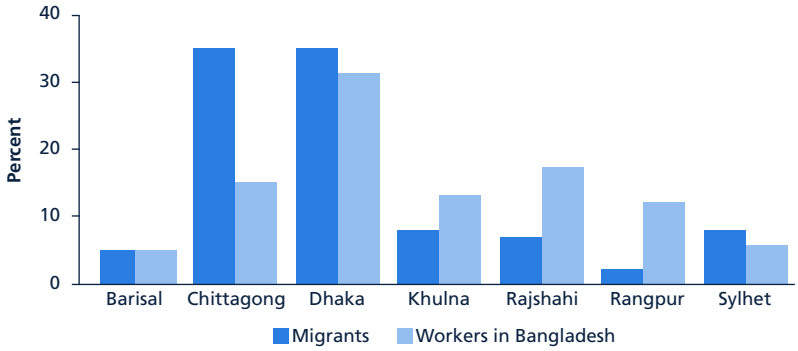


Source: BMET.

There exist strong geographical disparities in access to migration, reflecting the role of social networks prominent in megacities in making migration decisions and finding overseas opportunities

In 2016, the large majority of migrants (70 percent) came from the Chittagong and Dhaka divisions in the east of the country; the population share of the two divisions is about 52 percent. Migrants from the Chittagong division are largely overrepresented among total migrants when compared to their share of the employed in Bangladesh, suggesting disparities in access to migration opportunities (figure 96). In contrast, workers in the west of the country appear to be left out from migration opportunities. Rangpur represents 11 percent of the total Bangladeshi population, but only 2 percent of migrants. The east-west divide in propensity to migrate abroad has persisted for some time, with the pattern showing little change since 2005.

Figure 96
Distribution of geographic location among migrants versus workers in Bangladesh, 2016

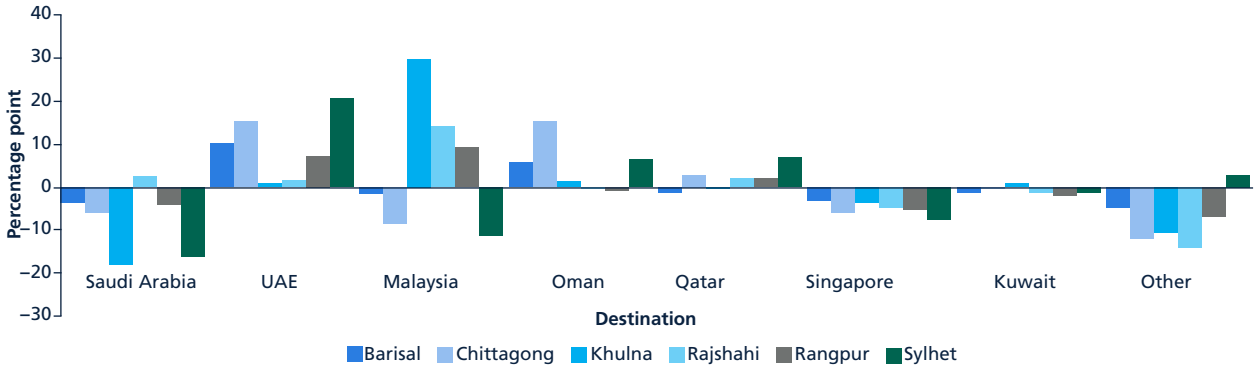


Sources: BMET; LFS 2016.

A multinomial logit regression analysis on the countries of destination shows that division of origination is more strongly associated with country selection than individual characteristics. Except for the "other" category countries (e.g., Jordan, Korea, and Lebanon) having a large association with indicators of male and post-tertiary education, the magnitude of correlation between educational attainment and sex and destination country is at most 10 percent. However, the association between division of origination and destination country is large (figure 97). For instance, individuals from Khulna compared to those from Dhaka are 30 percentage points more likely to migrate to Malaysia.

A possible reason for these strong regional effects, as pointed out by the World Bank (2012b), could be the weak migrant networks from underrepresented regions, as prospective migrants tend to rely on their networks with existing migrants to get information about finding employment opportunities, the migration process, and life in destination countries. International evidence suggests that the migration flow sustains itself independently of the initial conditions that caused the flow, because a sufficient pool of past migrants at a destination reduces the costs of new outmigration flows once migrant networks are established. In Bangladesh, Litchfield et al. (2015) find that networks play a strong role in both the decision to migrate as well as the choice of the destination country. Das et al. (2014) find that community networks (defined as the total migration from a village) are significantly correlated with lower risk of failed migration (defined as the number of migrants who give up attempting to migrate after making an initial investment for migration).

Figure 97
Determinants of destination countries: division of origination



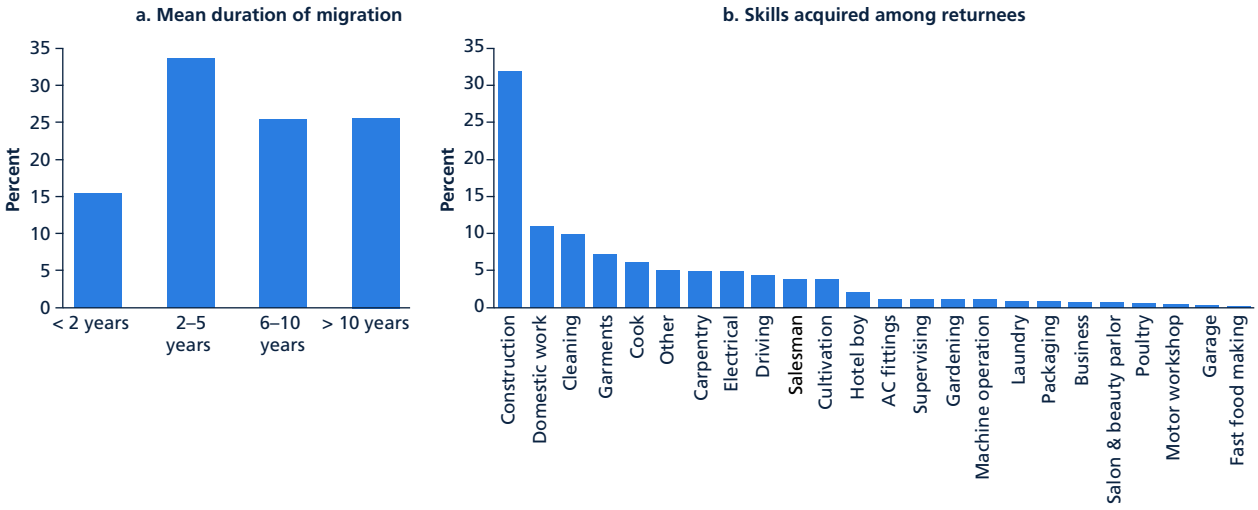
Source: SIR 2016.
Note: Base category = Dhaka.

Labor outmigration is largely temporary, although circular migration is common

Estimates from the Returning Workers Survey indicate that around 55 percent of migrants return within two to five years, while a quarter return within five to eight years (figure 98a). This short duration is largely driven by the temporary nature of the employment contracts of foreign workers in Middle Eastern countries, which stipulate a fixed-term employment period. From the perspective of Bangladesh's labor market, temporary migration alleviates concerns regarding skills and brain drain, which is often pointed out as a problem of international labor mobility as part of employment policies. The survey reveals that more than half of returnees are in the age 25–34 category. They possess skills in a large number of areas, but primarily in construction, with over 30 percent of returnees reporting having skills in this area (figure 98b). If those skills are transferable to the local market, it could generate a potential for productive employment and positive spillovers locally.

Reintegrating returning migrants is an important policy agenda that requires a better understanding of their preferences as well as constraints. Three-fourths of male returnees indicated that they were interested in self-employment, while only 20 percent were interested in finding a job in Bangladesh. For females, finding a job was more commonly cited (45 percent) than self-employment (20 percent). An important finding of the survey is that about 50 percent of all returnees reported they intended to migrate abroad again, suggesting that circular migration is widespread.

Figure 98
Mean duration and skills acquired among migrants

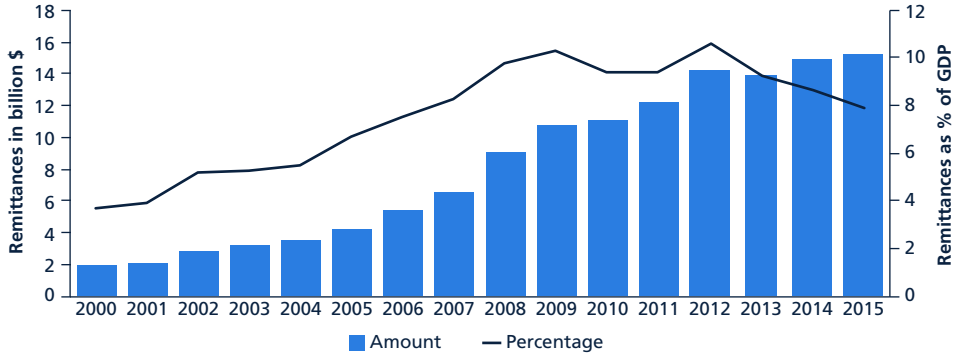


Sources: Returning Workers Survey.

Remittances are critical to the Bangladesh economy and have been an important driver of jobs, growth, and poverty reduction

One of the major outcomes of high labor migration is the large remittance flows coming into Bangladesh. As discussed above, Bangladesh ranked as the 10th highest remittance-receiving country globally in 2015, and remittances were a major source of income in the country with around $15 billion flowing in that year (figure 99). By contrast, the amount of foreign direct investment and foreign aid received was $3.4 billion (2015) and $2.4 billion (2014), respectively.[10] The three major sources of remittances in 2016 were Saudi Arabia, the UAE, and the United States. The recent decrease in remittances as a share of GDP despite increases in the number of outgoing migrants and in the amount of remittances suggests that declining and low oil prices may have pressed down workers' actual wages and thus remittances.

Figure 99
Annual remittance flows



Sources: BMET (for remittances); WDI Database (for remittances as a share of GDP).

[10] Source: WDI Database.

International evidence suggests that migration and remittances are important contributors to household income and poverty reduction, through which health and educational outcomes of household members can be improved (Acosta et al. 2008; Lokshin, Bontch-Osmolovski, and Glinskaya 2010; Yang 2011). In addition to the impact on migrant households, remittances also have indirect economic benefits by increasing demand for goods and services in the local economy with the increase in the purchasing power of migrant households. Zooming out even farther to the national economy, remittances of the scale observed in Bangladesh have important implications on the balance of payments and foreign exchange reserves.

Discussions on the potential impact of remittances lead to a debate on whether remittances are used for (short-term) consumption versus (longer-term) investment. While remittances used for consumption certainly help poverty reduction, they also need be channeled toward investments (e.g., business activities) for sustainable livelihoods for households and for the development of the overall economy. Studies have examined whether there have been increases in investments in human capital and business activities, repayment and reduction of debts, and savings.[11]

As emphasized by the World Bank (2012b), remittances in Bangladesh are directly associated with poverty reduction by increasing the income of migrant households, but also indirectly by spurring demand for goods and services. The marginal impacts of remittances are greater for poorer income groups (figure 100), highlighting the potential for remittances to reduce poverty. In 2012, poverty incidence among migrant households was only 10 percent (ILO 2014), against 31.5 percent nationwide, although it is important to note that migrant households are relatively better off to begin with, as discussed below. An analysis (Szabo et al. 2016) found that remittance-receiving households were more likely to be food secure than households without remittances, when food security is measured by access to and availability of food. Remittances play an important role in helping households transition out of poverty in rural Bangladesh. Specifically, among households that transitioned from poor or vulnerable to nonpoor over the period 2000–08, remittances represented about 40 percent of the household's total income (figure 101); although this includes remittances from both internal and international migrants. This share was even larger among those transitioning from poor to nonpoor status, representing close to 50 percent of the household's total income.

Figure 100
Ratio of remittances to pre-remittance household income by income quintiles

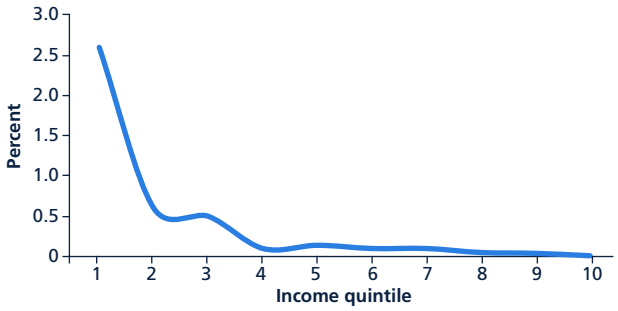
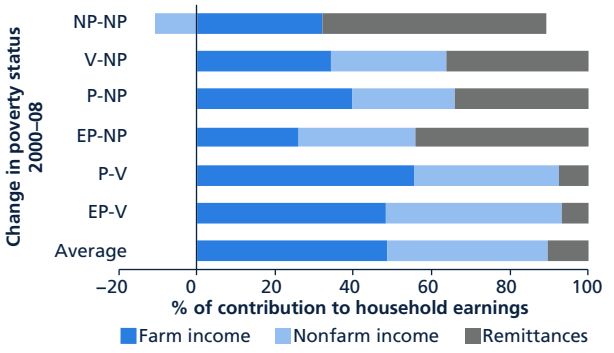


Figure 101
Contribution of earnings sources toward moving out of poverty



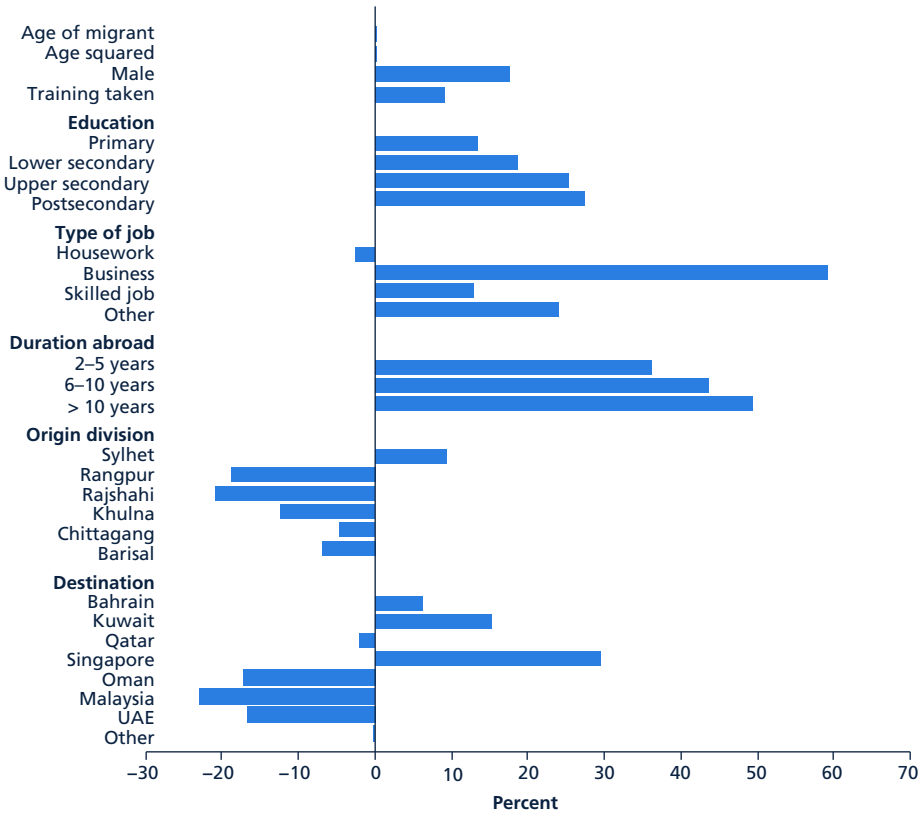
Sources: Gautam and Faruqee 2016; World Bank 2012b.
Note: EP = extremely poor; P = poor; NP = nonpoor; V = vulnerable. Average = average rural household.

[11] See Bouoiyour and Miftah (2015); Lucas and Stark (1985); McKenzie and Rapoport (2010); Stillman, Gibson, and McKenzie (2012); and Yang (2011).

Remittances received are used for various purposes—including consumption, loan repayment, and housing investment—but for relatively little investment in business activities

The SIR (2016) reports the use of remittances along with total amount received. The average remittances received per household over the past year was close to Tk 302,000 ($3,852), 68 percent more than the earnings of urban, nonagricultural workers in the domestic market.[12] Regression analysis shows several important determinants of the amount of remittances received by households (figure 102). The level of remittances reflects level of wage, although the share of remittances out of earnings may vary significantly. Migrant workers' education and duration abroad are positively associated with amount of remittances, reflecting their higher wages with more experience in the overseas market. While the duration of migration matters, worker age has little to do with the amount of remittances; this may indicate the insignificance of experience in the domestic market in determining earnings in the overseas market. Compared to unskilled (or semi-skilled) labor, mostly in construction, those in business activities and skilled occupations send higher amounts of remittances; domestic workers (mostly women) have the lowest level of remittances. The amount of remittances, even after controlling for individual migrant worker characteristics, varies largely across divisions and destination countries. Relatively better-off divisions—Dhaka, Sylhet, and Chittagong—have lower levels of remittances than others.

Figure 102
Regression results for the determinants of remittances received



Source: SIR 2016.
Note: Log(remittances) was analyzed in the regression analysis. Base categories: no education (for education); less than 2 years (for duration); Dhaka (for origin division); and Saudi Arabia (for destination).

Taking the difference between total remittances received and expenditure on investment (e.g., including housing construction, land and house purchase, and business input), savings, and repayment of loans as consumption,

[12] The average urban nonagricultural workers' weekly earnings, as per LFS 2016, were Tk 2,360, or about Tk 122,000 ($1,500) per year.

we investigate the consumption versus investment question. The usage pattern shows that around 36 percent is used for investment, 39 percent for consumption, and 20 percent for loan repayment and savings (figure 103). Among investments, housing construction is a major use, followed by land and house purchase (figure 104). Using remittances for businesses purposes is also common, but the share is 10 percent or below except in the Dhaka and Sylhet divisions. Lack of investment in business activities, but major expenditure on housing purchase and repair or consumption, suggests that there is room for household investment in productive activities to be promoted given its longer-term impacts on households as well as the multiplier effects on the overall economy.

Figure 103
Composition of remittance use

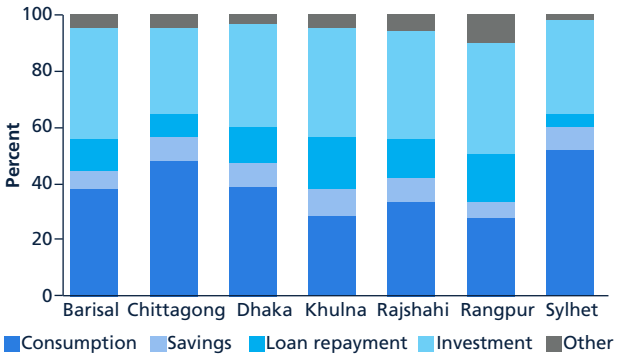
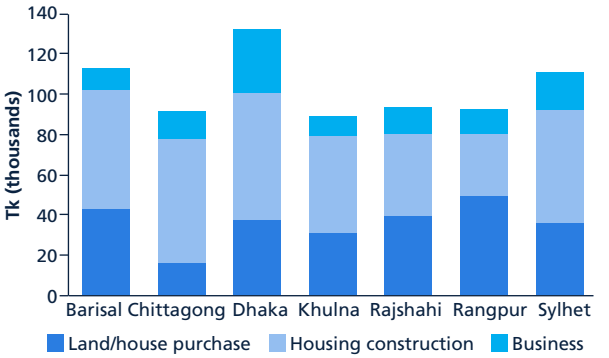


Figure 104
Composition of investment

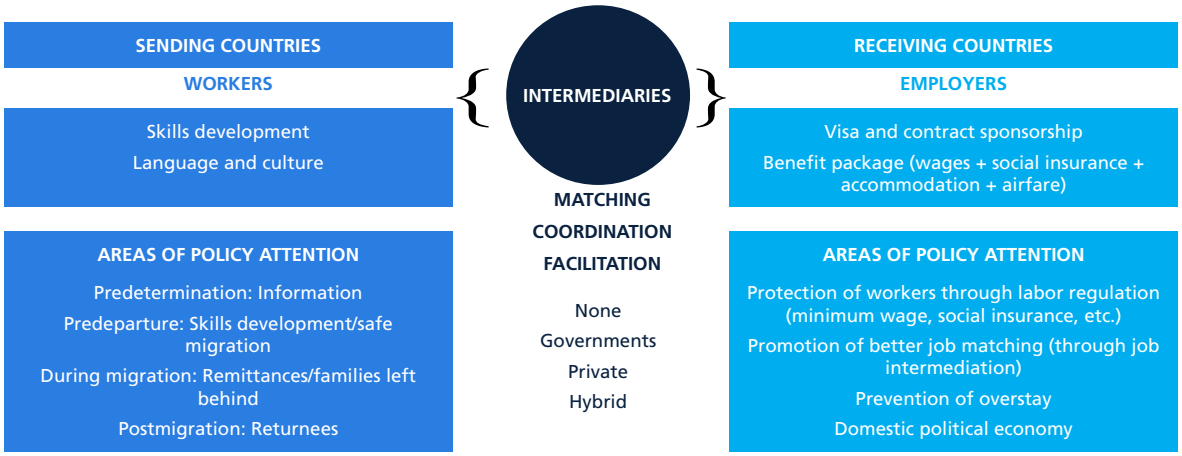


Source: SIR 2016.

Many challenges remain for international migration to be a sustainable employment strategy for workers in Bangladesh, including skills, search friction, high costs, safety, and risks of shocks from market concentration

The challenges of international migration as a sustainable employment strategy need to be understood within a broader labor market framework. Figure 105 suggests the overseas labor market consists of workers in the sending countries, employers in the destination countries, and intermediation conducted by governments, private recruitment agencies, and their combination. Like any labor market, the international labor market faces

Figure 105
Framework for understanding overseas labor markets



Source: Cho et al. 2017.

common challenges such as information asymmetry and skills mismatches between employers and workers, credit constraints and insufficient investment in human capital and skills, and inefficient job search and matching practices. These common challenges are aggravated by geography, cultural, and language differences which feature more prominently in the international labor market. Other issues also pertain to international migration, such as legal and institutional arrangements including G2G and remittances.

From the workers' perspective, a lack of skills appropriate to the destination country is one of many challenges. According to the SIR (2016), only about 12 percent of migrants took some training prior to departure. Of these, about half had taken vocational training, close to 10 percent had participated in driving and language training, and the rest were unspecified. In recognition of the occupational distribution which shows that many migrant workers engage in low-skilled jobs, policy makers often emphasize the importance of skills development with internationally recognized certificates. However, in addition to the importance of technical and vocational skills upgrades, policy attention to broad skills development fostering employability in the foreign labor market may be required. For instance, BRAC's safe migration program incorporates language clubs or life skills education as part of its curriculum for migrant workers. The BMET is offering skills training in 45 trades in 38 technical training centers. The trainings offered tend to focus primarily on skilled workers, and the capacity of the centers (65,000 trainees per year) is too limited to offer a wide range of training for a large number of workers. The value added of the training programs currently in place is also uncertain, due to concerns about the quality and relevance of the trainings provided. For female migrant workers assigned to a housekeeping job, a 21-day training has been made compulsory. It includes use of modern home appliances, culture, law and regulations, language, etiquette, and safety and security. The effectiveness of these trainings on outcomes at destination has not been evaluated.

Job search and matching efficiency may be compromised by the widespread practice of network-based recruitment. As discussed above, migrant workers tend to rely on migration networks, resulting in overrepresentation of certain groups from select parts of the country. Hanson (2010) also found that transnational migration networks provide prospective migrants with key information about economic conditions in destination countries and support in managing the immigration process, as well as help in obtaining housing and finding a job. As pointed out by the World Bank (2012b), people located in the destination country typically organize visas for family members, relatives, friends, or members of the same community in the home country. As a result, many recruiting activities and visa procurement are strongly based on social networks. Migration through networks can be welfare enhancing, as it reduces the cost of migrating and therefore lowers barriers to migrating for capital-constrained individuals. However, from a labor market efficiency perspective, migration networks are likely to bias the composition of individuals migrating and of destination countries, which diverges from policy efforts to diversify destination markets and types of skills levels and occupations. Migration networks also may reinforce certain practices (e.g., informal visa trading) as well as information that may not help workers make informed decisions.

The high costs of migration are often the source of heavy indebtedness and overstay of migrant workers, and prevent low-income populations from utilizing overseas employment as a poverty reduction strategy. Typically, migration costs consist of compliance costs associated with visas, training, medical checkups, and other required documentation and activities; processing costs associated with recruitment fees; and transport costs associated with travel. They vary significantly with destination as well as originating country (figure 106). The migration costs for Bangladeshis (along with Pakistanis) seem higher than those of Indians, Nepalese, and Sri Lankans from the same region. When disaggregated, the costs associated with visas are substantially higher for Bangladeshis (figure 107).

According to the Global Knowledge Partnership on Migration and Development (KNOMAD) Migration Cost Survey of 2015, Bangladeshis pay the highest recruitment costs worldwide, ranging between $1,675 and $5,145. World Bank (2012b) confirms that Bangladeshi migrants often pay twice as much as their counterparts in neighboring countries. This is consistent with a finding by ADB and ILO (2016) that the average migration cost for a Bangladeshi construction worker in the Middle East was estimated to be $3,900 in 2013—which would require, on average, over 15 months of work in the destination country to cover. The KNOMAD survey

Figure 106
Migration costs by origination and destination

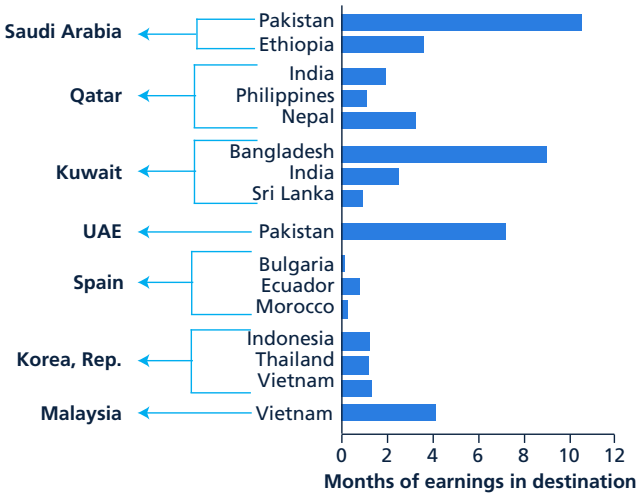
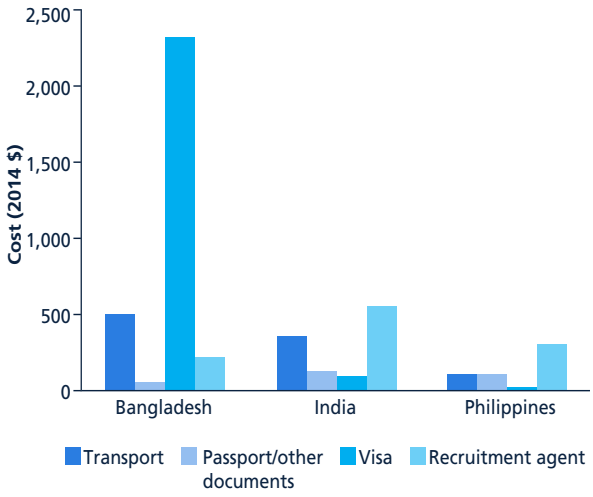


Figure 107
Costs of migration to Kuwait



Source: Abella, Martin, and Yi 2016; Yi 2016.
Note: All surveyed Sri Lankan workers in Kuwait were females engaged in the domestic work segment.

also suggests that both Bangladeshi and Pakistani workers have larger costs as they pay a higher amount for visa fees compared to other countries, raising their overall migration costs.

Not surprisingly, the high migration costs among Bangladeshi workers lower the potential of migration in poverty reduction, as individuals from lower-income households are limited in utilizing the employment opportunities in the overseas market. According to World Bank analysis (2012b) using 2010 Household Income and Expenditure Survey data, labor outmigration is dominated by workers in the upper quintiles: the proportion of migrants increases sharply with income level (from 0.5 percent in the lowest decile to 6.8 percent in the 9th and 10th deciles). As discussed earlier, it is unclear whether migrant households are positioned in upper-income quintiles because migrant earnings and remittances contributed to household incomes, or they are originally from better-off households. Nonetheless, it points to possible economic disparities in access to migration opportunities due to high costs.

The large majority (estimated to be three-quarters) of these costs, including visa fees, originates from intermediation services paid mostly to private agencies. In the presence of imperfect credit markets, workers from lower-income groups are unlikely to be able to cover those costs due to their exclusion from access to credit, or would have to rely on informal borrowing. The International Organization for Migration found that a majority of migration survey respondents had to take out a loan to cover partial or full costs related to their migration (IOM 2010). With few financial institutions providing loans at low rates to migrant workers, indebtedness due to the exorbitant interest rates often charged by informal money lenders poses significant risks in the event of job loss or failed migration. A longer period to recoup migration costs may also increase the incentive for a migrant to remain in the destination country beyond the period of the contract, exposing him or her to further vulnerabilities associated with illegal status. Recognizing the high costs of migration and limited financial intermediation, the government of Bangladesh has initiated a low-interest loan program for migrant workers through its state-owned bank (Probasi Bank), offering loans at 9 percent annual interest, with a maximum of two years for repayment. These terms are considerably more favorable than those available from other sources. Bangladesh's largest nongovernmental organization, BRAC, also initiated a loan assistance program for migrants to help cover migration costs, the results of which have yet to be examined.

Given the type of occupations taken abroad (e.g., construction or domestic work), the safety and welfare of labor migrants remains a grave concern, particularly for females. Commonly cited abuses and exploitations of foreign migrants include restriction in changing jobs under the sponsorship system (Kafala) which is prevalent in the Middle East, confiscation of worker passports, and divergence between contractual obligations and real

conditions at work (especially payment of wages lower than contracted). Female domestic workers tend to be vulnerable to sexual harassment and abuse, which go unnoticed given the isolated nature of their workplaces, and because domestic work falls outside the rubric of the destination countries' labor laws. Although the media regularly report the abuses migrant workers suffer, representative data are very scarce, except on costs involved in migration and fees charged by agents.

The economies of several destination countries on which Bangladeshi migration is heavily concentrated—such as Bahrain, Kuwait, Saudi Arabia, and the UAE—are dependent on oil and gas, and the boom and bust of the oil and gas industry significantly affects demand for foreign workers. This results in high volatility of migration flows from Bangladesh observed year by year. Remittances from migrants in oil-rich countries tend to be more volatile as well because of sensitivity to oil-price shocks, which induce large movements of migrants between host and home countries. Labor migrants are also vulnerable to changes in the political relationship between Bangladesh and destination countries. As discussed above, labor markets in Saudi Arabia and Malaysia were reopened for Bangladeshi migrants who had been blocked for varying amounts of time. As a result of fluctuations in the destination economies, remittance flows to Bangladesh—and consequently, the poverty outcomes of stayers—are exposed to volatility much more than other sources of incomes.

SUMMARY OF KEY FINDINGS: PART 2

- With the strong, steady growth in GDP per capita along with relatively robust job growth, a number of key labor market outcomes improved over the past decade.
- Female LFP grew rapidly for the past decade up to 2010, and modest progress was made with declining agriculture and increasing wage employment along with wage growth in real terms.
- Despite these positive trends, the current status of the labor market suggests a significant underutilization of human resources, with over 40 percent of the working-age population remaining out of the labor force, largely driven by low female LFP.
- Low levels of labor market participation among women are likely associated with high rates of early marriage, concentration of household responsibilities, mobility constraints, and employer perceptions, in the context of social and cultural norms.
- The quality of jobs in Bangladesh remains low, although structural transformation is bringing moderate progress toward better jobs. Despite overall shifts from agriculture to nonagriculture, and from nonwage to wage employment, progress has been uneven and overall job quality remains a major concern. Agriculture remains the largest sector with respect to employment, the vast majority of jobs are informal (without a contract), day labor and unpaid work are prevalent, and wage levels are low.
- Large disparities persist in the type of employment and thus in access to quality jobs across sex, region, and age groups.
- Access to better quality jobs for women is largely driven by young urban females—in particular for wage employment, largely in manufacturing.
- Youth have experienced significant progress in education and positive labor market changes over time, but they appear to be bearing the brunt of the recent slowdown in job creation (2010–16).
- Despite large differences across sectors, wage growth was modestly equalizing, and formality delivered an earnings premium.
- Earnings are positively correlated with education, with the largest effect at the postsecondary level; however, returns to education have been declining.
- The gender wage gap among wage employees and female premium in returns to education have declined steadily over time. This indicates an increasingly challenging environment for female workers.
- In the context of a challenging domestic labor market in recent years, a growing number of workers are seeking overseas employment.
- International migration remains highly concentrated in a few markets and, while demand for labor is continuing, most migrants are concentrated in low-skill activities.
- Remittances are a major source of household income and contribute significantly to consumption, savings, and investment, although little is used for investment in businesses.
- As in any labor market, market failures including skills mismatches, information gaps, and search friction need to be addressed in the overseas labor market.
- Issues such as high migration costs, worker safety, and risks from destination market concentration are constraints for international migration as a viable employment and poverty reduction strategy.

PART 3

SOURCES OF JOB CREATION: SECTORAL, ENTERPRISE, AND SPATIAL TRANSFORMATION

8. STRUCTURAL TRANSFORMATION

Structural transformation—the shift of workers from lower-productivity (typically agriculture) to higher-productivity activities in manufacturing and services—is the key process through which the creation of sustainable, higher-earning jobs occurs. Few countries, and certainly none without substantial natural resources, has achieved upper-middle-income status without going through structural transformation. This process tends to be most visible in the growth of employment in the manufacturing sector, but starts with the agricultural sector, where increased productivity releases workers to be absorbed into more productive sectors (Lewis 1954), particularly in the urban economy.

Chapter 2 shows that structural change has made a major contribution to growth in Bangladesh over the past decade or more. This chapter provides a deeper assessment of the process of structural transformation, focusing on the changing sectoral composition of employment in Bangladesh over the period 2003–16.

While the structure of employment is already shifting rapidly away from agriculture, there remains potential for substantially more job creation in industry

In 2003, more than half of all jobs in Bangladesh were in the agricultural sector. However, between 2003 and 2016, around 84 percent of all new jobs created were outside of agriculture. Indeed, since 2010, agricultural employment among the working-age population declined by 400,000. Put another way, if agriculture had maintained its 2003 share of national employment, by 2016 there would have been close to 29 million workers in the sector. Instead, there were just about 24 million. So, while agriculture remains the largest source of employment in Bangladesh, it now accounts for only 41.7 percent of all jobs among the working-age population, down from 50.8 percent in 2003. The services sector is now the second largest source of employment, accounting for 37.8 percent of jobs in 2016. The growth in the share of the industry sector is quite noticeable, moving from a small base over this period to account for 74 percent of the shift of structural transformation. This shift was uneven over time: between 2003 and 2010, growth in industry jobs accounted for almost 90 percent of the shift out of agriculture; between 2010 and 2016, industry accounted for 58 percent of the shift (figure 108).[1]

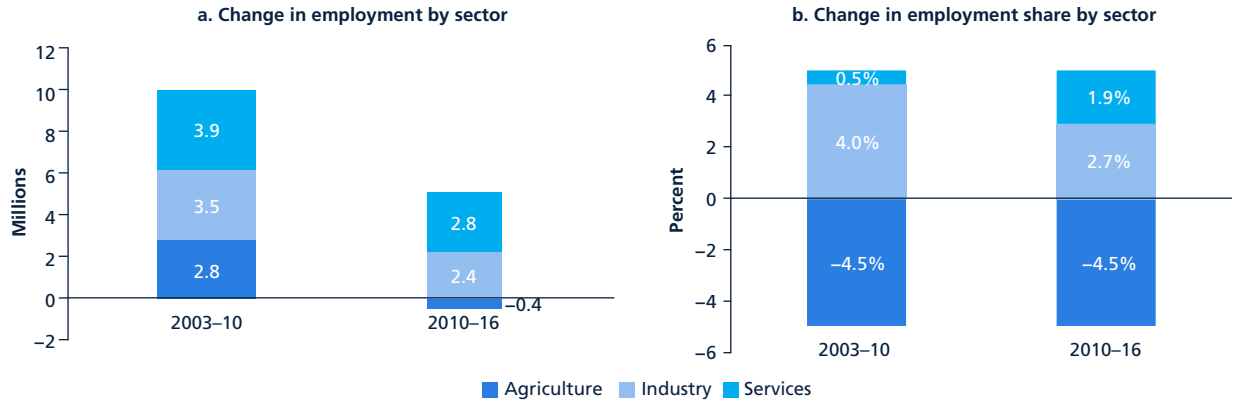
The distribution and shift of sectoral employment has significant implications for gender employment outcomes, given the segmented nature of the labor market in Bangladesh. Data from 2016 show that 63 percent of women are employed in agriculture versus just 32 percent of men. The opposite holds for construction and services, which employ 53 percent of men versus 22 percent of women. Within services, most notable is the trade (commerce) sector, which is the largest single subsector for men, accounting for 18 percent of all male jobs, but just 2 percent of female jobs.[2] The manufacturing sector accounts for a similar share of jobs across sexes: 15 percent for women and 14 percent for men.

The demographics of agricultural employment appear to be shifting rapidly, toward older, female workers, many of whom are household workers (and many of these unpaid). In the context of stagnant overall employment growth in agriculture, it is not surprising to see a significant shift in the average age of agricultural employment; even so, the changes in just 13 years are dramatic. Figure 109 shows that while in 2003, 72 percent of

[1] The classification "Industry" includes manufacturing as well as construction and utilities.

[2] Note that much employment in the commerce sector comes through household enterprises and self-employment. Particularly in the former, it is likely that many businesses are registered in the name of a male head of household, even though a female may be actively engaged in carrying out some or all of the work.

Figure 108
Change in employment and employment share by sector



Source: LFS 2003, 2010, 2016.

working-age agricultural workers were below the age of 35, by 2016 the figure was just 40 percent. The share accounted for by youth (15–24) shrank from 45 percent to just 14 percent, suggesting that very few young people are entering the agricultural sector. This is a trend that may well further the pace of the transformation process, but also raises risks about the future growth of agricultural productivity.[3] A similar dramatic shift can be seen in the gender composition of employment (figure 110), where a 20 percentage point shift between male and female workers occurred in just 13 years. Combined with the increase in agricultural workers registered as unpaid, this suggests an increasing reliance on female household workers. Such a shift is not uncommon during processes of structural transformation, where females are relied upon to maintain household agricultural production, while males migrate or seek secondary sources of income in the nonfarm rural economy.

Figure 109
Distribution of agricultural employment by age

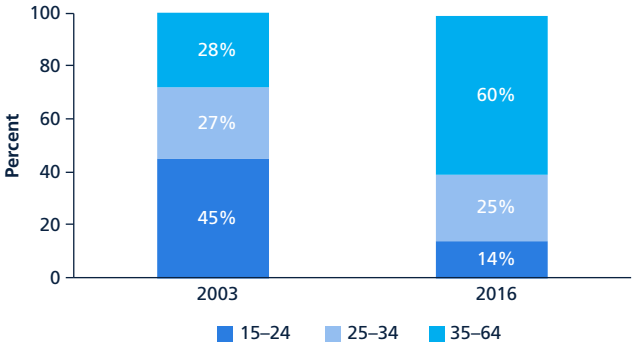
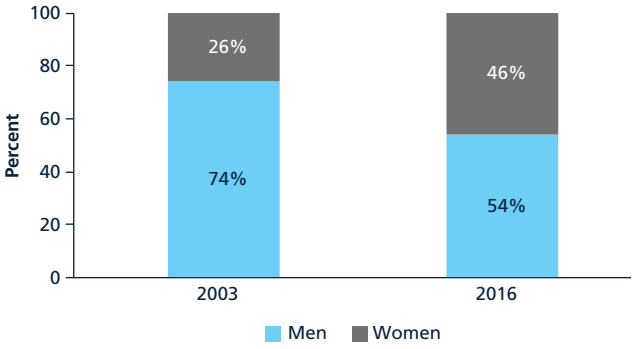


Figure 110
Distribution of agricultural employment by sex



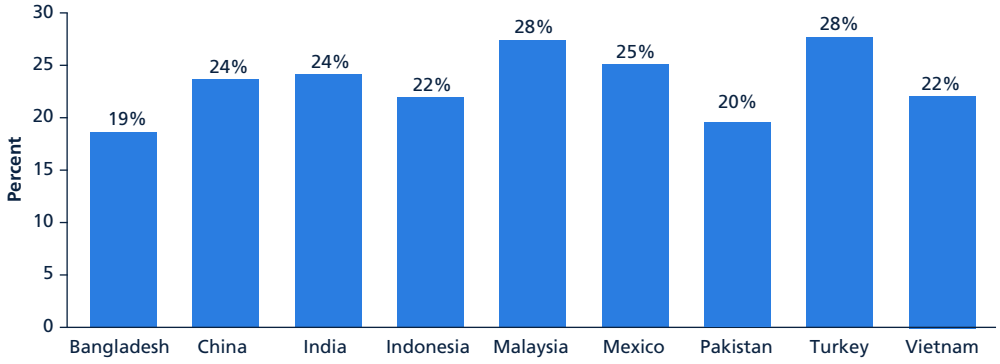
Source: LFS 2003, 2016.

While Bangladesh has undoubtedly experienced rapid sectoral transitions over the past decade or more, the transformation process should remain an engine of growth and quality job creation for some time, in order to sustain the country's growth. Less than 29 percent of China's workers remain in agriculture and the middle-income country average is less than 24 percent. Moreover, while the services sector is likely to continue to absorb more workers, there remains significant space to expand the share of the workforce in the industrial sector. With an industry share of 20.5 percent of employment in 2016 (18.7 percent using the modeled, cross-country

[3] And may partly explain the slowdown in agricultural productivity growth in recent years.

comparable International Labour Organization data in figure 111), Bangladesh remains below peer countries and well below some large middle-income comparators. If Bangladesh can raise the employment share of industry to peer levels while maintaining productivity growth, job creation potential would be significant.

Figure 111
Industry share of employment: Bangladesh versus peers

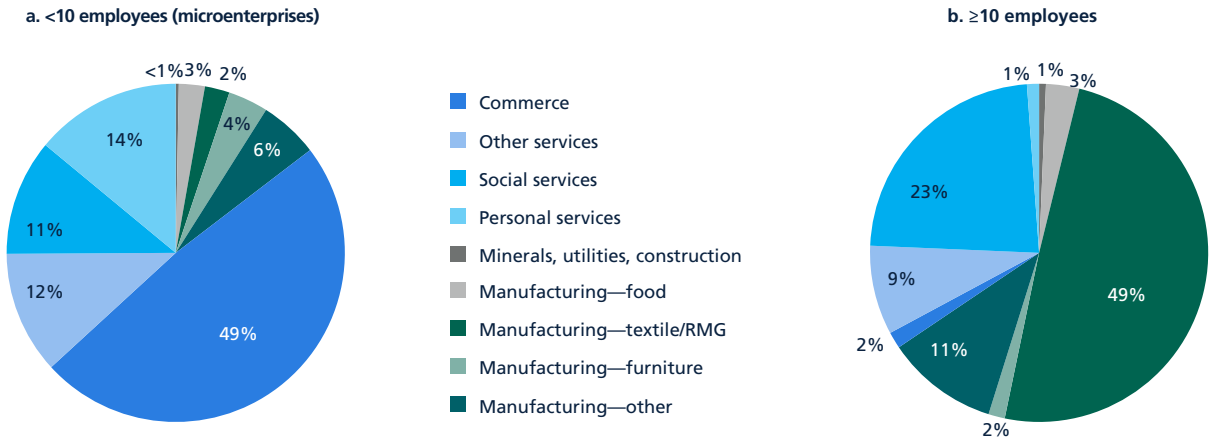


Source: International Labour Organization (ILO); note that all data presented are ILO modeled estimates for 2015.

New job creation has been concentrated in large-scale manufacturing (for women) and trading microenterprises (for men)

Nonagricultural employment is highly segmented by both firm type and sex. Figure 112a shows that for microenterprises with at least 1 employee (but less than 10), close to half of all jobs are in commerce, which is almost exclusively male; another 37 percent are in other services. However, even with microenterprises, manufacturing (especially food processing) accounts for around one-quarter of all enterprises and jobs. Including self-employed and household enterprises would highlight more clearly the dominance of microenterprise employment in commerce and personal services.[4] For enterprises with 10 or more employees (figure 112b), the picture is much different: 30 percent of enterprises and 60 percent of jobs in 2013 were in manufacturing. Most notably,

Figure 112
Employment share by size of enterprise and sector, 2013



Source: Economic Census 2013.
Note: Data exclude enterprises with no permanent employees.

[4] Data from the 2013 Economic Census indicates that around 90 percent of (nonagricultural) employment in household enterprises was in the services sector.

RMG alone accounts for 14 percent of microenterprises and for almost half of all jobs among nonmicroenterprises.

This segmentation is increasing over time. Over the period 2003–13, services (and especially commerce-focused) microenterprises accounted for 90 percent of all new enterprise entries, but just 60 percent of employment; industry accounted for 9 percent of net enterprise creation and 40 percent of jobs.[5]

RMG manufacturing has dominated job creation for women; while most manufacturing sectors are increasingly drawing on female labor, it is not yet sufficient to make up the gap from declining RMG job growth

The contribution of RMG to structural transformation—particularly for pulling women into the nonagricultural labor force—cannot be overstated. According to data from the Economic Census, the manufacturing sector accounts for more than three-quarters of all nonagricultural jobs for women in permanent establishments, and for 80 percent of the nonagricultural jobs created in permanent establishments over the past decade. And within manufacturing, RMG dominates as a source of jobs for women (figure 113).[6] Outside of RMG, the only sectors accounting for a significant share of nonagricultural female employment are social services, mainly health and education.

But while RMG has been transformative and represents one of the largest and most labor-intensive sectors globally, it is not the only sector in Bangladesh that is increasingly drawing on female labor. In fact, by 2013 just about all other subsectors in manufacturing employed around 30 percent females among their workforce (figure 114). The machinery and equipment sector (including electronics) actually employed a higher share of female workers (56 percent, versus 54 percent in RMG) according to the 2013 Economic Census. Almost every manufacturing subsector employs a larger share of female workers than any services subsector. Moreover, the growth of female employment in all manufacturing outside of RMG has been dramatic over the past decade, with growth in the female share of workers in food processing rising from 17 to 28 percent, in machinery and equipment from 14 percent to 56 percent, and in leather from 10 to 40 percent. One reason for the increasing share of female employment in these sectors may be a "gateway" effect from women entering RMG and being trained in manufacturing, providing spillover benefits to other sectors. Another reason is that the nature of Bangladesh's output in many manufacturing sectors is changing toward more processed, labor-intensive products

Figure 113
Sectoral contribution to female employment

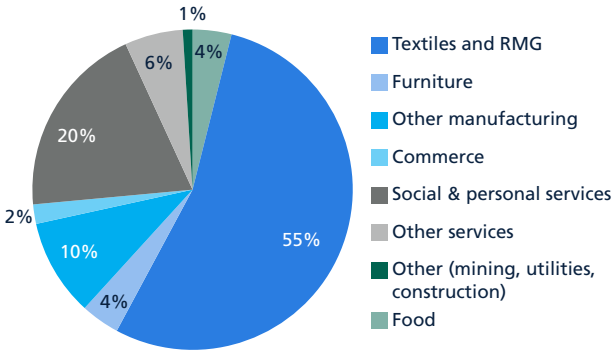
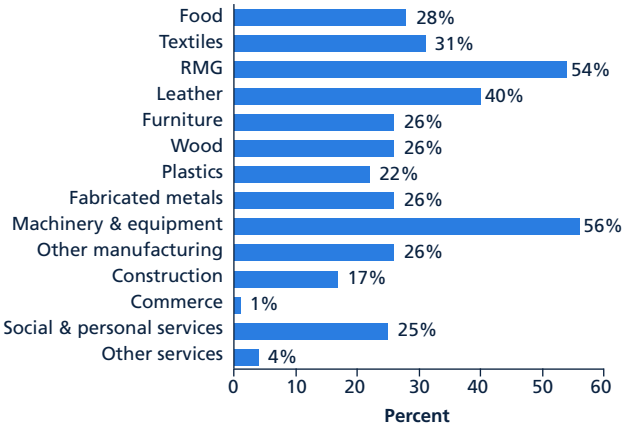


Figure 114
Female share of workers by sector



Source: Economic Census 2001/03 and 2013.

[5] Note that these figures on employment share from manufacturing and services do not match exactly those reported in the LFS.

[6] Data from the 2016 LFS tell a somewhat different story, indicating that manufacturing accounts for 40 percent of female employment, and RMG accounts for 55 percent of manufacturing employment.

that are more likely to make use of female labor. For example, output in the leather sector has shifted considerably from basic processed leather to leather products.

Note that these data from the Economic Census are somewhat at odds with data from the LFS, which reports much lower shares of female labor in manufacturing. According to the LFS 2016, the female share of employment in RMG is 44 percent, and 16 percent in manufacturing sectors outside of RMG and textiles. The LFS data also suggest that the female share of employment is declining in manufacturing. According to the 2013 LFS, women accounted for 40 percent of all employment in manufacturing; by 2016, the figure fell to just 31 percent. This is perhaps not surprising, in that RMG job creation has been stagnant (see below) and almost all growth in job creation has come from other manufacturing sectors that are much less female intensive. Interestingly, the two LFSs also indicate that the female share of employment within RMG fell from 57 percent in 2013 (which is in line with the 2013 Economic Census report) to 46 percent in 2016. Although somewhat surprising, it is in line with global experiences of "defeminization" of the labor force in countries that have upgraded and moved into more technology-intensive activities within the RMG value chain (Tejani and Milberg 2010).

Despite continued strong output growth, the "job creation machine" of RMG has slowed sharply, underscoring the importance of diversification in manufacturing—particularly through growing exports—to drive structural transformation and the creation of quality jobs

The capacity of other manufacturing sectors to deliver faster job creation may be critical to continuing the pace of structural transformation, in the context of a slowdown in job growth in RMG. Employment in RMG and textiles (including RMG as well as upstream textiles and related activities) was over 4.5 million in 2016, accounting for 54 percent of all manufacturing jobs in Bangladesh, and 13.6 percent of all nonagricultural jobs.[7] But even as output continues to grow in the sector, the pace of job creation has slowed to a standstill in recent years. Data from LFS show RMG and textiles employment growing at 11.0 percent annually from 2003–10, but just 1.5 percent annually from 2010 to 2016 (figure 115). The trend for RMG alone was even more dramatic—from 25 percent annual growth in 2003–10 to a decline of 0.6 percent annually from 2010 to 2016. In nominal terms, the RMG and textiles sectors generated more than 2.25 million jobs between 2003 and 2010, or around 302,000 each year. However, they generated just 62,000 jobs annually since then. Anecdotal evidence suggests that three factors are combining to stymie job creation in RMG: (1) intensifying global price competition putting significant cost pressure on Bangladeshi producers; (2) supply chain consolidation following the Rana Plaza disaster, concentrating production in larger, more sophisticated firms; and (3) rising wage demands among workers.

Other parts of the manufacturing sector are rapidly filling the gap. As figure 116 illustrates, while manufacturing sectors outside of RMG and textiles were stagnant between 2003 and 2010, they have since generated around 222,000 jobs per year. Given the huge scale of RMG and textiles, this has still not been sufficient to fully outweigh the slowdown in RMG and textiles,[8] but is a highly promising development.

The question is whether these other sectors have the capacity to deliver sustained, large-scale job creation. To date, most of the job creation apart from the RMG sector has come from domestically oriented, resource-based manufacturing subsectors, including food processing, furniture, and metals. Certainly, the Bangladesh domestic market is large and import penetration is significant, indicating that a large part of domestic demand is met by imported goods. So there is huge scope for manufacturing to grow further in the domestic market, as incomes rise and so does domestic demand, and if firms can raise competitiveness to compete against foreign goods in quality and price. However, sustained, large-scale, quality job creation may require a greater export orientation from the non-RMG sectors. This is true in the short term, as scaling benefits immensely from exploiting global markets, as was the case in RMG; the emergence of very large employers is likely to rely on accessing markets beyond Bangladesh. It is also true in the longer term, as export market participation should drive increased competitiveness to deliver higher value addition and better quality jobs.

[7] RMG alone was responsible for 3.1 million jobs.

[8] We estimate that the growth in jobs in other manufacturing sectors was able to fill close to 80 percent of the gap in the jobs that would otherwise have been generated had RMG and textiles continued to grow at their 2003–10 pace through 2015.

Figure 115
Growth in employment of nonagricultural sectors by period

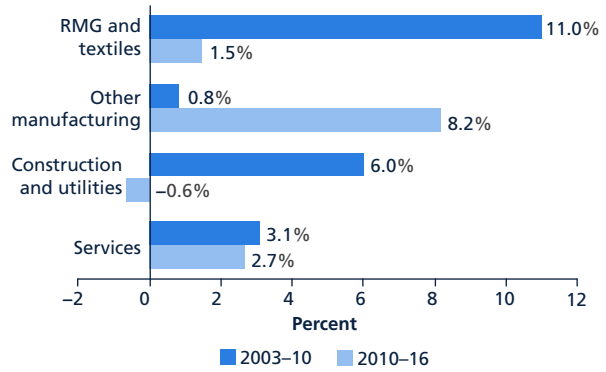
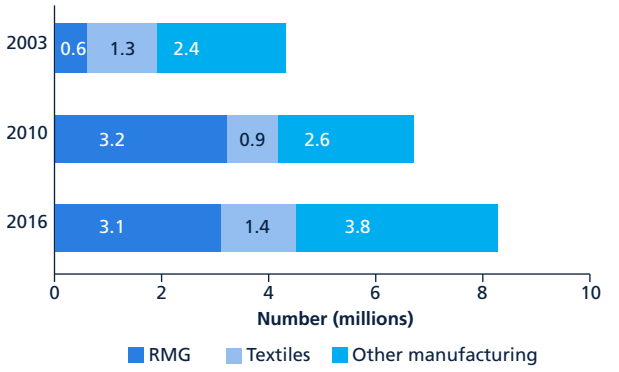


Figure 116
Manufacturing employment by subsector



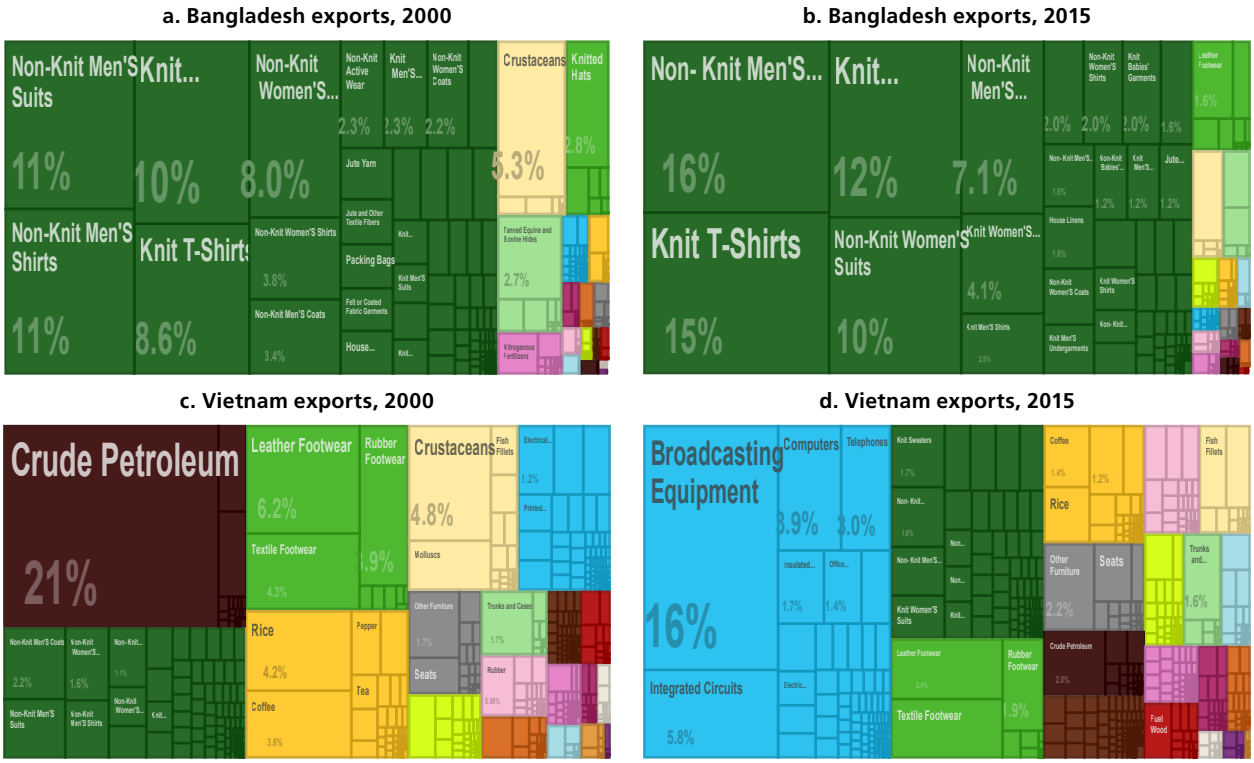
Source: LFS 2003, 2010, 2016.

Yet exports remain highly, and increasingly, concentrated in RMG. The RMG and textiles sector accounted for almost 89 percent of all goods exports from Bangladesh in 2015, up from 85 percent in 2003. Only agricultural products (mostly tobacco), fisheries (mostly crustaceans), and leather are sizable export sectors outside of textiles. While specialization in exports is not unusual, a comparison with a peer like Vietnam (figure 117) shows a sharp contrast. Vietnam started in 2000 with a much more diversified base of exports than Bangladesh and increased its diversity even further in subsequent years, reducing reliance on the oil sector and growing massively in the electronics and automotive sectors, along with RMG and footwear. Bangladesh experienced growth in the share of some sectors—notably, the footwear sector increased its share of exports from 0.7 percent to 2.0 percent between 2003 and 2015. Moreover, many sectors experienced rapid export growth from a very small base—e.g., leather exports grew by 26 percent annually and pharmaceuticals by 23 percent between 2003 and 2015. Bangladesh still failed to achieve significant export diversification and did not emerge as a major global exporter in any new sector over the last decade. There are likely to be many factors contributing to Bangladesh's failure to diversify exports beyond RMG, including business regulatory constraints, lack of access to land, and skills gaps, among others. There is also evidence to suggest that the industrial and trade policy environment overemphasizes support for the RMG sector, creating an unlevel playing field that crowds out investment in other sectors (Davies and Butterworth 2015; Kathuria and Malouche 2016).

Job creation in the services sector has been concentrated in low-productivity activities. Among permanent establishments, however, growth has been stronger in higher-productivity subsectors. While manufacturing tends to attract the most attention in the structural change narrative, construction and the services sector in most countries account for an even larger share of jobs leaving agriculture. It is also within the services sector that the quality (or lack of quality) of the transformation process is most evident. Where low-productivity, nontradable services dominate the structural transformation process, questions should be raised about the quality and sustainability of the process. That said, it is important to emphasize that few countries experience a significant growth of higher value-added services employment in the early and middle stages of the transformation process. Rather, high-value services tend to emerge in the latter stages of transformation, typically coinciding with a shift of employment out of routine manufacturing and into knowledge-intensive activities.

Even in the case of Bangladesh, where manufacturing employment growth was rapid in the 2000s, job creation in services outstripped manufacturing. Between 2003 and 2010, while growth in employment in the services sector was less than half that in manufacturing, the services sector generated more jobs overall—in total, 3.86 million jobs, or more than 515,000 each year. And the pace of services sector job creation remained steady (at over 500,000 annually) in the period 2010–16, accounting for 59 percent of all new jobs in the country (including agriculture). Over the entire period 2003–16, the two service subsectors that experienced the most rapid growth were finance and business services, and transport and communications (figure 118a). While finance and business services is a high value-added sector that is growing from a small base (as of 2016,

Figure 117
Visualization of export structure by sector: Bangladesh versus Vietnam, 2000 and 2015



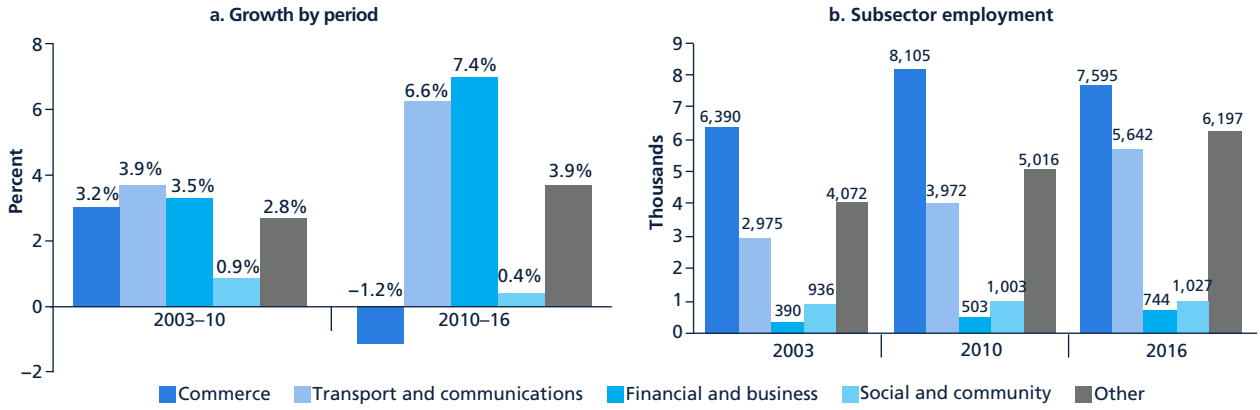
Source: MIT Observatory of Economic Complexity (http://atlas.media.mit.edu/en/)

it employed just 744,000 workers, or less than 4 percent of services jobs in Bangladesh), the transport and communications sector is among the largest sectors in the economy, employing 5.6 million workers in 2016 (figure 118b).[9] Interestingly, both subsectors experienced the most rapid growth between 2010 and 2016, the period in which job creation slowed in just about all other parts of the economy. Commerce, which remains the largest services subsector, accounted for around 229,000 new jobs annually during 2003–10; it has since experienced retrenchment, with employment shrinking by more than half a million. This may simply reflect changing categorization of trading activities and of workers for whom commerce is one of several sources of earnings. It may also be linked to the wider slowdown in job creation, although this is difficult to explain in the context of buoyant overall growth. The social and community sector, which is the largest nonagricultural employer of women outside of manufacturing, has been among the slowest-growing sectors in the economy over the past decade.

It is important to note that the construction sector in Bangladesh employs over 3 million workers—more than even the RMG sector—and is a major source of jobs for low-skilled Bangladeshis in both urban and rural parts of the country. Figure 119 highlights the volatility of employment in the construction sector, notably between 2010 and 2013, when employment is reported to have declined by close to 14 percent annually before rebounding between 2013 and 2016.

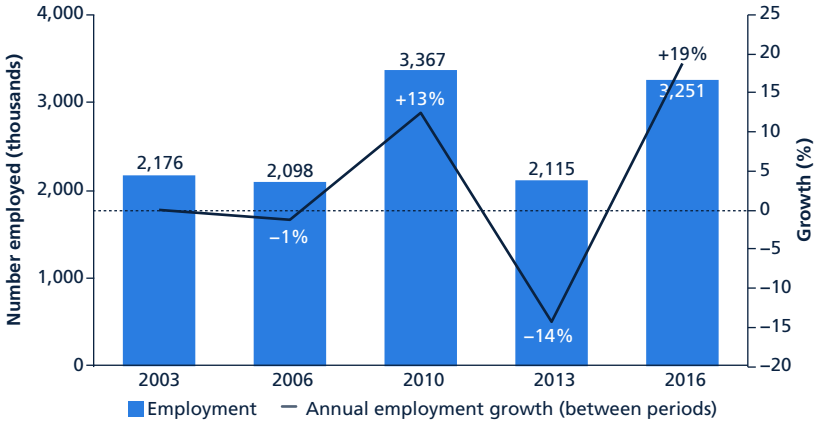
[9] This makes the sector 80 percent larger than RMG in terms of employment.

Figure 118
Employment and employment growth by services subsector



Source: LFS 2003, 2010, 2016.

Figure 119
Construction sector employment



Source: LFS 2003, 2006, 2010, 2013, 2016.

9. ENTERPRISE TRANSFORMATION AND PRODUCTIVITY

Enterprise transformation—including the shift of firms from the informal to the formal sector, but more broadly and more importantly, the shift toward more sophisticated and higher value-added enterprises—is a key corollary to the structural transformation process. It is also critical for the creation of better quality jobs. While there remains some debate on which types of firms create the most jobs—microenterprises versus large establishments, newly created versus old enterprises—the literature has come to some consensus on the importance of young, dynamic, high-growth enterprises (sometimes referred to as "gazelles"), even if there is no agreement on how to identify these firms ex ante (see Audretsch 1995; Dwyer and Kotey 2016; McKenzie 2015). However, there is little debate that productivity enhancement of firms, of all ages and sizes, matters greatly for the delivery of sustainable, quality jobs. This in turn requires both an economywide environment whereby labor and capital move efficiently to the most productive firms and sectors (allocative efficiency), as well as firm-level capabilities to turn these capital and labor inputs into the highest possible value-added outputs (technical efficiency). This chapter explores the (nonagricultural) firm landscape in Bangladesh to assess its structure, dynamics, and capacities to deliver more, better, and inclusive jobs.

While large firms make an outsized contribution to job creation, microenterprises still dominate the firm and employment landscape in Bangladesh

The firm landscape in Bangladesh is dominated by household and microenterprises. Of the 6.6 million economic units reported in the 2013 Economic Census, just 137,000 (2.2 percent) have 10 or more employees, whereas permanent microenterprises—along with household enterprises and temporary establishments[1] (both of which are almost exclusively microenterprises)—account for the remaining 98 percent (figure 120). Outside of urban areas, the picture is even starker, with just 1.25 percent of rural economic units employing more than 10 workers, and 42 percent of all units being household-based enterprises (figure 121). In fact, the reliance of household enterprises in rural areas is more than twice as high as in urban areas—85 percent of all household enterprises are rural; while around 70 percent of all nonmicroenterprises are urban.

Not surprisingly, from an employment standpoint, the relative contribution of the enterprise types differs significantly from the picture above. Figure 122 illustrates the contribution by economic unit types and sizes—it includes only permanent establishments (excluding the 6 percent of firms classified as temporary establishments). While enterprises with 10 or more employees account for just over 2 percent of permanent establishments in Bangladesh, they contribute more than 35 percent of all jobs (figure 122a). Household enterprises account for nearly half of all firms but just 21 percent of the jobs. Very large enterprises, employing more than 500 workers, appear to be particularly important for job creation in Bangladesh, as they account for just 0.04 percent of firms (less than 2,500) but 15 percent of all jobs.

[1] According to the 2013 Economic Census, permanent establishments are defined as "An economic unit outside household having fixed location and permanent structure"; temporary establishments are defined as "An economic unit outside household located in a fixed place beside a road or in a market place, whether under a temporary shed for a year or more"; household establishments are defined as "Many households have nonagricultural economic activities such as cottage industry, shop or workshop in or within its premise. These are classified as Economic Household. However, economic activities operated in the household, economic activities operated outside the household such as hawking, operating own rickshaw/push cart/van/easy bike, street vendor etc. were included within the purview of the household based economic activities."

Figure 120
Overall distribution of economic units by type, 2013

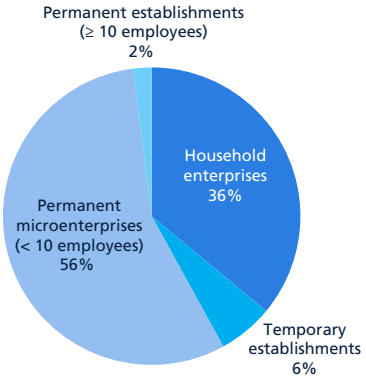
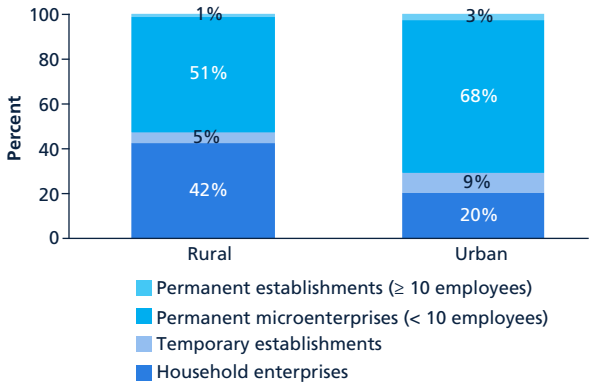


Figure 121
Rural-urban distribution of economic units by type, 2013



Source: Economic Census 2013.

This general pattern, whereby most firms are small but large firms account for a significant share of jobs, is common around the world. However, it appears that Bangladesh is significantly more reliant on microenterprises than many other economies. Figure 123 shows that microenterprises account for more than twice the share of jobs in Bangladesh compared to countries with similar economic structures. Compared to Vietnam, Bangladesh is almost six times more reliant on microenterprises for jobs. This suggests that the transformation process in the structure of Bangladesh's economy and private sector still has a significant way to go.

Bangladesh's large firms are concentrated in the manufacturing sector. Close to 80 percent of all enterprises with at least 100 employees are manufacturers, with more than half coming from the RMG sector alone (figure 124). Outside of manufacturing, virtually the only other large employers are in the social sectors, primarily in education and health care. Even within manufacturing, microenterprises dominate the landscape (figure 125). Just over 90 percent of manufacturing establishments are microenterprises (compared with 99 percent of services establishments). In some manufacturing sectors such as furniture and metals (light engineering), microenterprises account for more than 97 percent of establishments. Only textiles and RMG and plastics have large shares of nonmicroenterprises: 26 percent and 23 percent, respectively.

Figure 122
Distribution of employment by establishment size, 2013

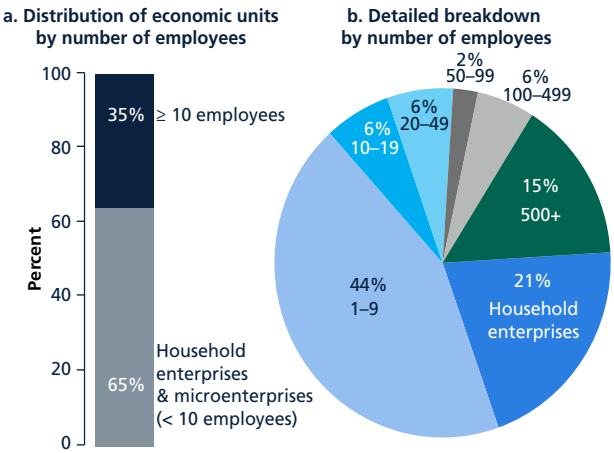
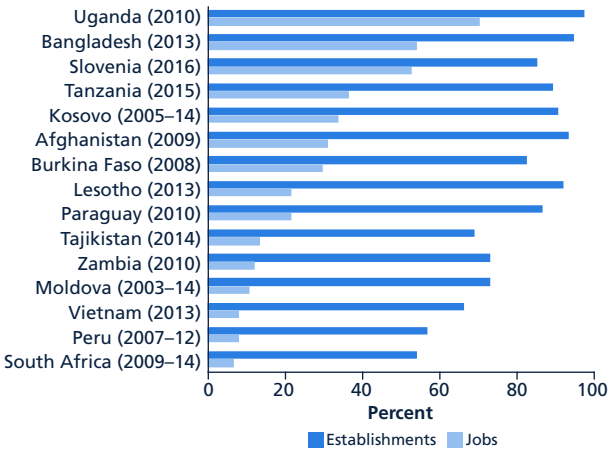


Figure 123
Microenterprises as share of establishments and jobs: Bangladesh versus selected peers



Source: Economic Census 2013; various country-specific sources.

Figure 124
Sectoral distribution of enterprises with 100 or more permanent employees

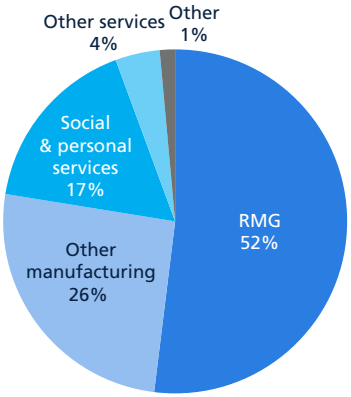
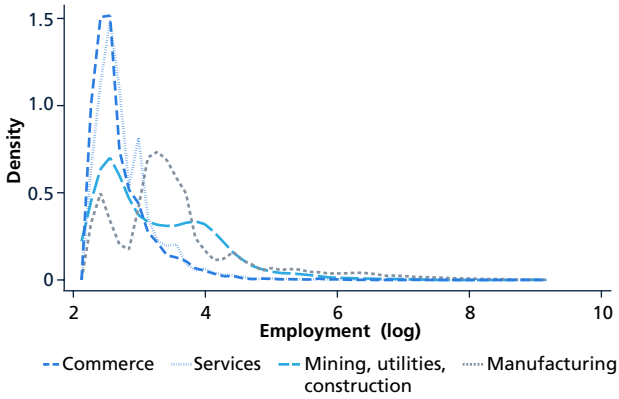


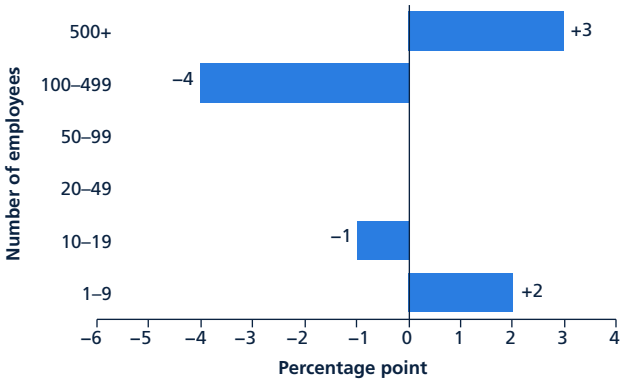
Figure 125
Distribution of enterprise size (employment) by sector, 2013: enterprises with 10 or more employees



Source: Economic Census 2013.

Evidence from trends over the past decade (figure 126) suggests a deepening of existing structural patterns of establishments and jobs. Relative gains in job creation over the decade came at the tails of the establishment size distribution—in microenterprises (+2 percentage points) and firms with more than 500 employees (+3 percentage points). Establishments in between are, however, experiencing a decline in their contribution to job creation. This is particularly true of those with 20–99 employees (of which there are very few and no growth over the decade) and those with 100–499 employees (which experienced a 4 percentage point decline in contribution to employment over the decade). It may be the case that the decline in contribution from the latter category resulted from their growth and shift to the 500+ category. But the fact that there was no similar graduation of firms from lower-size categories into the 100–499 category suggests there may be barriers preventing establishments from expanding.[2] It is worth noting, however, that this bimodal pattern of establishment size distribution is well documented across developing countries—particularly in the manufacturing sector—driven by a number of factors, including the nature of domestic demand and labor and capital market segmentation (Mazumdar and Sarkar 2013).

Figure 126
Change in contribution to job creation by establishment size, 2003–13



Source: Economic Census 2001/03 and 2013.

[2] It may also be the case that many of the enterprises in the large-size categories do not emerge from the growth of smaller firms but rather are "born large" (Ayyagari, Demirguc-Kunt, and Maksimovic 2015), including through foreign direct investment in sectors such as RMG and footwear.

The large majority of firms in Bangladesh fail to grow or to exit, contributing to a lack of dynamism in the enterprise sector

As noted previously, the literature on firms and job creation increasingly emphasizes the role of young firms as the drivers of job creation (Haltiwanger, Jarmin, and Miranda 2010; Haltiwanger et al. 2013, 2016). This is not because young firms inherently create more jobs than older ones, but rather that the majority of firms, young or old, lack the intent and/or capacity to grow substantially. Therefore, generating a steady and significant flow of high-growth, job-creating firms requires a steady and significant flow of new firm entry. It also requires an efficient process of churning—an "up or out dynamic" (Haltiwanger, Jarmin, and Miranda 2010) that conditions the market to allocate capital and labor to the most efficient firms. Given that microenterprises continue to dominate in Bangladesh, and that jobs have been created in an increasingly bifurcated manner with limited contribution from midsize firms, it is worth assessing the dynamics of firm life cycles.

Figure 127 compares the share of young firms (defined as those that have been established for five years or less) in Bangladesh to select international comparators. The data indicate that Bangladesh has a relatively smaller share of young firms than some other comparators (although substantially more than Peru and some Organisation for Economic Co-operation and Development [OECD] countries). Moreover, the share has declined by almost 10 percentage points between 2001/03 and 2013, with a greater fall among microenterprises (figure 128). Over the same period, the median age of establishments increased from 6 to 8 years among microenterprises, and from 13 to 14 among nonmicroenterprises. The decrease in the share of young firms along with the increase in firm age suggests there may be barriers to firm entry, that firms are failing to exit, or both.

At the sector level, the share of young establishments is lowest in food manufacturing (26 percent), and highest in commerce (43 percent), furniture manufacturing (39 percent), and RMG (38 percent). Geographically, the share of young firms among enterprises is 6 percentage points higher in Dhaka relative to the national average, and second highest in Chittagong; it is lowest in Rangpur (29 percent). Both the sectoral and geographical trends are very much in line with international norms, whereby dynamism is highest in metropolitan regions and sectors with high growth and/or low entry barriers.

Figure 127
Share of young establishments: Bangladesh versus peers

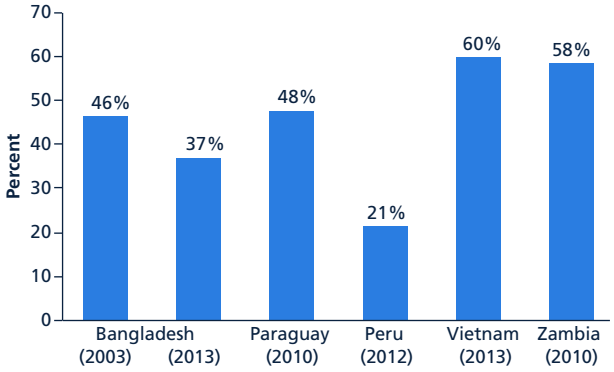
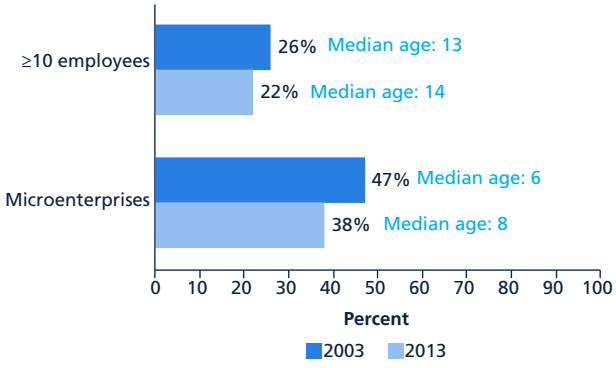


Figure 128
Share of young establishments and median age in Bangladesh



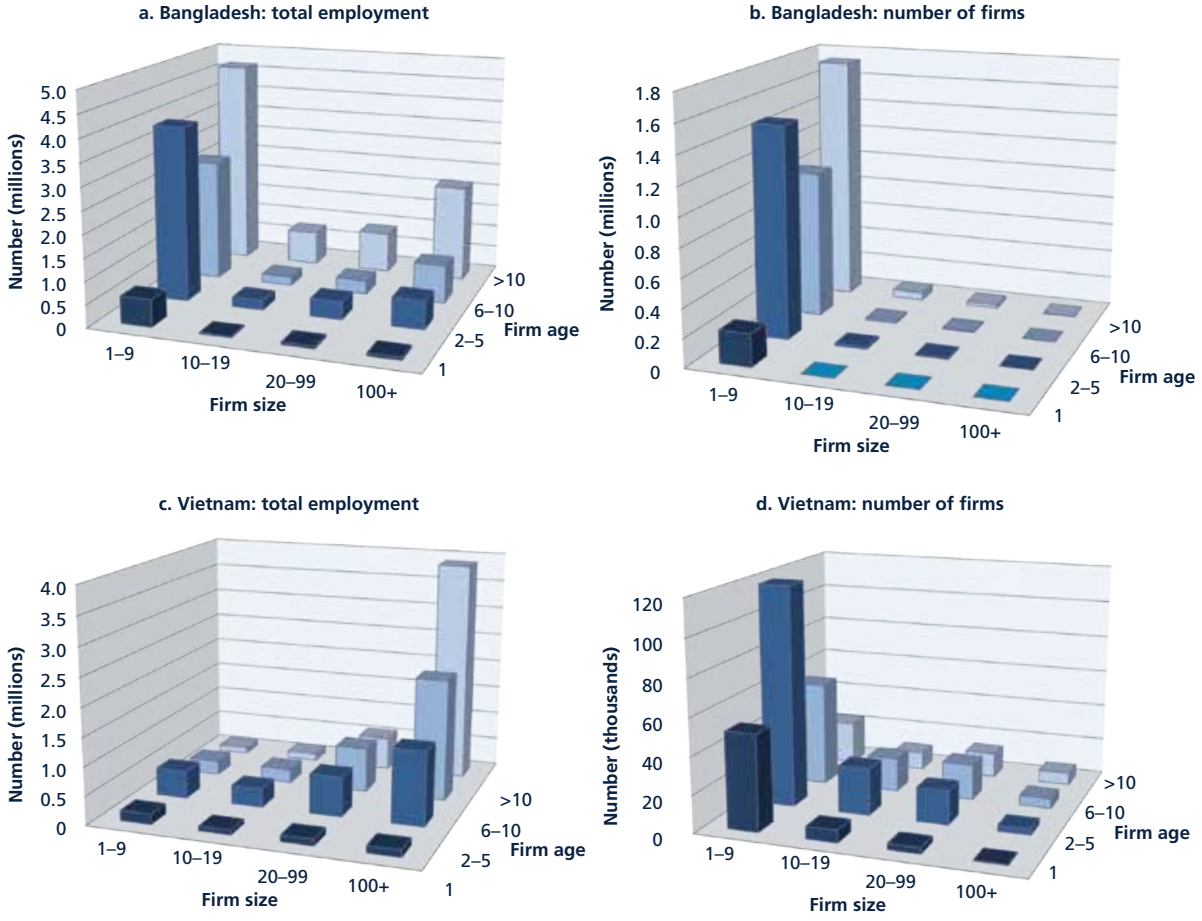
Source: Various country-specific sources (figure 127); Economic Census 2003 and 2013 (figure 128).
Note: Young establishments are those less than five years old.

The question remains whether the age pattern observed among Bangladeshi firms represents inefficiency in life-cycle dynamics. In a well-functioning private sector, we should see high churning among microenterprises, with young and small firms exiting if they are not productive. The picture presented in figure 129a and b indicates this may not be happening to a sufficient extent in Bangladesh, where the age distribution of microenterprises is not much different from that of larger firms. The illustration depicts an environment where microenterprises have high survival rates but fail to grow. The contrast with Vietnam in figure 129c and d is stark, particularly in the relative failure of midsize establishments to emerge in Bangladesh. For example, in Vietnam, young (less

than five years), midsize (from 10–99 employees) enterprises account for 16.6 percent of establishments and 12.0 percent of jobs; in Bangladesh, they account for just 0.7 percent of establishments and 3.8 percent of jobs. Moving to the next age bracket (6–10 years), midsize enterprises in Vietnam account for 9.6 percent of establishments and 8.2 percent of jobs; in Bangladesh, they account for just 0.5 percent of establishments and 2.8 percent of jobs.

The lack of dynamism in the microenterprise sector in Bangladesh may be partly explained by the role of microenterprises as a livelihoods strategy in the absence of quality employment options. In such an environment, very few microenterprises would be growth oriented, and exit from the market would hardly be an option for most establishments. In the context of pervasive informality, firms are unlikely to have incentives for exiting. However, lack of dynamism is similarly evident among enterprises with 10 or more employees. The fact that the average age among nonmicroenterprises increased by 15 percent in just one decade indicates that either new firm entry has slowed rapidly or churning is only taking place among the young firm cohort. As discussed above, the emergence of midsize firms is limited.

Figure 129
Age and size distribution of enterprises and employment: Bangladesh versus Vietnam, 2013



Sources: Economic Census 2013; World Bank and Vietnam Ministry of Planning and Investment 2016.

Regressions on enterprise size (measured by number of employees) show that age is positively associated with size, but the relative magnitude is quite small compared to the coefficients of indicators of foreign ownership and public sector (figure 130). In addition, size varies significantly with sector—the predictive power of the model increases by 22 percentage points conditional on location and industry versus location alone (not shown

in figure 130). This is in line with international norms. The results also highlight significant differences in size between foreign and domestically owned enterprises. Separate regressions on young establishments show significantly larger size entry for foreign direct investment.[3]

The results of this regression can be used to generate a cross-sectional life-cycle analysis modeling the employment growth of the average enterprise. Figure 131 presents these results for manufacturing establishments in Bangladesh, along with data from the manufacturing sectors of India, Mexico, the United States, and Vietnam. The results support the narrative that Bangladeshi enterprises grow only very slowly as they age, in contrast to experiences in many other countries. For example, manufacturing firms in the United States double in size, on average, in the first decade of operation, and then double again in the second decade. Firms in Mexico and Vietnam follow a similar path during the first decade of operation, but slow the pace in the second decade and beyond. In Bangladesh and India, however, firm growth is marginal throughout the life cycle.

Figure 130
Regression results: establishment age as a determinant of employment

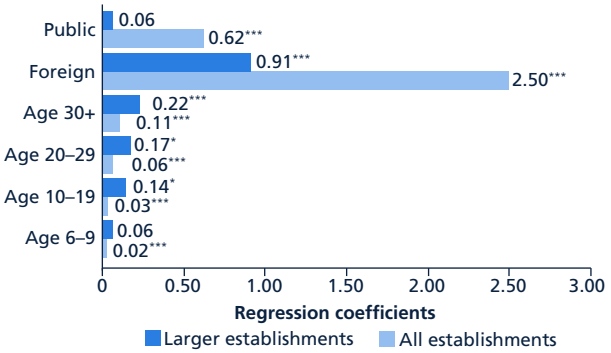
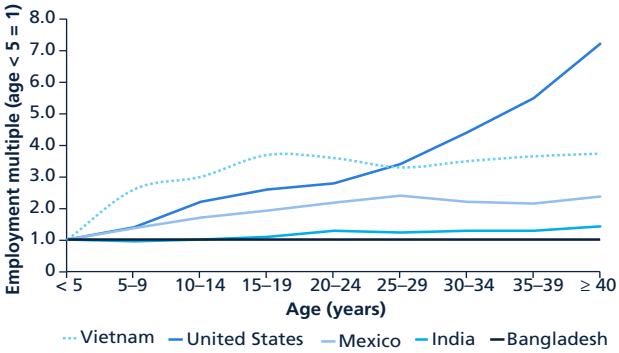


Figure 131
Employment growth over the life cycle of the average manufacturing establishment, Bangladesh versus peers



Source: Economic Census 2013 and other country specific sources.
Note: Figure 130 regressions control for sector and location (division) with log(employment) as a dependent variable and report coefficients along with significance: *** = p < 0.01; ** = p < 0.05; * = p < 0.1); total observations for all firms = 2,569,362; for larger firms (those with 10 or more employees) = 71,917.

It is worth noting that growth in Bangladeshi firms appears to be highly concentrated at the tails of the firm size distribution, with growth strongest among the smallest microenterprises and with the top 1 percent largest firms. This is in line with dynamics observed previously and highlights the fact that changes in hiring patterns among the smallest or largest firms (e.g., if the largest firms face regulatory, pricing, or technological shocks) might have an outsized impact on job growth patterns. In the case of Bangladesh, where large firms are concentrated in one sector, vulnerability to such a change is more acute.

The factors contributing to low firm growth are likely to be varied, but may include investment climate constraints, access to finance, and management capacity

So, why are firms in Bangladesh failing to grow? As noted above, one explanation for lack of observed growth, at least of household and microenterprises, is that these are mainly survivalist enterprises that function as second-best alternatives to wage employment. Such enterprises would not be expected to grow substantially. But for firms that are growth oriented, we can assess the factors that typically constrain growth globally to see which of these may be relevant and binding in the Bangladesh case. Among the most commonly identified factors are (1) barriers to competition preventing small firms from capturing market share, (2) lack of access to finance preventing investment for growth, (3) investment climate constraints raising production and transaction costs, and (4) lack of access to information or management capacity to respond to information on growth opportunities.

[3] Not presented here, but available from the authors.

We see no evidence that barriers to market competition are a major factor. Firm concentration is relatively limited. For example, in only 2 of the top 10 manufacturing subsectors do the top 4 firms account for as much as 10 percent of total employment; in the largest subsector (the main RMG subsector) the top 4 firms account for only 2 percent of total employment. Similarly, employment in the services sector is highly dispersed across firms. This finding suggests that there is little evidence of a small number of firms dominating the market to the extent that competition is hampered and firm growth discouraged. However, it should be acknowledged that firm concentration is only one factor that may capture market competition. Constraints through trade policy (e.g., protection against import competition), licensing regimes, and other regulatory factors might act as competition-reducing barriers to firm growth (box 3).

BOX 3: TRADE AND INDUSTRIAL POLICY IMPACTS ON COMPETITION—INSIGHTS FROM THE DIAGNOSTIC TRADE INTEGRATION STUDY

The World Bank's recent Diagnostic Trade Integration Study highlighted the role trade and industrial policy can play in creating the right incentives for firms to export, for investors to diversify outside of RMG, and for small firms to compete. Among the policies in Bangladesh that distort allocative efficiency across sectors and firms—and may thus shape employment growth patterns—are the following:

- High nominal and effective rates of protection, including the proliferation of para-tariffs (extra fees or taxes imposed on a good in addition to the tariff stated in the formal tariff schedule) that protect certain domestic industries
- Fiscal incentives and tax holidays that benefit some sectors and exclude others; these often lack transparency and are subject to ad hoc changes
- Tax loopholes accessible to certain sectors and types of firms
- Sector and firm-specific access of key customs facilities such as bonded warehouses
- Delays in duty drawback repayment, which penalizes smaller firms

Source: Kathuria and Malouche 2016.

Another factor commonly acknowledged to be a barrier to firm growth is access to finance. In the latest World Bank Doing Business Indicators report (World Bank 2016), Bangladesh ranked 157th of 190 countries on getting credit. Access to finance ranked third among the largest perceived constraints for businesses in both the latest World Economic Forum Global Competitiveness Index (2016) and World Bank Enterprise Surveys (2013) (figure 132). While Bangladesh is recognized as a world leader in the introduction of microfinance, coverage remains limited, and firms requiring investment capital in larger amounts may face onerous requirements (collateral) and high interest rates.

Beyond access to finance, broader constraints in the business regulatory environment may explain low growth among Bangladeshi firms, as well as the propensity of firms to operate informally. Results from World Bank Enterprise Surveys show that the average firm in Bangladesh reports major or severe constraints at a rate significantly (on average 50 percent) higher than firms in the rest of the South Asia region (figure 132). The nature of the main constraints (political instability, corruption, access to finance, and infrastructure[4]) is likely to have a direct impact on firm decisions to invest and may also affect the allocative efficiency of the economy. Perhaps more important from the perspective of explaining growth constraints, figure 133 shows that the scale of perceived constraints increases significantly for older and larger firms. This pattern does not hold for the rest of the region. For example, while the share of young firms in Bangladesh perceiving severe constraints is only

[4] Infrastructure is not picked up directly in the World Bank Enterprise Surveys, but was identified as the top constraint in surveys carried out for the latest World Economic Forum Global Competitiveness Index. Other top constraints identified in the Enterprise Surveys were corruption, access to finance, government bureaucracy, and workforce skills.

1 percentage point above the regional average, the gap rises to 11 percent for middle-aged firms. Similarly, while the share of microenterprises perceiving severe constraints in Bangladesh is 2 percentage points below the regional average, the share is 8 percentage points above average for midsize firms.

Figure 132
Firms indicating various business environment constraints as major or severe

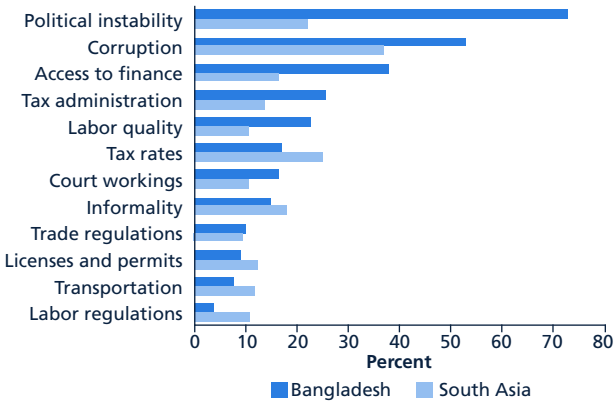
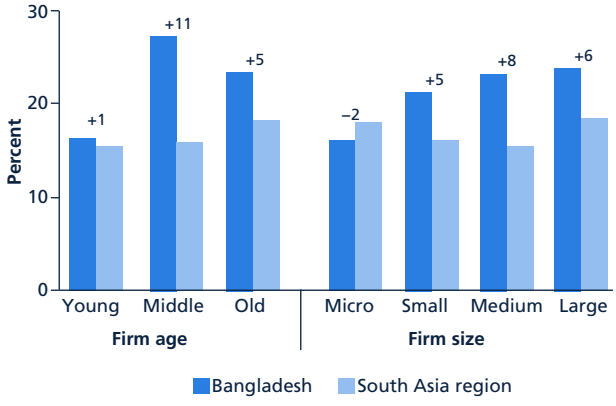


Figure 133
Perceived business environment constraints: comparison by firm age and size



Source: World Bank Enterprise Surveys.
Note: In figure 133, numbers indicate percentage point difference between Bangladesh and the South Asia regional average (based on the most recent survey year in each country).

The World Bank Doing Business indicators also suggest potential constraints that are not covered through the surveys discussed above. Bangladesh lags significantly in almost all Doing Business indicators. In particular, the indicators highlight broad weaknesses in governance and the rule of law that act as barriers to operating and growing a business in the country. Among these indicators, enforcing a contract (ranked 189th of 190 economies) and resolving insolvency (ranked 159th of 169 economies) may be particularly informative in helping explain the incentives for firms to operate informally. It takes about 4 years on average to enforce a contract through the Bangladesh court system, compared with about 3 years on average in South Asia and about 1.5 years in OECD countries (table 5). The average cost of enforcement accounts for two-thirds of the claim value, more than twice the cost in the rest of South Asia and three times the OECD average. With contract enforcement so costly and delayed, firms are likely to limit domestic supply chain development and rely on informal, trust-based relations. This reinforces small, informal firm structures as well as family-based conglomerates. Similarly, resolving insolvency is a four-year process, and eventual recovery rates average just 27 cents on the dollar. In this context, it is hardly surprising that failing firms do not exit the market in an efficient way, and that the financial sector is hesitant to lend.

Table 5
Summary of key indicators from selected Doing Business categories

Indicator		Bangladesh	South Asia average	OECD average
Enforcing a contract	Time to enforce through courts (days)	1,442	1,098	553
	Cost as % of claim	66.8	30.6	21.3
Resolving insolvency	Average loan recovery rate (% of loan value recovered)	27.0	32.6	73
	Time to resolve (years)	4.0	2.6	1.7

Source: World Bank 2016.

Another reason firms may not grow is simply that they lack market information about growth opportunities or do not have the technical capacity to act on such information. While certainly there will be many firms that lack quality information on market opportunities (at least in international markets), there is no clear evidence to

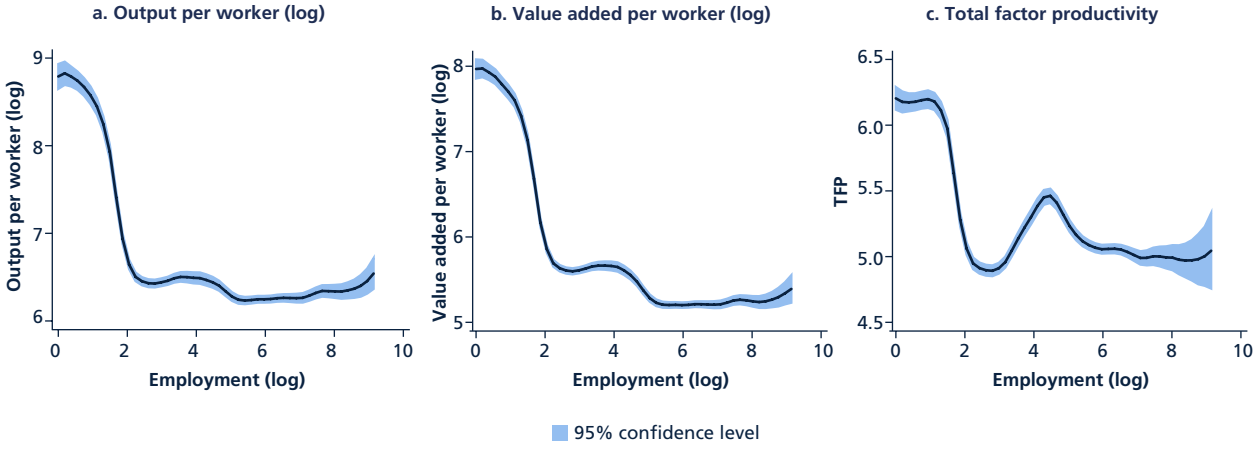
suggest this is a systematic and binding problem in Bangladesh. The issue of management capacity, while difficult to pinpoint, has been identified in previous studies in Bangladesh (Fernandes 2008; Macchiavello, Menzel, and Woodruff 2014). The propensity for Bangladeshi firms to be family owned and operated, and the reluctance to employ professional management, has been identified as a potential factor constraining firm growth in Bangladesh. For example, in the business sophistication pillar of the Global Competitiveness Index (2016), Bangladesh ranks 134th of 139 economies on management willingness to delegate.

Firms that do grow do not appear to benefit from productivity gains, suggesting factor distortions are at play

Typically, as firms increase in size, productivity also increases. Firms become large when they are efficient in allocating input for better production; at the same time, larger firms take advantage of economies of scale for improved efficiency. This relationship matters for growth, as a positive correlation between productivity and firm size is a sign that more productive firms can scale up to increase profits. Empirical studies consistently support this relationship between firm size and productivity in manufacturing in various contexts (Leung, Meh, and Terajima 2008; Van Ark and Monnikhof 1996; Van Biesebroeck 2005).

In Bangladesh, the correlation between size and productivity in the manufacturing sector is not linear.[5] This is illustrated in figure 134, which plots productivity measured as output per worker, value added per worker, and TFP. What we see in the firm size and productivity relationship mirrors somewhat the broader story of bifurcation in firm size distribution. Specifically, the highest levels of productivity are among the smallest firm sizes. This high productivity tail is fairly common across countries. What is less typical is the fact that productivity generally declines across the firm size distribution, so midsize and larger firms continue to show lower levels of productivity, until we reach the upper tail where see some evidence of a small uptick in productivity (although with wide confidence intervals).

Figure 134
Measures of productivity by firm size



Source: SMI 2012.

This nonlinear relationship between firm size and productivity is also illustrated in the results of a regression analysis of firm size on productivity (table 6). Although causality is not established, the results show a strong negative association between firm size and productivity and the positive association between the square of firm size. This relationship holds for the overall manufacturing sector and for the RMG and textiles sector specifically (although TFP results are not significant for the textiles sector). The regression results indicate the negative association between size and productivity reverses and becomes positive at around 200 employees in the manufacturing

[5] Note that the only source that allows for calculating firm productivity is the SMI, which restricts coverage to the manufacturing sector and to firms with 10 or more employees.

sector overall, and closer to 400 employees in the RMG and textiles sector (i.e., firms above this size show increasing productivity relative to smaller firms). These findings are in line with previous analysis in Bangladesh. For example, Fernandes (2008) found a negative correlation between firm size and TFP, and an inverse U-shaped relationship with firm age (the highest productivity was found in the youngest and oldest firms).

Table 6
Regression results of firm size on productivity

Dependent variable	VA/worker: all manufacturing	VA/worker: textiles/RMG	TFP: all manufacturing	TFP: textiles/RMG
Firm size	–1.045*** (0.140)	–0.532*** (0.0726)	–0.226*** (0.0781)	–0.225 (0.183)
Firm size squared	0.0983*** (0.0155)	0.0446*** (0.00748)	0.0275*** (0.00814)	0.0295 (0.0192)
Constant	8.503*** (0.268)	6.730*** (0.158)	6.118*** (0.105)	5.226*** (0.373)
Location dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	No	Yes	No
Observations	8,220	4,074	8,219	4,074
R-squared	0.457	0.114	0.574	0.293

Source: SMI 2012.
Note: VA = value added. Firm size measured in log(number of employees). Robust standard errors are in parentheses. *** = p < 0.01; ** = p < 0.05; * = p < 0.1.

Productivity dispersions shown in figure 135 confirm the broad picture described above. Even though there is less productivity dispersion among larger firms, average productivity differs little across small, medium, and large firms; and a significant share of small firms is at the upper tail of the productivity distribution.

High levels of dispersion in the productivity distribution of small and medium firms, combined with declining productivity among medium- and larger-size firms, signal possible distortions in factor markets (figures 136 and 136). These distortions may be related to problems of allocative efficiency, whereby productive firms may grow below their potential while less productive firms fail to exit (thus contributing to the firm life-cycle dynamics we observe in Bangladesh). It may also suggest problems with technical efficiency—i.e., the efficiency with which firms convert inputs into outputs.

Sectoral differences in productivity are largely reflected in wages

Among manufacturing sectors, RMG has the lowest labor productivity (value added per worker) (figure 137), with furniture and textiles the only significant sectors without a substantial productivity premium over RMG.

Figure 135
Kernel distribution of labor productivity (value added per worker) by firm size

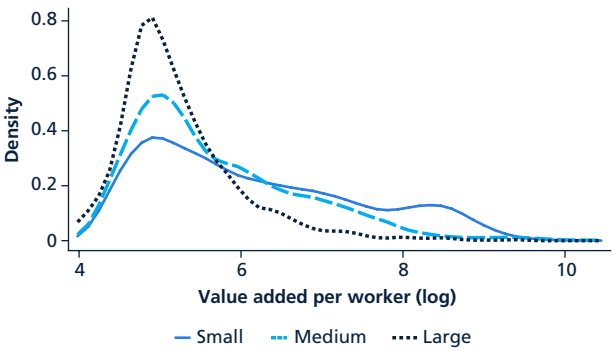
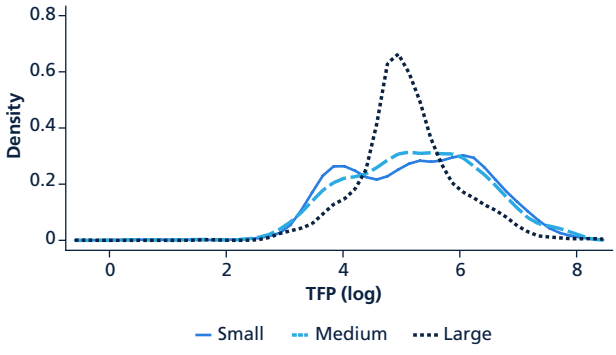


Figure 136
Kernel distribution of TFP by firm size



Source: SMI 2012.
Note: Data are for manufacturing firms only; small firms = 1–19 employees; medium = 20–99; large = 100 or more.

This is perhaps not surprising, given the labor intensity of RMG, and the fact that such a large share of output comes through imported inputs (i.e., the value-added share of output is low). As would be expected, within-sector productivity dispersions are much narrower when taking TFP into account (figure 138). Moreover, RMG's performance on TFP is better, although it remains among the less productive manufacturing sectors. By contrast, less labor-intensive (and more resource- and capital-intensive) sectors such as nonmetallic minerals and fabricated metals show higher productivity.

Figure 137
Labor productivity differentials relative to the RMG sector

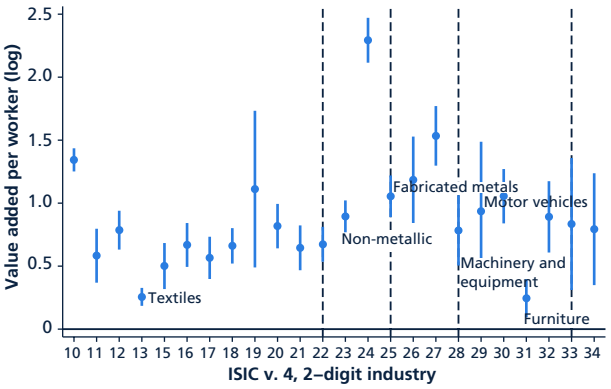
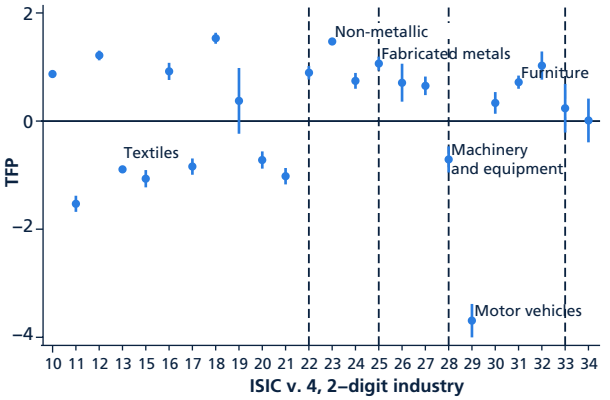


Figure 138
TFP differentials relative to the RMG sector



Source: SMI 2012.
Note: Figures show average value of regression coefficient and 95% confidence interval (range), based on least-squares regression on industry dummies, controlling for size, location, and ownership.

Finally, we consider the correlation of average wages with productivity and other firm-level characteristics of performance. This relationship matters for jobs, as it is a critical channel through which improved firm performance may translate to higher job quality—i.e., through increased wages and earnings. Results show that firms with higher productivity (however it is measured) tend to pay higher wages, with an increase of 10 percent in productivity being associated with 2.5 to 4.0 percent higher wages on average. This relationship is nonlinear and only takes effect once wages reach a certain level. In terms of firm size, average wages increase monotonically with size. This finding is consistent with a "market power" explanation where larger firms exploit their position to reap more benefits, but also share some of their profit with workers. The result reverses when TFP is included. Thus, for the same levels of efficiency, small firms pay higher average wages.

Foreign and public firms tend to pay higher wages, although this is not robust to all specifications. In terms of location, there is little regional heterogeneity regarding wages. A worker in a firm in Dhaka or Chittagong is likely to have similar wages other things equal, although the cost of living is likely to be significantly higher in these metro areas.[6] Exporters are also likely to pay higher wages, a result found in most countries.

[6] Exceptions to this are workers in firms located in Barisal, who have the lowest wages; and in Rangpur, who have slightly higher wages.

10. SPATIAL TRANSFORMATION

The process of structural transformation almost inevitably involves not just a sectoral shift, but a spatial one. As workers move out of the agricultural sector, they move into jobs in services and manufacturing that tend to concentrate in and around urban areas. In some countries (e.g., Korea and the Philippines), this spatial transformation involves rapid agglomeration in megacities; in others (e.g., China, Taiwan, and Thailand), the shift is stronger in the rural nonfarm economy, which concentrates workers in secondary towns and cities (Christiaensen and Todo 2013). The capacity of destinations, whether large metropolitan areas or secondary towns, to support sustainable productivity growth is a critical determinant of how effective the spatial transformation process will be in supporting large-scale quality job creation. In Bangladesh, a dramatic spatial transformation over the past decade or more has been a major contributor to the growth of more, higher-quality, and inclusive jobs. However, constraints are emerging due in part to shortcomings in the urban environment. This chapter describes patterns of spatial transformation in Bangladesh, recent trends, and implications for future job growth.

Employment is increasingly concentrating geographically, particularly in Dhaka, driven by patterns of structural transformation that vary significantly across the country

Overall, employment is concentrating increasingly in Dhaka as labor moves out of agriculture and into manufacturing and services. The population of the megacity of Dhaka rose from 3.3 million in 1980 to close to 18 million in 2016. While the Dhaka division is now home to more than a third of Bangladesh's population, it accounts for 45 percent of all jobs in industry and 39 percent of all services jobs. Dhaka has three times more industry jobs than the next highest division (Chittagong) and almost twice as many services jobs as the next highest (Rajshahi) (figure 139).

Dhaka has the second highest concentration of agricultural jobs after Rajshahi, but is the only division with less than 40 percent of its employment still in agriculture—in most divisions, close to half of all jobs or more remain in agriculture (figure 140). Outside of Dhaka, which has 28 percent of its jobs in industry, there is very little variation in industry share, with all other divisions in the 14–19 percent range; Sylhet has just 6 percent of its jobs in manufacturing.

Figure 139
Share of sectoral employment by division

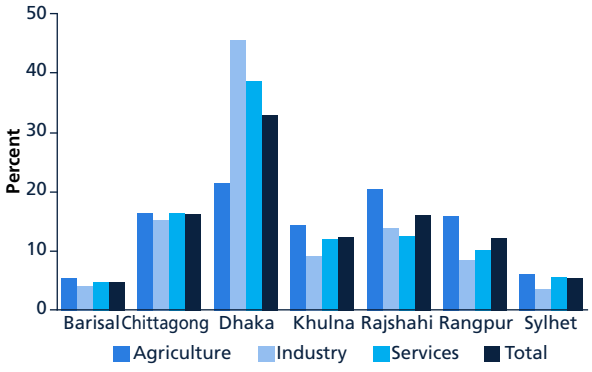
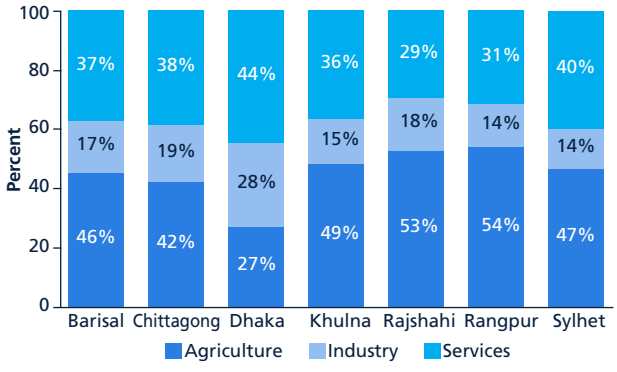


Figure 140
Distribution of divisional employment by sector



Source: LFS 2016.

Over the past decade, job creation has been strongest in Dhaka and Rajshahi, which are also the two regions that account for the largest shares of total employment (figures 141 and 142). Employment in Dhaka grew by 3.7 percent annually over the period 2003–16, while employment in Rajshahi grew even more strongly at 4.1 percent annually. Dhaka alone created more than 540,000 new jobs annually between 2003 and 2016, accounting for 45 percent of all job creation in the country (and for more than 50 percent of all new jobs taken by women). Rajshahi contributed another 24 percent of total national job creation. By contrast, Chittagong grew employment by just 1.3 percent annually over the period, and Barisal experienced a decline in employment.

Figure 141
Evolution of employment by division, 2003–16

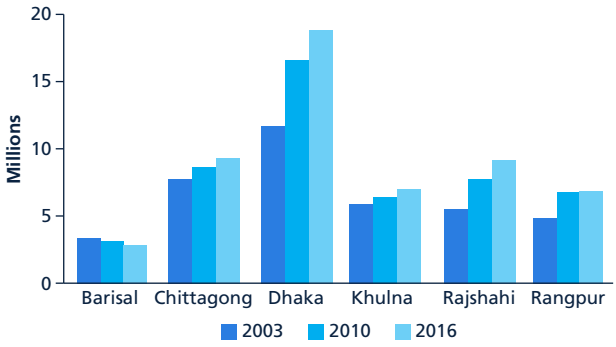
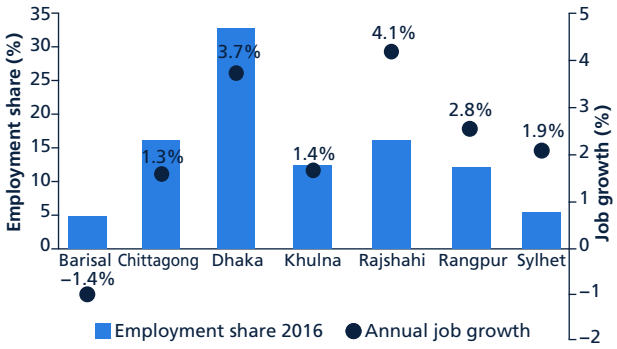


Figure 142
National employment share and annual job growth by division, 2003–16



Source: LFS 2003, 2010, 2016.

The growth experiences of Dhaka and Rajshahi reflect very different sectoral developments. In Dhaka, agricultural jobs shrank, but industry employment grew at a rapid 8.2 percent annually, with services jobs growing 4.3 percent (table 7). By contrast, Rajshahi saw its strongest growth in agriculture (4.1 percent annually), but also experienced robust growth in both industry (5.3 percent) and services (2.3 percent). Rangpur experienced substantial growth in industry while maintaining positive growth in agriculture. Chittagong, meanwhile, experienced anemic growth across all segments except industry. Outside of Dhaka and Chittagong, job creation has been much stronger in rural areas than in urban ones, leading to a declining share of urban employment. This may reflect growing strength in Bangladesh's nonagricultural rural economy. It also may reflect a declining competitiveness of Bangladesh's secondary cities.

Table 7
Annual growth (%) in sectoral employment by division, 2003–16

Division	Agriculture	Industry	Services
Barisal	–2.4	1.0	–2.2
Chittagong	0.0	3.3	1.0
Dhaka	–0.6	8.0	4.3
Khulna	0.6	3.7	0.7
Rajshahi	4.1	5.3	2.3
Rangpur	2.4	5.8	1.4
Sylhet	0.3	2.6	2.4

Source: LFS 2003, 2016.
Note: Annual growth is calculated using the compound annual growth rate.

Higher-quality jobs (wage jobs) are even more concentrated in Dhaka, with Rajshahi the second most promising region for the creation of wage employment. Figure 143 shows the likelihood of being in different forms of

employment depending on division of residence.[1] The results, which control for worker characteristics, show a stark difference in terms of likelihood of being in wage private sector employment in Dhaka (the omitted reference category) versus all other regions, and the high likelihood of being self-employed in agriculture in these regions. Rangpur stands out from the rest of the regions in terms of having a greater likelihood of private wage employment. A worker in Dhaka is also more likely than in other divisions to be self-employed in nonagricultural activities compared to a worker in Rajshahi or Rangpur. Public sector employment is more likely in urban areas than rural, with less notable differences across divisions. Figure 144 looks more closely at the probability of being in wage versus nonwage employment.[2] As would be expected, in all cases we see a negative likelihood to be in wage employment in all divisions relative to Dhaka, with workers in Rangpur the most likely to be in wage work. What is most notable from these regression results—although in line with expectations—is that being in a rural area, regardless of division, makes it much less likely to have a wage job.

Figure 143
Impact of location on employment outcomes (marginal effects)

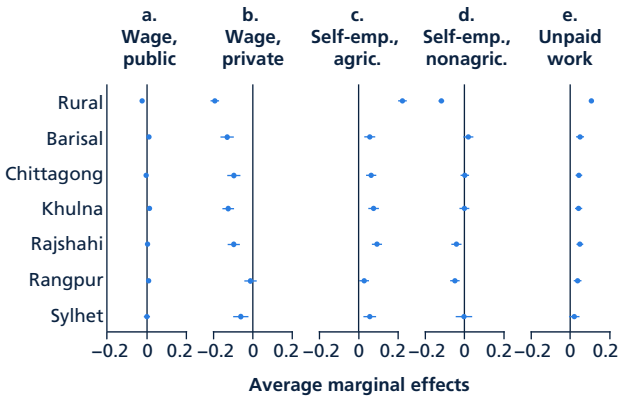
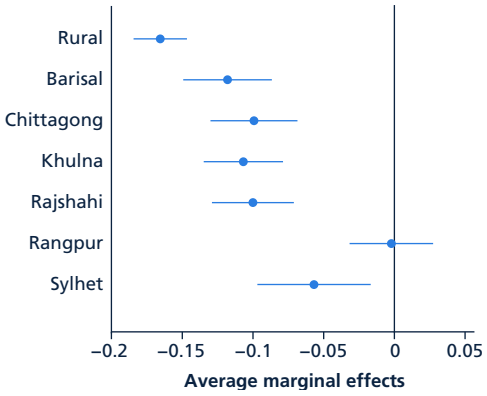


Figure 144
Probability of wage employment (marginal effects)



Source: LFS 2016.

The structural changes underpinning spatial transformation are supported by patterns of change in the firm landscape, resulting in heavy concentration around Dhaka and the northwest

Dhaka and Chittagong not only account for half of all nonagricultural establishments in the country, but are among the divisions with the fastest growth in establishments over the period 2003–13 (figure 145). Over the decade, Dhaka experienced more than 7 percent annual growth in establishments, with Chittagong at 6.4 percent. Sylhet actually experienced the fastest growth in establishments (7.2 percent), but from a very small base relative to other parts of the country.

Overall, while the largest population of firms is around Dhaka, high concentrations also exist in the northwest, in Rangpur and Rajshahi (figure 146). Outside of Chittagong, the firm landscape is very thin in the southern and northeastern parts of the country. Figure 147 presents a "hotspot" analysis,[3] where firms are mapped across *upazilas* based on density rather than the nominal figure (i.e., firms relative to the population of the *upazila*[4]). The results confirm the strong concentration around Dhaka and the northwest, but also identify Khulna as an area where firm density is higher than would be expected. By contrast, Barisal and Sylhet (along with the southern and southwestern parts of Dhaka Division) stand out as having much lower than expected firm density.

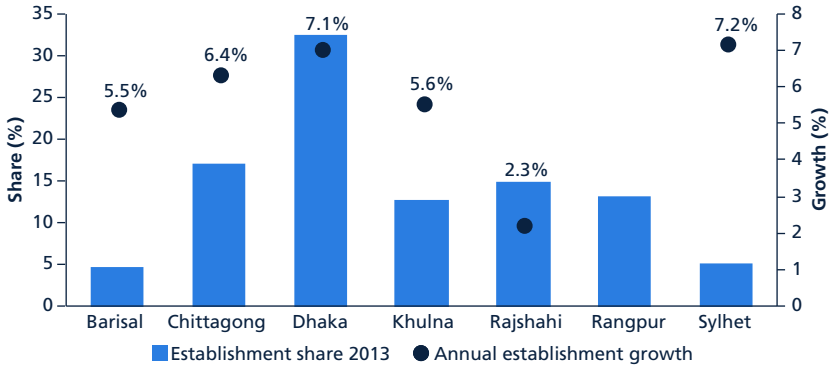
[1] Dhaka is the base case, so the results show probability relative to Dhaka.

[2] The base that is compared to in the regression is being in an urban part of Dhaka Division.

[3] Hotspot analysis assesses the probability that the spatial distribution of values (in this case, firm density) is random by looking at whether there are significant differences in firm concentration between each grid location and the "neighborhood" (the set of spatially proximate grids). If the neighborhood is significantly denser (less dense) than the study area, that grid is a hotspot (cold spot). The analysis is carried out in ArcGIS using the in Getis-Ord Gi* statistical feature.

[4] They are presented here as firms per 1,000 population.

Figure 145
Distribution and growth of establishments by division, 2001/03–16



Source: Economic Census 2001/03 and 2013.
Note: Due to definition changes in the division, we are unable to calculate the growth rate for Rangpur.

Figure 146
Distribution of firms by *upazila*, 2013

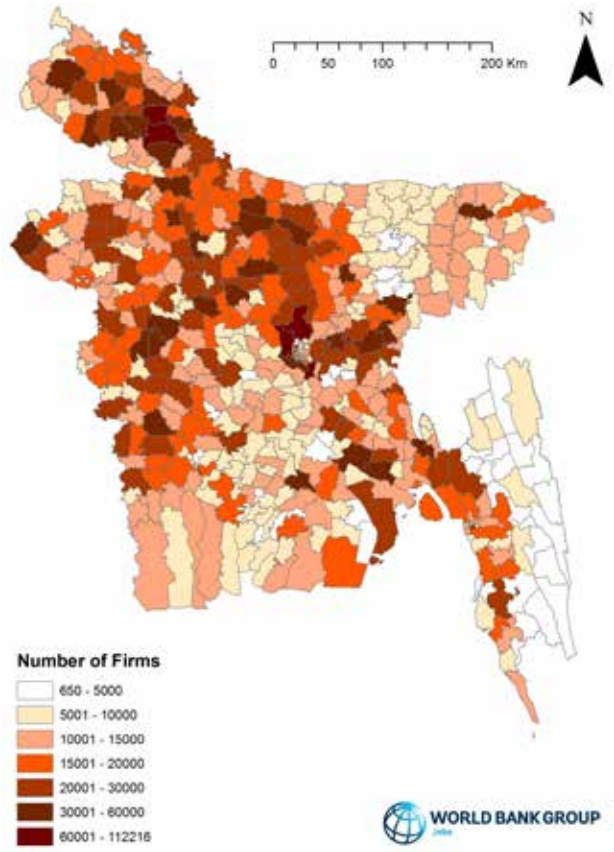
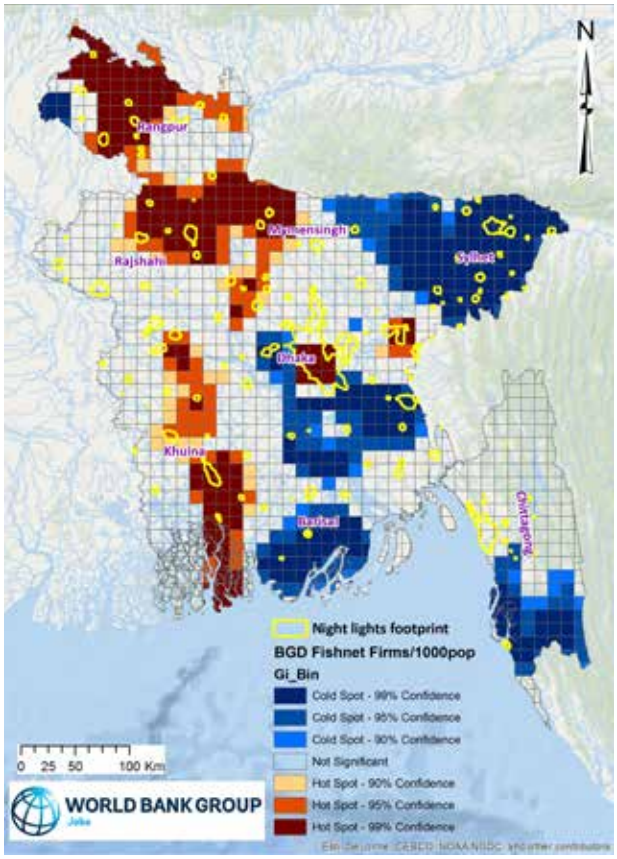


Figure 147
Firm density: hotspot analysis



Source: Economic Census 2013.

Location patterns of firms vary significantly by sector. Export-oriented sectors—most notably RMG and textiles but also including other light manufacturing—tend to have extremely high concentrations in Dhaka and Chittagong. In the case of RMG, e.g., 80 percent of all firms with 10 or more employees are within 50 kilometers of the city of Dhaka. The only other concentrations of RMG firms are in Chittagong (about 10 percent of all firms) and Bogra (where the vast majority of firms in the sector are microenterprises). A sector such as food processing, which largely serves the domestic market, looks very different (figure 148), with firms distributed much more broadly and concentrations in western parts of the country (the largest concentration of nonmicroenterprises is outside the city of Bogra; the largest concentration of microenterprises is outside of Rajshahi), presumably near sources of agricultural production.

Figure 148
Distribution of nonmicroenterprise RMG firms by *upazila*

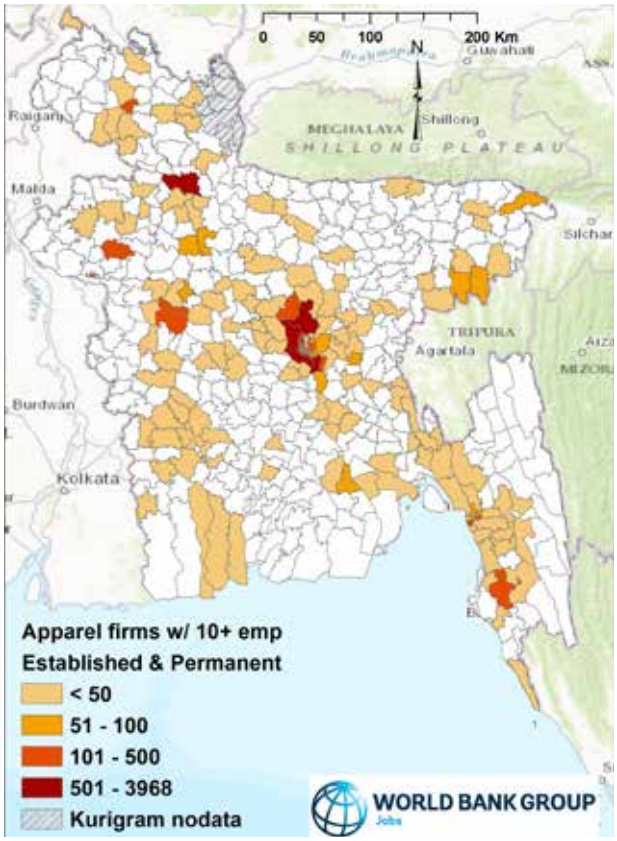
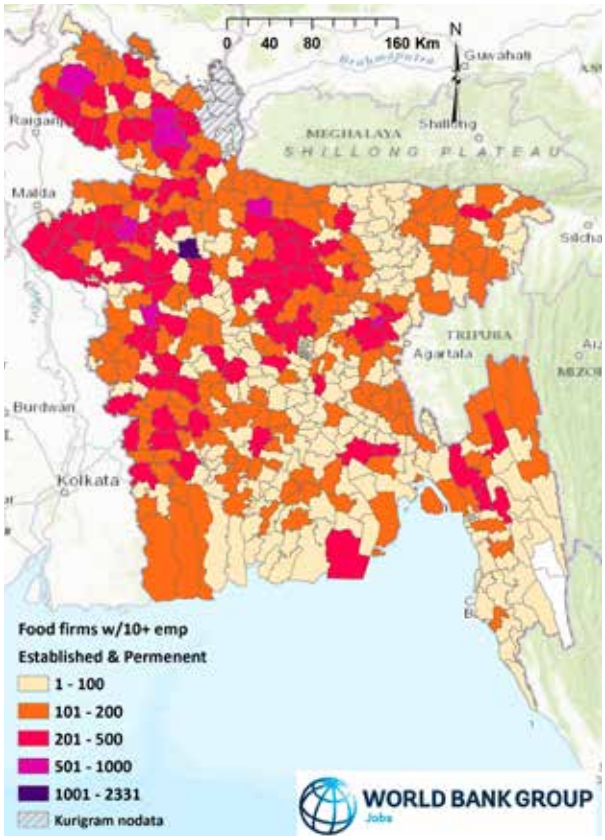


Figure 149
Distribution of nonmicroenterprise food processing firms by *upazila*



Source: Economic Census 2013.

The strong rural dimension of job growth can be attributed to two parallel spatial patterns: rapid growth of rural nonfarm microenterprises and a shift of the large-scale manufacturing sector toward the urban periphery

Figures 150 and 151 show the evolution of firms and employment by enterprise type and location (urban versus rural) over the decade. It is clear that there has been rapid growth in firm creation, perhaps most notably among rural microenterprises, over the decade. In terms of jobs, the largest contribution, by some distance, came from nonmicroenterprises in rural areas (34 percent, up by 10 percent annually over the decade). Nonmicroenterprises in urban areas contributed another 24 percent, while rural and urban microenterprises contributed 23 percent and 19 percent, respectively.

Figure 150
Number of rural and urban permanent establishments: 2003 and 2013

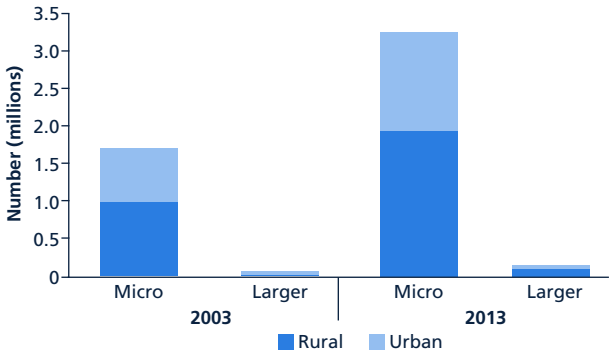
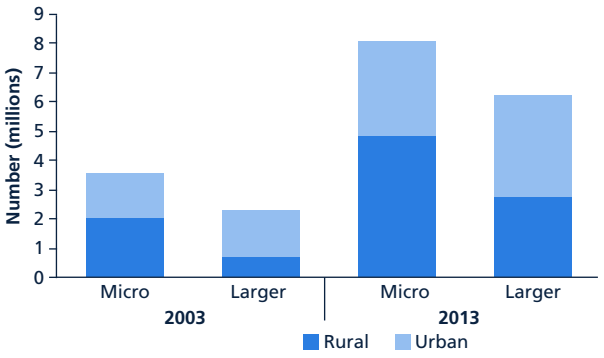


Figure 151
Employment in rural and urban permanent establishments: 2003 and 2013

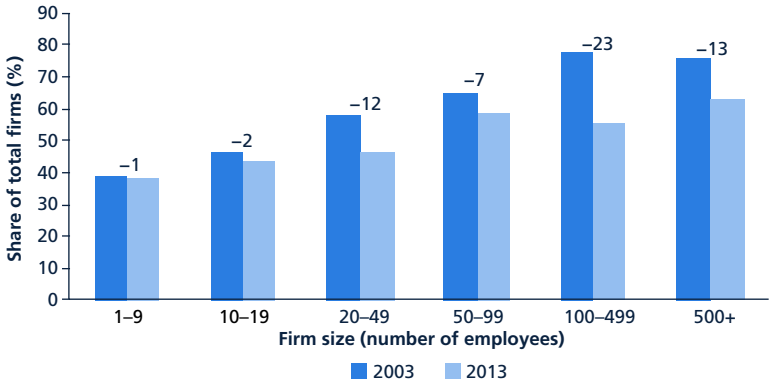


Source: Economic Census 2001/03 and 2013.
Note: Larger enterprises are those with 10 or more employees.

The result of these developments is that 53 percent of all (nonagricultural) jobs in permanent establishments were in rural areas in 2013, up from 49 percent in 2003. The employment size of a rural nonmicroenterprise grew by 34 percent over the decade, compared to just 13 percent for urban enterprises. However, the average urban firm is still 50 percent larger than the average rural firm, due to the propensity of large firms to be based in urban areas—while just 38 percent of microenterprises are in urban areas, 63 percent of all enterprises with 500 or more employees are urban.

But while larger enterprises are still more likely to be in urban areas, this appears to be changing rapidly. Figure 152 shows that between 2003 and 2013, the share of firms based in urban areas declined across all size categories. More important, while the shift was marginal for smaller firms (just 1 percentage point for microenterprises and 2 percentage points for enterprises with 10–19 employees), it was very substantial among larger firms. Starting with a 12 percentage point decline in the urban share of firms with 20–49 employees and rising to 23 percentage points among those with 100–499 employees and 13 percentage points for those with 500 or more employees. This represents a dramatic shift in the location of firms in such a short time frame. Most likely, the majority of this change is explained by the location of new firms rather than a physical shift of incumbent firms (the available data do not allow analysis of this distinction) or a dramatic difference in the performance of incumbents. Regardless, it suggests sharp responses by firms to the relative competitiveness of urban and rural locations.

Figure 152
Urban share of enterprise by size category, 2003 and 2013



Source: Economic Census 2001/03 and 2013.
Note: Numbers indicate percentage point change in share between 2003 and 2013.

But as many observers have pointed out, the distinctions between urban and rural are increasingly fuzzy in densely populated, rapidly urbanizing Bangladesh (Asfar 1999; Rahman 2014; World Bank 2015). In fact, the strongest concentrations of firms (not just in nominal terms but also in terms of density) are around large cities (figure 153), indicating that what we may be observing is not so much a shift of firms to the rural hinterland as a shift toward the urban periphery. A deeper look at urban and rural classifications shows there are many locations within metropolitan areas classified as rural. Figure 154 illustrates this using the Dhaka metropolitan area as an example. Using the nightlights footprint to establish a boundary for the functional metropolitan area, it is clear that parts of the metropolitan area (around half) are unions classified as rural.[5]

Figure 153
Firm density: nonmicroenterprises by *upazila*, 2013

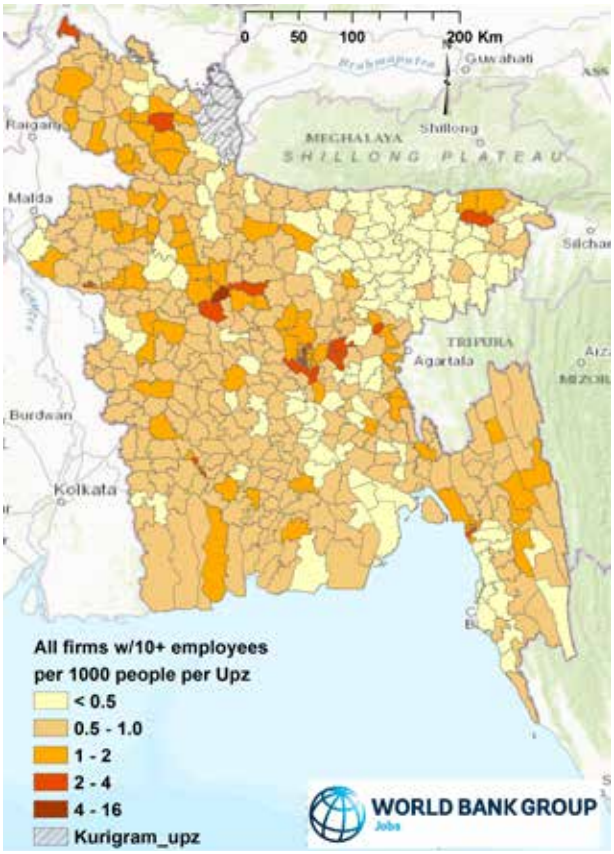
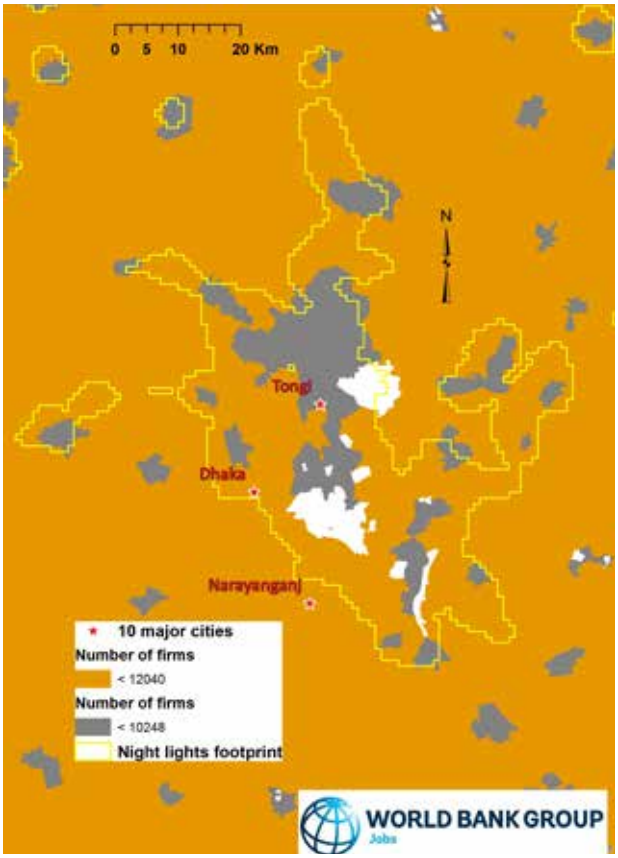


Figure 154
Firm location by rural/urban districts in Dhaka metro area, 2013



Source: Economic Census 2013; On right: orange denotes unions classified as rural and gray denotes unions classified as urban

It appears that many of the largest firms are located precisely in these "rural" areas in the periphery of large cities where formal and informal industrial zones have emerged over the last 10–15 years. Figure 155 identifies the unions across the country (and figure 156 hones in on Dhaka) that are home to firms with 500 or more employees, and sets these against areas identified by nightlights as having the largest economic density. Here, again we see that many of these firms are located in unions classified as rural but located within urban regions.

Comparing changes in the number of firms by location in and around specific cities in 2003 and 2013 provides further evidence of employment shifting into the urban periphery of Dhaka. Figure 157a, which focuses on the RMG and textiles sector, shows that the number of firms with at least 10 employees in unions within the

[5] Unions are the administrative boundary below the *upazila* level and above the village level (equivalent to a municipality). Note that there is also substantial land in the Dhaka metropolitan area classified as neither rural nor urban; this is mainly land used by the military.

Figure 155
Location of 500+ employee firms in rural/urban districts, 2013

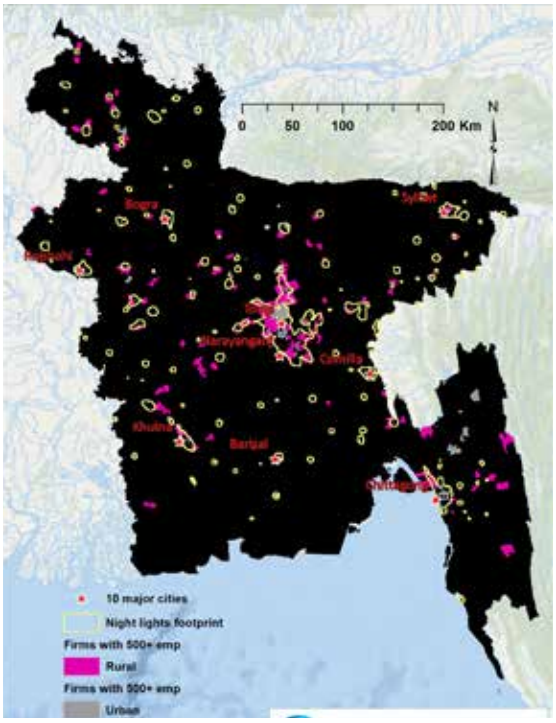
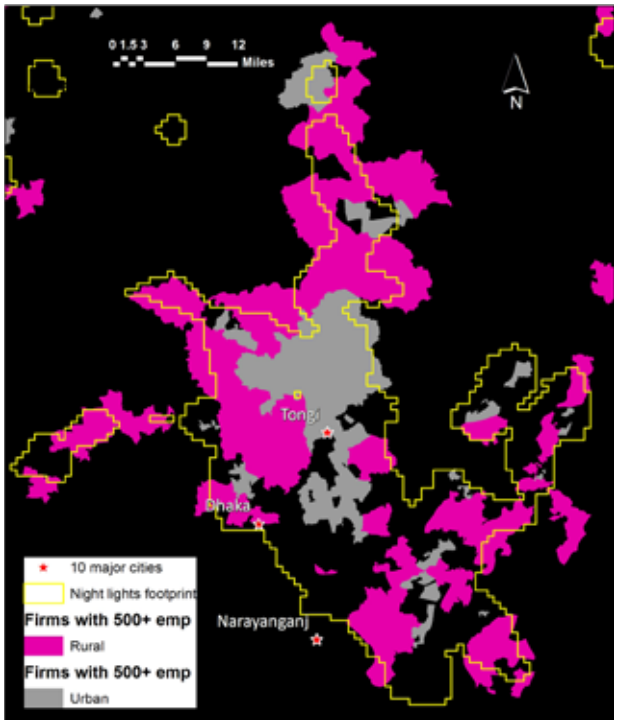


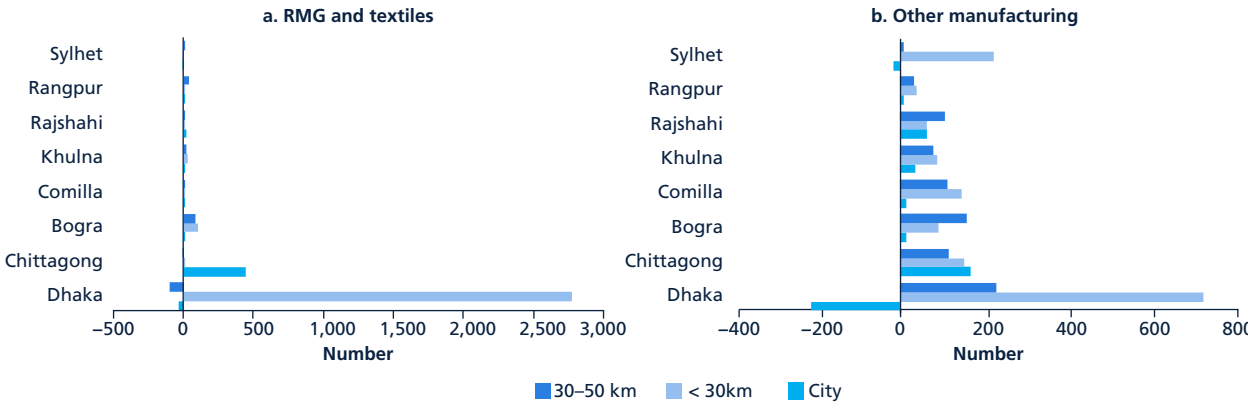
Figure 156
Location of 500+ employee firms in rural/urban districts in Dhaka metro area, 2013



Source: Economic Census 2013; pink denotes unions classified as rural and gray denotes unions classified as urban.

city of Dhaka actually declined slightly between 2003 and 2013, but the number based outside the city within 30 kilometers of the city center increased substantially (by more than 2,700 firms). The trend in Chittagong was different, with most firm creation coming within the city. Firm growth in the next six largest cities (secondary cities) was also strongest outside the city but within 30 kilometers of the city center (although for the RMG and textiles sector, the stock and growth of nonmicroenterprises in secondary cities is so small, it almost fails to register). For other manufacturing, a similar story holds in Dhaka, with an even larger decline in firms in the city center, offset by growth in the urban periphery (figure 157b). The situation in Chittagong again shows relatively faster growth in the city, along with strong growth in the near periphery; secondary cities show the largest growth in the hinterlands (30–50 kilometers), but stronger growth in the urban periphery than in the cities.

Figure 157
Changes in the number of nonmicroenterprises for RMG/textiles and other manufacturing, 2003–13



Source: Economic Census 2001/03 and 2013; "other manufacturing" is all manufacturing excluding RMG and textiles and agriprocessing.

The analysis is supported by regressions results on employment growth in permanent firms (table 8), which includes location indicators for both urban location and market access.[6] The table shows results of regressions on employment growth for all firms, for firms with 10 or more employees, and for firms of 250 or more employees. Explanatory variables include sectors, divisional location, urban versus rural location ("urban" and "urban within 50 km"), and a measure of access to market. We focus on spatial results, which indicate a significant negative association between employment growth and urban locations across all size categories. However, the size (but not the statistical significance) of the effect declines significantly when measuring a wider urban area. Results using the broader population and market access measure suggest that the strength of the relationship is driven by microenterprises (less than 10 employees), while for firms of 250 or more employees the relationship between market access and employment growth turns positive (but not significant). Taken together, these results suggest that employment growth is driven largely by the entry of small firms as well as the growth of very large firms in rural areas. This is likely a response to growing challenges of urban congestion, including lack of access to land, increasing costs of traffic congestion and pollution, and rising wage demands resulting from transport and housing constraints (Ellis and Roberts 2016; Muzzini and Aparicio 2013).

Rapidly escalating congestion costs in Dhaka combined with poorly functioning secondary cities prevent Bangladesh from taking full advantage of the potential of urbanization to drive growth and quality job creation

The largest metropolitan areas in any country eventually experience congestion costs that force traditional manufacturing out, to be replaced by activities that can deliver higher value added per unit of land utilized, and can take maximum advantage of agglomerations that emerge from urbanization. In this sense, the shift occurring in Dhaka is natural, although the scale and speed of the transformation appear to be running ahead of what would be efficient at this stage of Bangladesh's development. This inefficiency is the result of substantial shortfalls in the quality of infrastructure and services in Dhaka, and to a lesser extent Chittagong. In the annual ranking of 140 cities worldwide by the *Economist*'s Intelligence Unit, Dhaka ranked 136th overall in 2016 and dead last (140th) for infrastructure. While infrastructure gaps affect firm competitiveness directly through increasing costs of operations, there is also evidence that transport constraints and, especially, high and rapidly rising housing costs are putting severe burdens on workers and contributing to strong upward pressure on wages.[7] Moreover, lack of available land and facilities restricts firms from expanding in situ. Those firms with the capital and growth prospects to support a greenfield shift to the urban periphery are few; most firms simply cope with the constraints by deferring growth plans.

As a country's main urban center becomes increasingly congested, the expectation is that manufacturing shifts not simply to the periphery of the megacity but that secondary cities begin to become more attractive locations for manufacturing. This does not appear to be happening in Bangladesh, which raises questions about the environment for investment and job creation in Bangladesh's secondary cities. As discussed earlier, outside of Dhaka, the process of structural change is occurring much more slowly and is of lower quality, in the sense that most nonagricultural employment growth is in relatively low-productivity services jobs. Figure 158 shows clearly that outside of Dhaka, not only are the vast majority of jobs located in rural areas, but growth in urban areas is minimal. Even in the industrial and services sectors, the stock and growth of jobs is much stronger in rural areas.

While secondary cities are less congested than Dhaka and Chittagong, they face even larger shortfalls in the critical infrastructure supporting industrialization (Muzzini and Aparicio 2013), most notably transport and electricity. Gaps in social infrastructure—health and education—remain major barriers to firms and workers shifting out of Dhaka and Chittagong and into secondary cities.

Improved development of these secondary cities is likely to be critical to deliver a more efficient process of spatial and sectoral transformation in Bangladesh. With increased agricultural productivity contributing to expanding rural incomes, secondary cities have an important role to play as services centers. But they are also likely to be

[6] Market access is measured as the population-weighted distance from each *upazila* to all other *upazilas* in the country.

[7] See, e.g., http://fashionrevolution.org/high-rents-trap-bangladeshs-garment-workers-in-a-cycle-of-debt/.

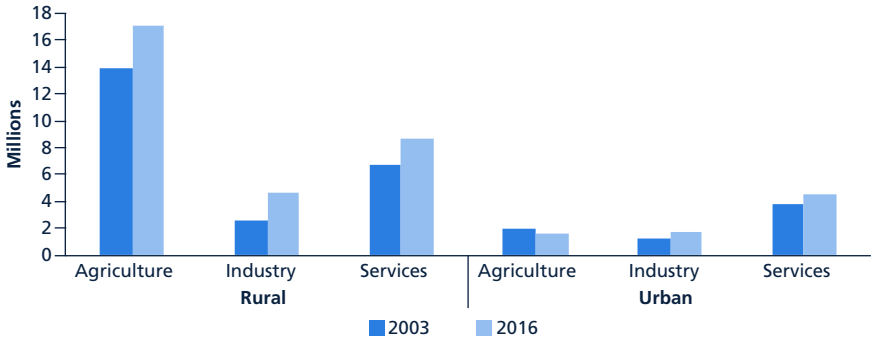
Table 8
Regression on firm-level employment growth, 2003–13

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All firms			Firms with ≥10 employees			Firms with ≥ 250 employees		
Barisal	0.148***	0.137***	0.129***	–0.0488	–0.0852	–0.000285	0.131	0.195	0.0961
	(0.0407)	(0.0412)	(0.0395)	(0.0770)	(0.0775)	(0.0746)	(0.393)	(0.396)	(0.383)
Chittagong	0.150***	0.144***	0.161***	0.0946*	0.0751	0.185***	0.256	0.311*	0.271*
	(0.0300)	(0.0299)	(0.0287)	(0.0483)	(0.0485)	(0.0457)	(0.179)	(0.179)	(0.160)
Khulna	0.0306	0.0214	0.00745	0.268***	0.230***	0.277***	0.521**	0.583**	0.448**
	(0.0353)	(0.0357)	(0.0349)	(0.0573)	(0.0581)	(0.0560)	(0.233)	(0.236)	(0.223)
Rajshahi	0.182***	0.173***	0.162***	0.138***	0.0999*	0.158***	0.498**	0.555**	0.420*
	(0.0312)	(0.0317)	(0.0303)	(0.0520)	(0.0529)	(0.0498)	(0.242)	(0.243)	(0.226)
Rangpur	0.229***	0.221***	0.192***	0.112*	0.0798	0.0922	0.344	0.400	0.285
	(0.0388)	(0.0391)	(0.0385)	(0.0663)	(0.0668)	(0.0651)	(0.334)	(0.336)	(0.334)
Sylhet	–0.0236	–0.0338	–0.0385	0.224***	0.186**	0.276***	–0.147	–0.0923	–0.119
	(0.0446)	(0.0451)	(0.0438)	(0.0771)	(0.0777)	(0.0761)	(0.459)	(0.457)	(0.465)
MinUtilConstr	0.000409	0.00110	0.0140	0.0679	0.0686	0.0955	–0.770**	–0.774**	–0.731**
	(0.0707)	(0.0707)	(0.0709)	(0.114)	(0.114)	(0.114)	(0.356)	(0.355)	(0.348)
Food mfg.	–0.0114	–0.0125	–0.0272	0.124	0.119	0.0901	–0.205	–0.207	–0.251
	(0.0571)	(0.0571)	(0.0565)	(0.0973)	(0.0974)	(0.0964)	(0.304)	(0.304)	(0.305)
Furniture mfg.	0.299***	0.298***	0.283***	0.744***	0.741***	0.712***	–0.430	–0.433	–0.442
	(0.0552)	(0.0552)	(0.0548)	(0.0979)	(0.0981)	(0.0966)	(0.383)	(0.382)	(0.372)
Other mfg.	0.138***	0.138***	0.141***	0.172**	0.175**	0.176**	0.0202	0.0162	–0.0411
	(0.0510)	(0.0510)	(0.0507)	(0.0863)	(0.0864)	(0.0853)	(0.177)	(0.177)	(0.174)
Commerce	0.0996*	0.0984*	0.0839	–0.148	–0.151	–0.160*	–1.949***	–1.951***	–1.939***
	(0.0519)	(0.0520)	(0.0518)	(0.0960)	(0.0961)	(0.0953)	(0.213)	(0.214)	(0.219)
Services	–0.311***	–0.312***	–0.316***	0.0102	0.00907	0.0131	–0.902***	–0.895***	–0.800**
	(0.0516)	(0.0516)	(0.0514)	(0.0844)	(0.0847)	(0.0837)	(0.314)	(0.314)	(0.322)
Social_Services	–0.108**	–0.109**	–0.120**	–0.0171	–0.0180	–0.0422	–0.141	–0.124	–0.0996
	(0.0515)	(0.0515)	(0.0513)	(0.0817)	(0.0819)	(0.0809)	(0.184)	(0.182)	(0.180)
Pers_Services	0.0219	0.0209	0.00618	0.0713	0.0671	0.0507	–1.966***	–1.967***	–1.912***
	(0.0517)	(0.0518)	(0.0516)	(0.0997)	(0.0998)	(0.0990)	(0.319)	(0.313)	(0.312)
Urban (within 50 km)	–0.0406*			–0.246***			–0.0367		
	(0.0213)			(0.0375)			(0.146)		
Market access		–2.53e–08**			–1.24e–07***			2.20e–08	
		(1.08e–08)			(1.68e–08)			(5.03e–08)	
Urban			–0.252***			–0.497***			–0.423***
			(0.0268)			(0.0391)			(0.130)
Constant	0.923***	0.397***	0.400***	4.073***	0.812***	0.603***	0.972	0.332	0.639***
	(0.319)	(0.0584)	(0.0492)	(0.567)	(0.0974)	(0.0797)	(2.210)	(0.242)	(0.146)
Observations	10,802	10,802	10,802	7,339	7,339	7,339	780	780	780
R–squared	0.038	0.039	0.047	0.029	0.031	0.045	0.127	0.127	0.139

Source: Economic Census 2001/03, 2013.
Note: Robust standard errors are in parentheses. *** = p < 0.01; ** = p < 0.05; * = p < 0.1.

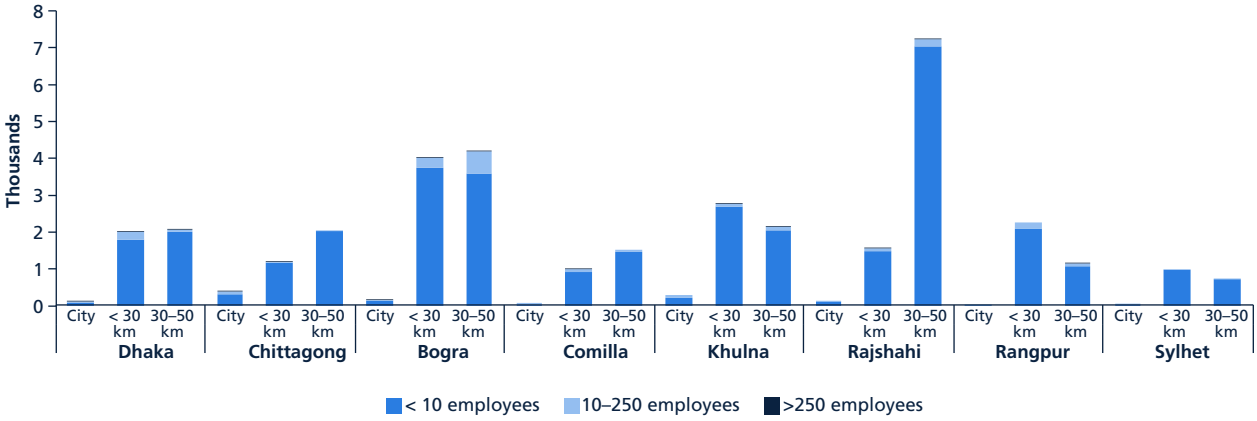
the most strategic locations for value-added processing of agriculture, and thus are critical links to supporting the rural economy and raising agricultural productivity. Figure 159 shows that the areas around secondary cities are home to a substantial share of agriculturally based manufacturing activity. Bogra stands out as having the largest concentration of nonmicroenterprises in agriprocessing, while areas outside Rajshahi have very large

Figure 158
Employment by sector over time: outside of Dhaka Division



Source: LFS 2003, 2016.

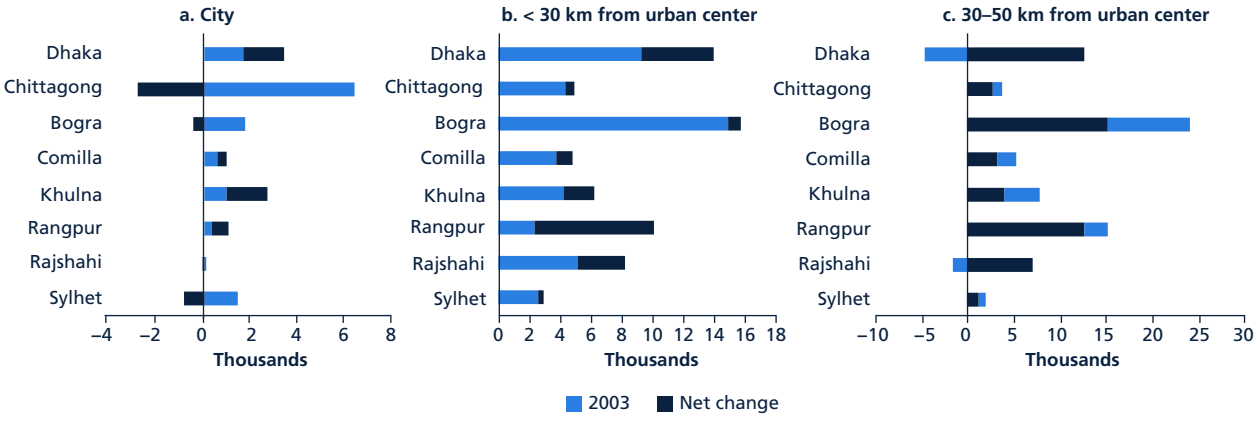
Figure 159
Number of establishments by size: agriprocessing, 2013



Source: Economic Census 2013.

concentrations of agriprocessing microenterprises. Rangpur and Khulna also have sizable numbers of (mainly microenterprises) in agriprocessing. However, the job growth in agriprocessing is taking place well outside the urban centers of secondary cities; the largest share of agriprocessing job growth is beyond 30 kilometers from the center of secondary cities (figure 160). Thus, these positive developments for agriculturally linked

Figure 160
Changes in employment by city and proximity to the urban center, agriprocessing 2003–13



Source: Economic Census 2001/03, 2013.

BOX 4: THE ROLE OF RISING AGRICULTURAL EARNINGS (AND REMITTANCES) IN THE GROWTH OF RURAL NONFARM EMPLOYMENT

The dynamics of growth in the agriprocessing sector reflect broader developments in Bangladesh's rural economy, where firm creation and job growth have been very strong over the past decade, driven by increasing returns to agriculture—which has also contributed to growth in the nonfarm rural economy. Data from the latest Household Income and Expenditure Survey (2010) indicate that 87 percent of all rural households in 2010 earned some income from agriculture. Growth in agricultural income accounted for just over half of the increase in average household earnings between 2000 and 2010 (figure 161); it accounted for almost all the growth between 2005 and 2010, a period of rapid food price increases. Along with this growth in agricultural earnings, the share of households with some form of nonfarm income rose to 65 percent. Household earnings from remittances grew 5 percent annually over the decade 2000 to 2010, while other nonfarm income (mainly labor earnings) accounted for close to one-third of increased household earnings over the decade.

These findings are supported by LFS data that show a rapid increase in the share of the agricultural workforce that reports having a second job. For males, about one in every five agricultural workers reported having a second job in 2016 versus just 6 percent in 2003; for females, the figure rose only marginally from 1 percent to 4 percent. Notably, the growth in nonfarm earnings appears to be coming increasingly from wage employment, despite the evidence of rapid growth in the creation of household and microenterprises. The share of rural nonfarm earnings coming from wage employment doubled between 2000 and 2010; earnings from wage employment was nearly double earnings from enterprise employment by 2010 (figure 162).

These findings are in line with evidence from a recent analysis of Bangladesh's rural economy (Shilpi and Emran 2016), which found that agricultural productivity growth spurs strong nonfarm employment growth and transformation toward wage jobs—in particular, through the growth of formal services jobs (notably education and other social services) many of which are located in or near proximate urban agglomerations.

Figure 161
Per capita rural household earnings by income source

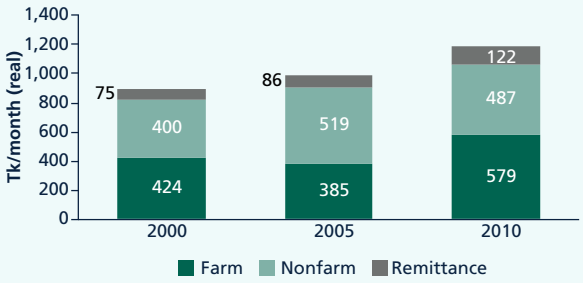
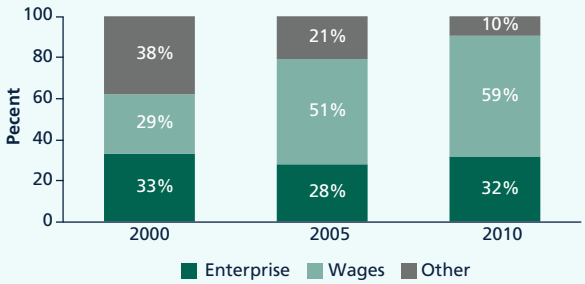


Figure 162
Distribution of rural nonfarm earnings



Source: Gautam and Faruqee 2016.
Note: Other rural nonfarm earnings include income from self-employment, rentals, safety nets, etc.

While this report has highlighted the rapid growth in rural enterprise creation over the period 2003–13, recent analysis on the nature and competitiveness of rural nonfarm enterprises (Gautam and Faruqee 2016) highlights possible limitations to their growth and employment potential. One important finding from that analysis is that while rural nonfarm enterprises located in proximity to urban centers (i.e., where the upazila is within five kilometers of the district headquarters) are more productive than those located farther away, the difference is statistically significant only in 1998/99 (figure 163). This may indicate that firms operating in the rural nonfarm economy do not produce with the price and/or quality to compete in urban markets (and, increasingly, to compete in rural markets with goods and services from urban markets). Analysis from the same report looking at the sophistication of nonfarm activities suggests there has been virtually no movement in rural households toward more advanced nonfarm activities over the decade, despite the fact that these activities are clearly shown to deliver substantially higher returns to households (figure 164). Failure

to upgrade or benefit from improved connectivity suggests that these rural nonfarm enterprises are, on average, not positioned well to expand and be a major source of job growth.

Figure 163
Rate of return to rural nonfarm enterprises based on proximity to urban centers over time

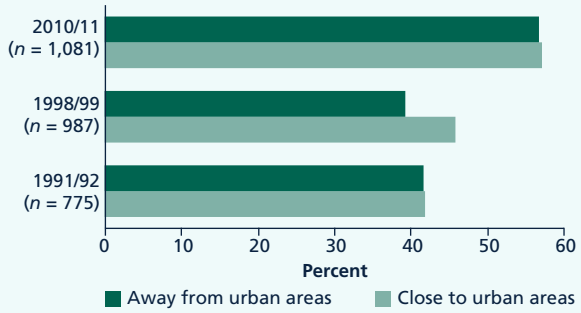
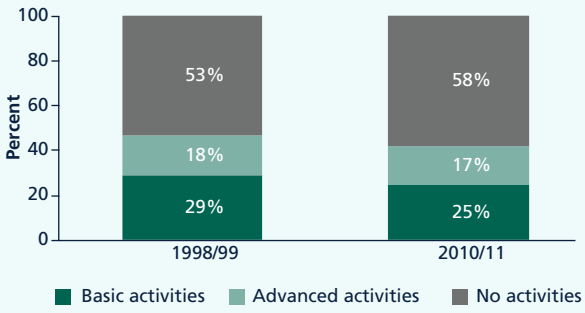


Figure 164
Distribution of sophistication of rural nonfarm activities by households



Source: Gautam and Faruqee 2016.

Note: The data presented here on household earnings (from the Household Survey) cover the period 1998/99 to 2010/11, while the data on enterprise creation (from the Economic Census) cover the period 2001/03 to 2013).

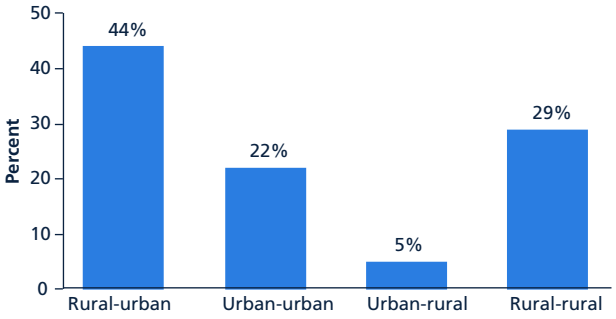
manufacturing jobs may have less to do with urban developments, and rather derive more from the strength of Bangladesh's rural economy and links between the farm and nonfarm rural economy (box 4).

The patterns of spatial transformation of industry are driving (and are being driven by) large-scale migration to cities and the urban periphery, which is largely benefiting higher-skilled workers from proximate rural areas

The spatial transformations discussed in this chapter have been enabled by a large-scale movement of workers across the country. Internal migration in Bangladesh is significant; more than 5 million individuals have changed *upazilas* of residence within the most recent five years; the figure increases to 19 million when those who ever changed *upazilas* are counted. Focusing on migrants within the past five years, the following findings emerge. Migration is primarily a rural-to-urban phenomenon, but not exclusively so. As shown in figure 165, 73 percent of all migrants come from rural areas, while 66 percent end up in urban areas (which is close to double the share of the overall population living in urban areas). Rural-to-urban migration accounts for 44 percent of all movements, but another 29 percent comes from rural-to-rural movements. High levels of rural-rural migration may be driven by the substantial growth in rural Bangladesh over the past decade, but may also reflect the fuzzy urban and rural definitions discussed earlier. Most rural-rural migration—like all migration—takes place in the Dhaka division. Dhaka is by far the largest destination for migrants, with about 10 percent of its total working-age population having migrated in over the past five years; this is almost double the level of Chittagong, the next largest migrant-receiving division (figure 166). Dhaka alone absorbs 60 percent of all recent migrants in the country (and Chittagong another 16 percent) and has the largest share of all types of migrant flows. Other notable locations include Rangpur and Rajshahi for rural-rural migration and Khulna for urban-rural migration.

The majority of male migrants (73 percent) move explicitly to seek employment, while just over 18 percent of female migrants move for job reasons (45 percent move for marriage and 33 percent for family reasons). Those moving for employment-related reasons tend to be substantially more educated than the overall economy. The likelihood of migration rises significantly at each subsequent level of education; the share of the population with postsecondary education migrating for employment is almost four times the levels of those with no education, and twice the level of those with an incomplete primary education (figure 167). Migrants who move from rural to urban areas have almost 20 percent more schooling on average than rural stayers, and even slightly more than established urban residents (figure 168).

Figure 165
Distribution of internal migration flows by type of migration



Source: LFS 2016.

Figure 166
Share of working-age population that migrated to individual divisions in the past five years

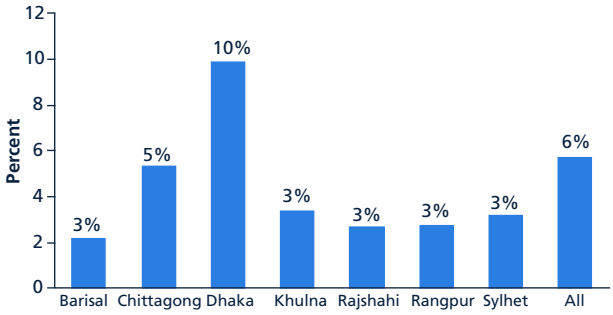


Figure 167
Share of working-age population migrating to a different *upazila* in the past five years by education level

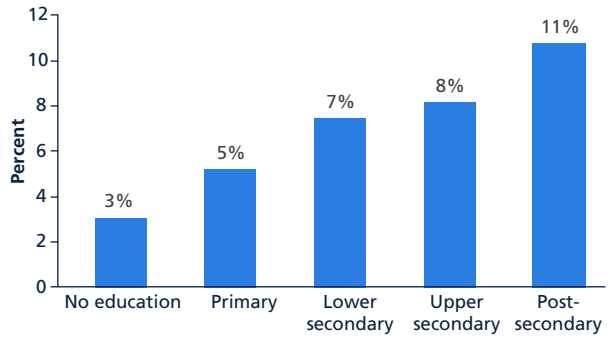
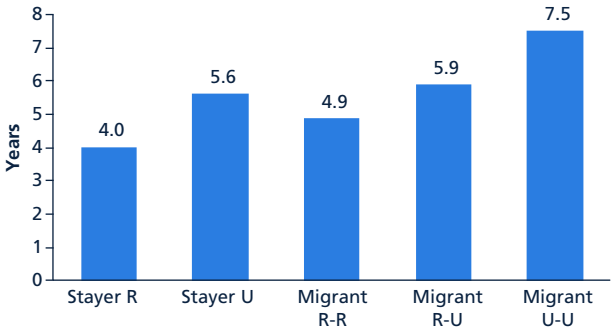


Figure 168
Average years of schooling by migrant status



Source: LFS 2016.
Note: R = rural; U = urban.

Returns to migration are high in terms of employment, earnings, and job quality

Data on employment and earnings show clearly how migration has been driven by growth in the manufacturing sector, and how this has delivered significant gains to migrants. While only 14 percent of rural stayers are in wage employment, 67percent of migrants from rural to urban areas are in wage employment; the share of rural migrants in day labor is below the share of both rural and urban stayers (figure 169). Only a small share of migrants engage in agriculture, and this is concentrated among rural-rural migrants, with most of them employed as paid agricultural workers. Most notably, the share of migrants from rural areas working in industry is more than twice as high than for both resident rural and urban populations. This suggests that migrant workers have been highly successful in capturing jobs in the rapidly growing manufacturing sector.

The propensity of migrants to move into manufacturing employment has implications on formal employment and earnings as well. While only 10 percent of rural stayers are employed in formal jobs, about 30 percent of workers who have migrated from a rural area to a different rural *upazila* are employed in a formal job; 41 percent moving to urban areas are in a formal job (versus just 25 percent of established urban residents) (figure 171). On the other hand, the share of migrants within rural areas working in a formal job is not significantly different from that of rural stayers. Among wage employees, migrants also receive significantly higher wages than stayers. This may partly reflect the positive selection of migrants where highly motivated (and high wage potential) and more educated workers are more likely to migrate. Nonetheless, the substantial wage differentials suggest potentially large returns to migration. The average wage of migrants from rural to urban areas is about 21 percent higher than stayers in rural areas, and the average wage of those migrants is close to that of urban incumbents (figure 172).

Figure 169
Employment type, by migrant status

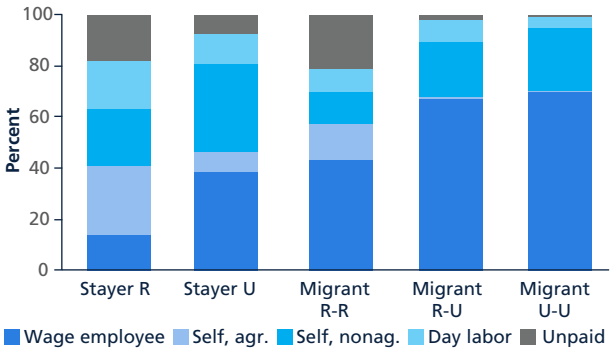
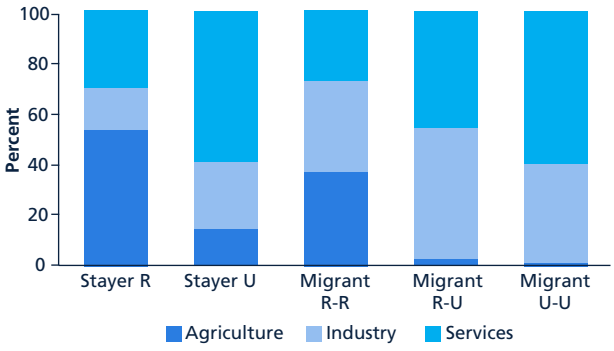


Figure 170
Sector of employment, by migrant status



Source: LFS 2016.

Figure 171
Share of wage employees with a contract, by migration status

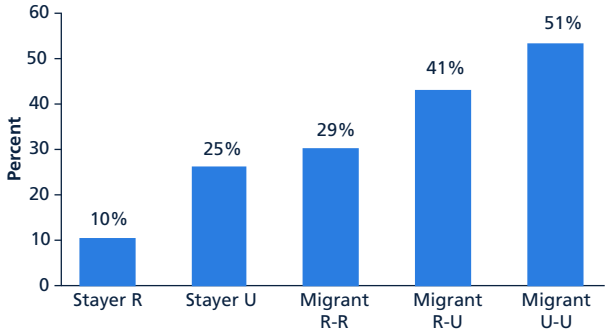
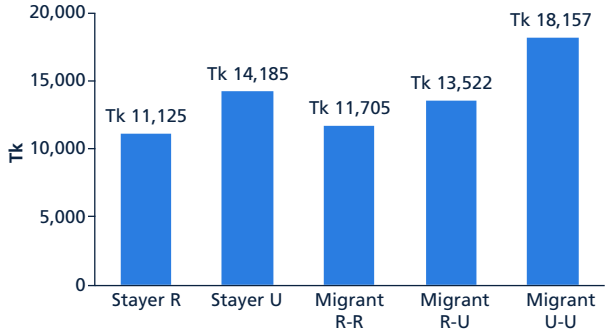


Figure 172
Mean earnings of wage employees, by migration status



Source: LFS 2016.
Note: R = rural; U = urban.

SUMMARY OF KEY FINDINGS: PART 3

- The structure of employment is shifting rapidly; however, Bangladesh still has considerable room for further sectoral shifts in employment, contributing to higher productivity and improved job quality.
- The demographics of agricultural employment appear to be shifting rapidly toward older, female workers, many of whom are household workers (many of these unpaid).
- The labor market is highly segmented both by firm type (microenterprises and very large firms dominate, with a small and static middle) and sex (women are concentrated in agriculture and large-scale manufacturing, men in services, especially commerce).
- RMG job creation has slowed sharply, but other (mainly domestic-oriented) manufacturing sectors are beginning to make up the gap. Expansion of these sectors into export markets is likely to be critical to drive the large-scale job creation needed to replicate RMG success.
- With a shift away from RMG and more technology-intensive production within RMG, prospects for female employment are declining. At the same time, there are signs of growing female employment share across other parts of the manufacturing sector.
- While very large firms are typical in RMG, microenterprises dominate the firm landscape, including in most of the manufacturing sector. This has implications for growth and for job quality.
- There appear to be significant barriers to growth among Bangladeshi firms—firms enter but do not grow or exit the market. Among the factors contributing to this may be barriers to efficient market competition, lack of access to capital for investment, lack of access to land, business regulatory constraints, and management capacity.
- There is a nonlinear relationship between firm size and productivity, with the smallest and largest firms exhibiting higher productivity and productivity declining across most size categories. This points to possible factor distortions (noted above) and barriers to technical efficiency (e.g., skills).
- More productive firms are paying higher wages, suggesting that productivity gains are being shared with workers (contributing to higher-quality jobs), although (all things equal) wages in RMG are lower than in other sectors.
- Employment is increasingly concentrating in Dhaka. Elsewhere, the largest pockets of job growth are in the northwest (around Bogra and Rajshahi) and, secondarily, around Khulna. In these cases, job growth is coming from agricultural and rural micro and small enterprises.
- Much of the apparent shift of employment to rural areas reflects a move of large firms into the urban periphery, driven by rapidly rising urban congestion costs.
- Spatial transformations are underpinned by continuing large-scale internal migration, which benefits primarily higher-skilled workers moving into Dhaka. Returns to migration are high.

PART 4

CONCLUSIONS AND POLICY DIRECTION

11. CONCLUSIONS AND POLICY DIRECTION

BRIEF SUMMARY OF MAIN FINDINGS

The analysis presented in this report highlights a country in the midst of massive economic transformation, which is delivering large-scale job creation. This transformation, particularly the growth of urban manufacturing jobs in large firms (mainly in the RMG sector), is delivering more formal wage work and changing the lives of many workers—particularly urban females and youth. It has also been strongly associated with spatial transformation, marked by large rural-urban migration and increasing concentration of jobs in Dhaka.

At the same time, many challenges remain, in particular regarding job quality. Despite much progress, the labor market is still dominated by agriculture and low-productivity services, with informality, unpaid work, low earnings, and lack of worker protection prevalent. Gaps in access to quality jobs persist by region (urban and rural), sex, education, and age groups, among others. Female LFP remains low, and has declined in recent years in urban areas. Addressing these challenges will require substantially faster job creation in the formal sector, while raising productivity and earnings in the informal.

Delivering on this will be increasingly challenging in a context where the RMG sector—which has been the catalyst of Bangladesh's transformation over the past decade—may no longer be the source of large-scale job creation. The analysis of enterprise dynamics indicates that firms both fail to grow and fail to exit, leading to a stagnant enterprise environment and an inefficient allocation of factors of production (capital and labor). Thus, delivering diversification, growth, and quality job creation will require both upgrading domestic enterprises as well as attracting additional foreign direct investment.

While urbanization has been central to Bangladesh's industrial transformation, rising congestion costs in Dhaka represent critical constraints to productivity and firm competitiveness, as well as to the quality of jobs (i.e., earnings increasingly insufficient to keep up with the costs of housing and transport). And while megacities' capacity for industrial investment becomes saturated, secondary cities lack the industrial and social infrastructure to emerge as new locations for investment.

Finally, the report highlights the critical role of temporary international migration as a mechanism to relieve pressure on the domestic labor market and as an employment strategy for workers. These large labor migration outflows can also be interpreted as symptoms of poor job quality available in the domestic market. Leveraging international migration to deliver sustainable, inclusive, and higher-quality jobs for Bangladeshis will require addressing a number of challenges including high costs of migration, lack of information and predeparture services, high concentration of destination markets, low skills of Bangladeshi outmigrants, and limited attention to reintegration of returning migrants.

Comprehensive policy efforts addressing the macro environment and investment climate, labor markets and skills, and sectoral and regional competitiveness are needed to deliver more, better, and inclusive jobs. Overall, maintaining the pace of job creation and improving job quality while reducing labor market disparities will require sustaining and raising growth up to and beyond the national development plan's 8 percent target. This level of growth requires diversification of the industrial economy, along with expansion of exports and foreign

direct investment, increased activation of workers and productivity enhancement, and more efficient use of capital and labor.

INITIAL POLICY DIRECTION

This Jobs Diagnostic is intended to be a main input into the development of a Jobs Strategy. As such, here we provide only some high-level direction on the policy domains that may be considered as part of the Jobs Strategy.

A comprehensive and well-coordinated policy effort is required aimed at improving (1) the macro environment and investment climate, (2) regional and sectoral policies, and (3) labor market and skills. These areas of priority are in line with the Vision 2021 and the 7th Five-Year Plan of the government of Bangladesh. Such policy efforts would cover three interlinked objectives.

- **Increasing the pace of job creation:** to deliver large-scale job creation that will absorb a growing labor force
- **Raising the quality of jobs:** to increase earnings, employment stability, working conditions, and formality
- **Connecting vulnerable groups to jobs:** to ensure that labor markets deliver shared prosperity for all parts of Bangladeshi society

Faster, diversified job creation

Regulatory reform and revision of distortionary business policies is critical in accelerating structural transformation and improving competitiveness, especially for non-RMG sectors and for small and medium enterprises. For the non-RMG sectors, policy reforms that level the playing field with currently favored sectors such as RMG are needed to enhance competitiveness and attract new investments; these could include measures such as standardizing the tax and subsidy regime, and extending special customs and financing facilities to all sectors. Trade and investment climate reform is also important in removing restrictive distortions. Removal of para-tariffs and nontariff measures/nontariff barriers could help firms have easier access to higher-quality and more competitively priced inputs. In parallel, interventions that streamline business licensing and permitting procedures will benefit the entry and growth of all firms, and targeted efforts are needed to support micro- and household enterprises for job creation—especially in the nonagricultural rural economy. Similarly, reforms to improve contract and insolvency enforcement in the court system will be particularly critical in supporting small and medium enterprise expansion.

Better planned and faster urbanization—key to the development of secondary cities and the sustainability of Dhaka—will need strategic and coordinated investments in amenities, infrastructure, and administrative capacity. At the national level, policies could expedite the implementation of special economic zones, and facilitate access to industrial land more broadly, by freeing up (and packaging) substantial government-owned land and implementing institutional reforms such as consolidating the administrative structures that govern industrial land use. A national perspective is needed to coordinate interventions across the country's large cities and their city corporations; and to develop and implement integrated urban (metropolitan) development plans that address issues of infrastructure, land, and transport systems. In parallel, it would be useful to enact policies to empower and enable local government—including the various city corporations beyond those of Dhaka and Chittagong—to carry out development planning and implement public investment. Such measures will require strengthening city corporations' technical and institutional capacity.

Improved job quality

Increasing the level of formality of the labor market will contribute substantially to enhancing the quality of jobs, but this will need to be supported by interventions boosting firm productivity. Productivity growth is already challenged by infrastructure and investment climate constraints, and these constraints are amplified by poor management practices and skills gaps in labor supply. Low and slow-growing firm productivity is explained

by a combination of challenges, including financing constraints and lack of knowledge. An important set of interventions to encourage productivity growth would thus include reforms to the standards regime to promote adoption of improved standards and technologies.

Developing a policy to enable workers in the informal sector to have access to benefits and social insurance would enhance job quality. For instance, many workers have no access to pensions, as the current pension system—consisting of the poverty targeted social pension (Old Age Allowance) and a mandatory pension for government retirees (the Pension for Retired Government Employees and their Families)—excludes the majority of workers. As Bangladesh continues its process of demographic transition, the importance of old age support will eventually become politically and socially pressing. Thus, the development of an overarching strategy or policy that expands coverage while remaining sustainable would be needed. This strategy could include reform of government retiree pensions, reform of social pensions, introduction of various schemes (e.g., voluntary, contributory savings), and possible mandatory pensions for the private formal sector.

Improved access to jobs for vulnerable groups

Facilitating access to jobs for women and youth must be a high policy priority in order to have a sustainable impact on poverty reduction. Despite rising unemployment rates among youth and females, there have been limited efforts for counseling, job search assistance, or intermediation services. The training opportunities and services that are available have proven to be insufficient and/or are not linked to market demand. As a pre-requisite to deepen interventions, Bangladesh may benefit from a workforce development strategy to identify strategic areas of investment to ensure linkage of jobs and workers, including curriculum reform. A measure likely to emerge from such a strategy—and that could even be taken in parallel—is reform of the technical training center system to reduce fragmentation and improve quality of services, so that the system fulfills its goal of enhancing employability and preparing today's youth for a rapidly changing workplace environment. Supporting greater access to jobs and greater employment mobility for women will require a comprehensive approach to address the legal as well as cultural barriers that inhibit female LFP, reinforce entrenched occupational segregation, and prevent upward mobility. Among the policy options to be considered are investments in educational campaigns to raise awareness and break down gender stereotyping in occupations, direct support for female training programs, and piloting women-only employment services. In addition, reforms to existing labor laws that institutionalize bias against women should be prioritized, along with more effective enforcement of laws that support women's access to safe, quality jobs.

Finally, given the growing importance of overseas employment for development, there are several interventions that could facilitate more and safer temporary migration of workers. At the government-to-government level, there is scope to expand the set of countries with which there are memorandums of understanding and bilateral labor agreements. These agreements would reduce migration costs as well as the vulnerability of migrant workers overseas. Vulnerability can be further reduced by developing policies to facilitate return and reintegration—such policies may be especially important for migrant workers concentrated in economies exposed to commodity price volatility or other macroeconomic shocks such as regional conflict. The Bangladesh government has taken several important steps in recent years through legislation (e.g., the Overseas Employment and Migrants Act 2013 and Expatriates' Welfare and Overseas Employment Policies 2016), and efforts could be made to ensure full implementation of such legislation.

Table 9 presents a basic framework for the eventual development of a Jobs Strategy. It provides initial ideas on possible specific policy areas that may be relevant to address the constraints outlined above.

Table 9
Jobs policy framework and initial recommendations on policy domains

Policy domain	Key challenges	Potential policy actions
Objective: Faster, diversified job creation		
Investment climate and trade	• RMG sector has been key in driving large-scale (female-intensive) job creation, but now export basket is overly concentrated and job creation in the sector is slowing rapidly; other sectors not emerging quickly enough at sufficient scale in part due to distortionary policy environment • Microenterprises are the backbone of the private sector and increasingly critical for the rural economy; improving earnings and growth in this sector faces constraints both from regulatory barriers and access to finance	• Level the playing field to enhance competitiveness of other sectors beyond RMG, including: – Opening access to customs and trade facilities such as bonded warehouse regime to all sectors – Extending facilities for raw material financing across sectors and implementing expedited duty-drawback payments – Standardizing tax and subsidy regime (e.g., export subsidies) to make sector agnostic and increase transparency • Enhance access of industry to quality, competitive inputs through removing trade policy distortions, e.g., removal of para-tariffs and nontariff measures/nontariff barriers • Introduce or enforce business and investment climate reforms, e.g.: – Implementation of National One-Stop-Service for investment – Reforms to court system to improve contract and insolvency enforcement—e.g., out-of-court methods – Reforms to business licensing and permitting procedures, with a particular focus on micro- and household enterprises
Urbanization—infrastructure and amenities	• Lack of access to land for new investments and expansion in all parts of the country (especially Dhaka) • Insufficient infrastructure services and poor connectivity in periphery of Dhaka, where industrial sector is shifting due to high congestion costs • Limited investment in secondary cities with poor access/quality of key infrastructure services (power, water/sanitation, solid waste management) as well as limited social services	• Accelerate implementation of special economic zone program and address constraints to accessing quality land through institutional reforms, including merging various industrial land institutions and freeing access/packaging of government-owned land • Develop and implement integrated urban (metropolitan) development plans (land, infrastructure, transport) across the network of large cities (city corporations) • Strengthen the capacity of city corporations to carry out development planning and implement public investment
Objective: Improved job quality		
Firm-level quality and productivity	• Low levels of technology, along with poor management practices and skills gaps • Infrastructure/investment climate constraints to firm productivity • Lack of knowledge, finance, and incentive to invest in productivity-enhancing technology and practices	• Reforms to the standards regime to promote adoption of improved standards and technologies (including liberalizing market for testing and certification)

Policy domain	Key challenges	Potential policy actions
Pensions	• Limited access to pension, as the current system consists of (1) a poverty targeted social pension program (Old Age Allowance) under the Ministry of Social Welfare, and (2) a mandatory pension for government retirees (Pension for Retired Government Employees and their Families) under the Ministry of Finance	• Develop comprehensive and coherent measures for old age support, including: – Reform options for government retirees pension – Reform options for the social pension – Introduce voluntary, contributory savings and pension schemes – Introduce options for mandatory pensions for the formal sector
Objective: Improved access to jobs for vulnerable groups		
Youth and women labor market transitions	• Increasing unemployment rates among youth, particularly females • Limited counseling, job search assistance, or intermediation services, as well as inadequate training opportunities • Entrenched occupational segregation and lack of mobility for women in employment	• Develop a workforce development strategy • Reform technical training systems to enhance employability • Review/reform labor laws to minimize bias against women and ensure stronger enforcement (family leave, maternity leave, health and safety, anti-harassment legislation) • Educational campaigns and training to promote females and youth into nontraditional employment • Pilot programs for female-targeted employment services
International migration	• Migration flows from Bangladesh highly concentrated in a small set of economies, creating risks over sustainability of growth • Exorbitant costs often imposed by intermediaries • Rights and conditions of work are not uniformly provided or protected in receiving countries • Irregular migration flows to high-income destinations are rising, with potential pressure in future for repatriation	• Expand set of countries with which there are memorandums of understanding and bilateral labor agreements • Publicly publish text of agreements for transparency, following international best practice • Strengthen capacity to implement Overseas Employment and Migrants Act 2013, Expatriates' Welfare and Overseas Employment Policies 2016 • Develop policy on assisted voluntary return and reintegration

REFERENCES

Abella, Manolo, Philip Martin, and Soonhwa Yi. 2016. "Why Are Migration Costs High for Low-Skilled Workers? Draft. World Bank, Washington, DC.

Acosta, P., C. Calderon, P. Fajnzylber, and H. Lopez. 2008. "What Is the Impact of International Remittances on Poverty and Inequality in Latin America?" *World Development* (36) 1: 89–114.

ADB and ILO (Asian Development Bank and International Labour Organization). 2016. *Bangladesh Employment Diagnostic Study: Looking beyond Garments.* Dhaka.

Al Awad, M. 2010. "The Cost of Foreign Labor in the United Arab Emirates." Institute for Social & Economic Research Working Paper No. 3. Zayed University, United Arab Emirates.

Anner, M. 2015. "Prices and Development in the Global Apparel Industry: Bangladesh in Comparative Perspective." Bangladesh Garment Manufacturers Association, Dhaka.

Asfar, R. 1999. "Rural-Urban Dichotomy and Convergence: Emerging Realities in Bangladesh." Bangladesh Institute of Development Studies, Dhaka.

Audretsch, David B. 1995. *Innovation and Industry Evolution*. Cambridge, MA: MIT Press.

Ayyagari, M., A. Demirguc-Kunt, and V. Maksimovic. 2015. "Are Large Firms Born or Made?: Evidence from Developing Countries." Policy Research Working Paper 7406. World Bank, Washington, DC.

Bouoiyour, J., and A. Miftah. 2015. "Why Do Migrants Remit? Testing Hypotheses for the Case of Morocco." *IZA Journal of Migration* 4(2).

Cho, Y. 2016. "Social Protection and Labor Review: Towards Smart Social Protection and Jobs for the Poor." Bangladesh Development Series 33. World Bank, Washington, DC.

Cho, Y., A. Denisova, U. Khadka, and S. Yi. 2017. "Bilateral Arrangement of International Migration: Lessons from Korea's Employment Permit System." Unpublished paper. World Bank, Washington, DC.

Christiaensen, L., and Y. Todo. 2013. "Poverty Reduction during the Rural-Urban Transformation: The Role of the Missing Middle." Policy Research Working Paper 6445. World Bank, Washington, DC.

Das, N., A. de Janvry, S. Mahmood, and S. Sadoule. 2014. "Migration as a Risky Enterprise: A Diagnostic for Bangladesh." Unpublished paper. University of California at Berkeley, Berkeley, CA.

Das, M., and E. Tas. 2015. "Gender and Jobs in Bangladesh." Unpublished paper. World Bank, Washington, DC.

Davies, S., and D. Butterworth. 2015. "Inclusive Growth Diagnostics." Draft report. UK Department for International Development.

Dwyer, B., and B. Kotey. 2016. "Identifying High Growth Firms: Where Are We?" *Journal of Management & Organization* 22(4): 457–75.

Ellis, P., and M. Roberts. 2016. *Leveraging Urbanization in South Asia: Managing Spatial Transformation for Prosperity and Livability*. Washington, DC: World Bank.

Fair Labor Association. 2016. *Toward Fair Compensation in Global Supply Chains: Factory Pay Assessments in 21 Countries*. Fair Labor Association.

Fernandes, A. 2008. "Firm Productivity in Bangladesh Manufacturing Industries." *World Development* 36 (10): 1725–44.

Gautam, M., and R. Faruqee. 2016. *Dynamics of Rural Growth in Bangladesh: Sustaining Poverty Reduction*. Directions in Development—Agriculture and Rural Development. Washington, DC: World Bank.

GIZ and ILO (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH and International Labour Organization). 2015. *Labour Market Trends Analysis and Labour Migration from South Asia to Gulf Cooperation Council Countries, India and Malaysia*. Nepal: GIZ and ILO.

Haltiwanger, J., S. Davis, K. Handley, R. Jarmin, J. Lerner, and J. Miranda. 2013. "Private Equity, Jobs, and Productivity." NBER Working Papers 19458. National Bureau of Economic Research, Cambridge, MA.

Haltiwanger, J., R.S. Jarmin, R. Kulick, and J. Miranda. 2016 "High Growth Young Firms: Contribution to Job, Output, and Productivity Growth." In *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges*. Cambridge, MA: National Bureau of Economic Research.

Haltiwanger, J., R.S. Jarmin, and J. Miranda. 2010. "Who Creates Jobs? Small vs. Large vs. Young." Working Papers 10-17, Center for Economic Studies, U.S. Census Bureau, Washington, DC.

Hanson, G.H. 2010. "International Migration and the Developing World." Chapter 66 in Dani Rodrik and Mark Rosenzweig, eds., *Handbook of Development Economics, Vol. 5*. North-Holland: Elsevier, 4363–414.

Heath, R., and M. Mobarak. 2015. "Manufacturing Growth and the Lives of Bangladeshi Women." *Journal of Development Economics* 115 (1).

Hossain, M., G. Mathbor, and R. Semenza. 2013. "Feminization and Labor Vulnerability in Global Manufacturing Industries: Does Gendered Discourse Matter?" *Asian Social Work and Policy Review* 7(3).

ILO (International Labour Organization). 2014. *In the Corridors of Remittances: Cost and Use of Remittances in Bangladesh.* Dhaka: ILO Country Office.

IMF (International Monetary Fund). 2014. "Labor Market Reforms to Boost Employment and Productivity in the GCC." Annual Meeting of Ministers of Finance and Central Bank Governors. IMF, Washington, DC.

IOM (International Organization for Migration). 2010. *The Bangladesh Household Remittance Survey 2009: Summary Report*. Dhaka: IOM.

Kathuria, S., and M.M. Malouche. 2016. *Toward New Sources of Competitiveness in Bangladesh: Key Insights of the Diagnostic Trade Integration Study*. Directions in Development—Trade, Washington, DC: World Bank.

Kumar, K., M. Mahmud, S. Nataraj, and Y. Cho. 2017. "Employer and Employee Preferences for Worker Benefits." Unpublished paper. World Bank, Washington, DC.

Leung, D., C. Meh, and Y. Terajima. 2008. "Firm Size and Productivity." Staff Working Papers 08-45. Bank of Canada, Ottawa.

Lewis, W. Arthur. 1954. "Economic Development with Unlimited Supplies of Labor." *The Manchester School* 22: 139–91.

Litchfield, J., M. Raisul, S. Tasneem, E.-M. Egger, and S. Ansari. 2015. "Migration and Social Networks: Evidence from Bangladesh." Migrating Out of Poverty Working Paper 31. Department for International Development, London.

Lokshin, M., M. Bontch-Osmolovski, and E. Glinskaya. 2010. "Work-Related Migration and Poverty Reduction in Nepal." *Review of Development Economics* 14(2): 323–32.

Lucas, R., and O. Stark. 1985. "Motivations to Remit: Evidence from Botswana." *Journal of Political Economy* 93 (5): 901–18.

Macchiavello, M., A. Menzel, and C. Woodruff. 2014. "Managerial Capacity and Productivity: Evidence from a Training Program in the Bangladeshi Garment Sector." Unpublished paper. International Growth Centre.

Mazumdar, D., and S. Sarkar. 2013. *Manufacturing Enterprise in Asia: Size Structure and Economic Growth*. New York: Routledge.

McKenzie, D.J. 2015. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." Policy Research Working Paper WPS 7391. World Bank, Washington, DC.

McKenzie, D.J., and H. Rapoport. 2010. "Can Migration Reduce Educational Attainment? Evidence from Mexico." *Journal of Population Economics* 24(4): 1331–58.

Muzzini, E., and G. Aparicio. 2013. *Bangladesh: The Path to Middle-Income Status from an Urban Perspective*. Directions in Development—Countries and Regions. Washington, DC: World Bank.

Rahman, H.Z. 2014. "Urbanization in Bangladesh: Challenges and Priorities." Paper presented at Bangladesh Economists' Forum, June 21–22, 2014, Dhaka.

Sharif, I. 2009. "Building a Targeting System for Bangladesh Based on Proxy Means Testing." Social Protection Discussion Paper No. 0914. World Bank, Washington, DC.

Shilpi, Forhad J., and Shahe Emran. 2016. Agricultural Productivity and Non-Farm Employment: Evidence from Bangladesh." Policy Research Working Paper 7685. World Bank, Washington, DC.

Stillman, S., J. Gibson, and D.J. McKenzie. 2012. "The Impact of Immigration on Child Health: Experimental Evidence from a Migration Lottery Program." *Economic Inquiry* 50 (1): 62–81.

Szabo, S., M. Hossain, W. Adger, Z. Matthews, S. Ahmed, A. Lazar, and S. Ahmad. 2016. "Soil Salinity, Household Wealth and Food Insecurity in Tropical Deltas: Evidence from South-West Coast of Bangladesh." *Sustainability Science* 11 (3): 411–21.

Tejani, S., and W. Milberg. 2010. "Global Defeminization? Industrial Upgrading, Occupational Segmentation and Manufacturing Employment in Middle-Income Countries." SCEPA Working Paper Series 2010-1. Schwartz Center for Economic Policy Analysis, New York.

Tong, Q. 2010. "Wages Structure in the United Arab Emirates." Institute for Social & Economic Research Working Paper No. 2. Zayed University, United Arab Emirates.

Toufique, K. 2014. "Labour Market Transitions of Young Women and Men in Bangladesh." Work4Youth Publication Series 13. International Labour Office, Geneva.

Van Ark, B., and E. Monnikhof. 1996. "Size Distribution of Output and Employment: A Data Set for Manufacturing Industries in Five OECD Countries: 1960s–1990." OECD Economics Department Working Paper Series. Organisation for Economic Co-operation and Development, Paris.

Van Biesebroeck, J. 2005. "Firm Size Matters: Growth and Productivity Growth in African Manufacturing." *Economic Development and Cultural Change* 53 (3): 545–83.

World Bank. 2012a *World Development Report 2013: Jobs*. Washington, DC: World Bank.

———. 2012b. *Bangladesh: Towards Accelerated, Inclusive and Sustainable Growth—Opportunities and Challenges, Volume II: Main Report*. Washington, DC: World Bank.

———. 2013. "Bangladesh Poverty Assessment: Assessing a Decade of Progress in Reducing Poverty for the Period 2000–2010." World Bank, Washington, DC.

———. 2015. *More and Better Jobs to Facilitate Shared Growth and End Extreme Poverty: A Systematic Country Diagnostic*. Washington DC: World Bank.

———. 2016. *Doing Business 2017: Equal Opportunity for All*. Washington, DC: World Bank.

World Bank and Vietnam Ministry of Planning and Investment. 2016. "Vietnam 2035: Toward Prosperity, Creativity, Equity, and Democracy." Washington, DC: World Bank.

Yang, D. 2011. "Migrant Remittances." *The American Economic Review* 25(3).

Yi, Soonhwa. 2016. "High Migration Costs for Low-Skilled Migrants." Background note prepared for the OECD Development Centre. Organisation for Economic Co-operation and Development, Paris.

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