

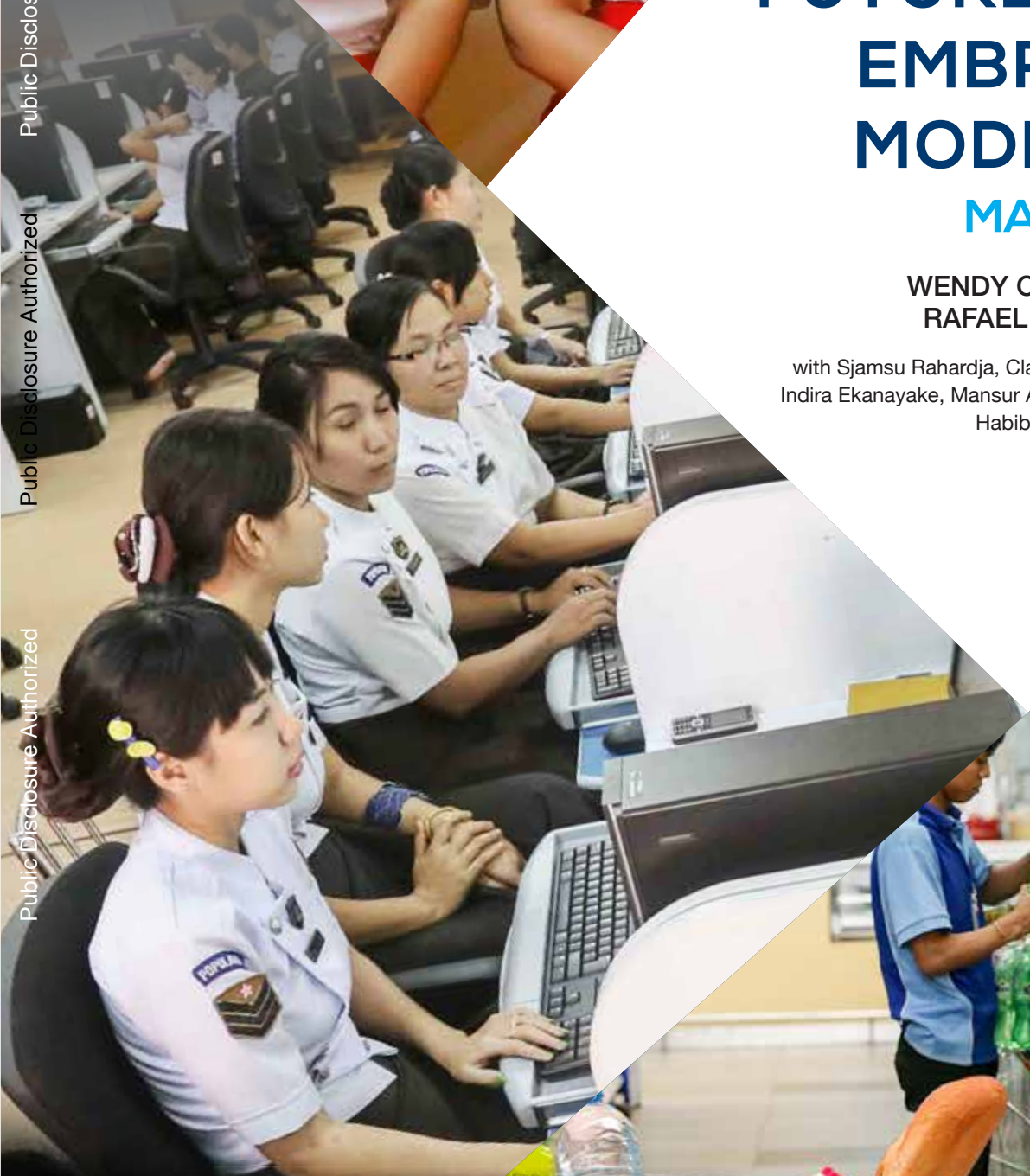


MYANMAR'S FUTURE JOBS: EMBRACING MODERNITY

MAIN REPORT

WENDY CUNNINGHAM AND
RAFAEL MUÑOZ, EDITORS

with Sjamsu Rahardja, Claire Hollweg, Izabela Leão,
Indira Ekanayake, Mansur Ahmed, Mohammed Amin,
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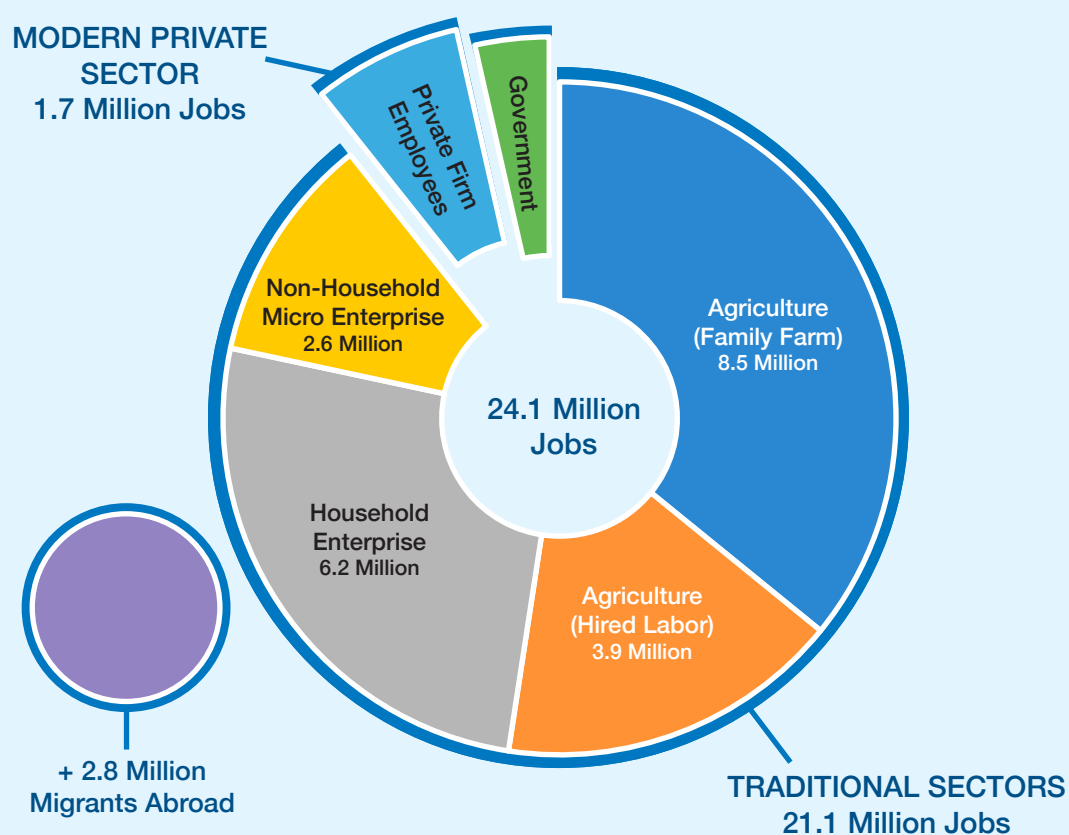
The reports was prepared under the guidance of Victoria Kwakwa, Vice President for East Asia and Pacific; Ulrich Zachau and Ellen Goldstein (former and current Country Directors for Myanmar), Abdoulaye Seck and Gevorg Sargsyan (former and current Country Managers for Myanmar) and Jehan Arulpragasm and Philip O'Keefe (social protection sector managers) at the World Bank. The preparation benefitted from detailed peer review guidance provided by Tom Farole, Gabriel Demombynes, Parmesh Shah, and Maryla Maliszewska as well as Lars Sondergaard, Shabih Mohib, Rawang Rojvanit, and many colleagues at the World Bank who provided insights, suggestions, and improvements to the report process and the final document.

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ABOUT THIS REPORT

Jobs are a priority policy area for Myanmar. Myanmar has enjoyed rapid economic growth and structural transformation in recent years. This has been accompanied by an expansion of jobs in the private domestic sector, but given the magnitude of the number of jobs in Myanmar – more than 24 million – the new sectors have made only a small dent in expanding job quantity or quality. Economic growth and private sector development are necessary, but not sufficient, to create the jobs that Myanmar needs.

The jobs picture in Myanmar is complex. More than one-third of workers own a family farm, and another 16 percent are agricultural laborers. Another one in four people own their own non-farm household businesses. Among wage earners who do not work in agriculture, half are in small firms – and thus are likely to receive few worker protections – while the other half work in large, domestic or foreign private sector firms or in government jobs.



This heterogeneous job picture requires heterogeneous solutions. The challenge for some job sectors (such as large private sector firms) is to increase the number of jobs, while for others, (such as farms or household enterprises) it is to increase workers' productivity and jobs quality – which might even lead to fewer, yet better, jobs in these job sectors.

The Notes in this report present the nature of jobs in each sector (except the public sector), the challenges to improving these sectors, and recommended policies to develop sector-specific jobs strategies. Building on the government's Myanmar Sustainable Development Program (MSDP), which provides a framework for jobs policy reform, this report identifies priority area that could have the greatest impact in each sector in promoting this framework. The accompanying Overview document presents the overall jobs picture based on this report. Note 1 addresses the overall Myanmar macroeconomic environment for jobs, while Note 2 profiles the Myanmar labor force. Notes 3, 4, 5, and 6 explore jobs in agriculture, household enterprises, the private sector, and through migration. The Notes are designed to be stand-alone documents that can be used to inform discussions with appropriate Ministries or stakeholders.

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CURRENCY EQUIVALENTS

(Exchange Rate Effective May 30, 2017)

Currency Unit = Myanmar Kyats (MMK)

US\$ 1 = MMK 1368.50

ABBREVIATIONS AND ACRONYMS

ASEAN	Association of Southeast Asian Nations
CBM	Central Bank of Myanmar
EAP	East Asia and the Pacific
FDA	Myanmar Food and Drug Administration
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GOM	Union Government of Myanmar
GVCs	Global Value Chains
ICT	Information and Communications Technology
IHLCA	Integrated Household Living Conditions Assessment
ILO	International Labor Organization
LEOs	Labor Exchange Offices
MPLCS	Myanmar Poverty and Living Conditions Survey
NESP	National Education Strategic Policy
NGO	Non-governmental organization
PISA	Programme for International Student Assessment
PIAAC	Programme for the International Assessment of Adult Competencies
REER	Real Effective Exchange Rate
SEZ	Special Economic Zone
SME	Small and Medium-sized Enterprises
TIMSS	Trends in International Mathematics and Science Study
TVET	Technical Vocational Education and Training
WDI	World Development Indicators

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NOTE 1:

A MACROECONOMIC CONTEXT FOR MORE AND BETTER JOBS¹

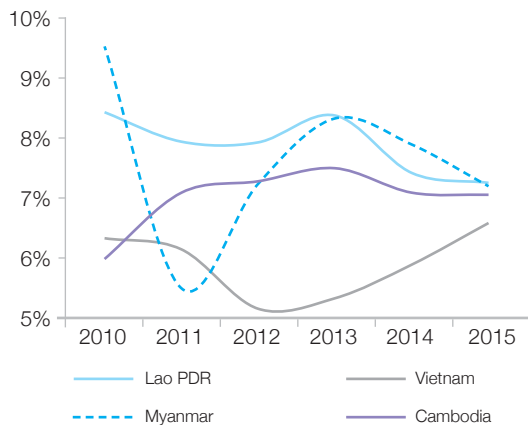
¹ This Note was prepared by Rafael Muñoz Moreno and Pui Shen Yoong, with inputs by Habib Rab.

Myanmar is facing heightened challenges in sustaining the high levels of investment and job creation it has experienced since opening up in 2011. Between 2011-2015, sound macroeconomic policies and the lifting of economic controls (e.g. in foreign exchange, trade licensing, telecommunications and financial sectors) led to an acceleration of private investment, including in high employment industries (e.g. construction, light manufacturing) and services (e.g. hospitality, transport, trade). In this time, growth was relatively stable, inflation was below 6 percent, and GDP expanded by 7.3 percent annually—thus exceeding the growth rates of neighboring countries (Figure 1.1), and remaining on par with that of other high performing countries during their period of economic liberalization (Figure 1.2). In the last 2 years, however, declining commodity prices, heavy flooding in agricultural areas, and policy uncertainty have exposed the economy to short-term vulnerabilities and growing macroeconomic imbalances. Inflationary pressures remain high (over 7 percent in January 2017) even as growth has begun to moderate, and both the current account deficit and the budget deficit widened in 2015/16.

Figure 1.1

Real Growth (%), 2010-2015

Myanmar's real GDP growth has outpaced that of most of its neighbors in recent years...

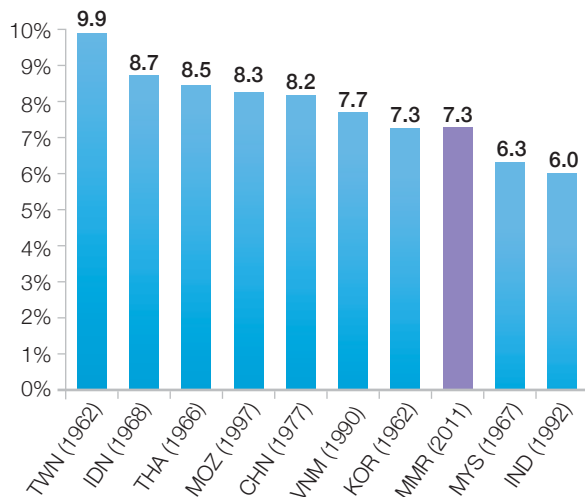


Source: World Development Indicators (WDI), January 2017

Figure 1.2

Average Real GDP Growth (%), 5-year period after liberalization

...and is on par with the growth rate of other countries after their liberalization.



Source: WDI, January 2017

Note: Year refers to start of the five-year period. Countries listed are: Taiwan (TWN), Indonesia (IDN), Thailand (THA), Mozambique (MOZ), China (CHN), Vietnam (VNM), Republic of Korea (KOR), Myanmar (MMR), Malaysia (MYS), and India (IND).

Three key macroeconomic challenges exist to generating more and better jobs. First, Myanmar's vulnerability to volatile economic growth, due to a lack of resilient agricultural infrastructure and a narrow production base, can have serious long-term consequences on the quality and stability of employment. Second, inflationary pressures fueled by deficit monetization and nominal exchange rate targeting have made it more difficult to maintain a competitive exchange rate, which is critical to the employment-generating potential of tradable sectors. Third, although credit to the private sector has grown rapidly overall, micro, small and medium-sized businesses have limited access to financial products, impeding their expansion and ability to create more jobs. Low levels of financial inclusion are largely due to interest rate caps that are binding on a widespread range of products.

Despite Myanmar's favorable economic outlook and labor market prospects, confidence in its trajectory depends on maintaining investor confidence, for which macroeconomic stability is key.

This Note looks at Myanmar's record of growth and employment, and at the potential impact of emerging macroeconomic challenges on investment and on jobs. Its conclusion identifies policy options that could help sustain the macroeconomic stability that is needed to promote high quality investments, and enable the creation of more, and more productive, jobs.

Trends in Growth and Labor Market Developments

A legacy of economic isolation has led to poor labor market outcomes

Decades of economic isolation have constrained investment and real GDP growth in Myanmar.

Private entrepreneurship was initially heavily constrained as the 1962 military coup led to the nationalization of industries and closure to external markets, after which a small, politically connected elite tightly controlled natural resource extraction. Although nascent reforms took place in the 1990s, these were relatively short lived. Sanctions imposed by the European Union, the United States and others in the 1990s further repressed trade and investment in the economy. It is estimated that Myanmar has been trading at only 15 percent of its potential level through 2010, far behind neighboring countries such as Vietnam and Thailand (World Bank 2016).

Myanmar's economic isolation was accompanied by poor outcomes in terms of job creation.

Available evidence indicates that the employment intensity of growth, a measure of how employment and output vary together over time, has declined over the past few decades. According to estimates from a cross-country study, a one percent increase in Myanmar's output led to an increase of 0.35-0.36 percent in employment over 1991-1999 on average, controlling for country dummy and interaction variables (Kapsos 2005).² This figure subsequently declined to 0.21 percent over the period 1999-2003, in contrast to other countries in Southeast Asia that experienced increases in employment intensity during this time (Ibid).

Limitations on data quality aside,³ these results point to the link between economic growth and employment being quite weak in Myanmar prior to 2011. Economic controls repressed demand, which in turn led to significant underinvestment and underemployment. Natural resources were an important driver of growth in the 2000s although they generated little employment. The estimates of employment intensity of growth in Myanmar falls below the 'normal' range of 0.3-0.5 for countries where the labor force is growing between 1-2 percent per annum (USAID 2013; Crivelli et al. 2012).

In addition to poor outcomes on the quantity of jobs, the available evidence also suggests that economic growth has had little impact on the quality of jobs. Although Myanmar's economy is moving relatively quickly away from agriculture towards industry and services (Figure 1.3), the distribution of employment across sectors has remained fairly static (Figure 1.4). The share of agriculture in GDP fell from 54.5 percent over 2000-2004 to 32.4 percent over 2010-2015, while the share of industry and services grew from 45.6 percent to 67.6 percent over the same period. Nonetheless, the share of workers employed across agriculture (around 52 percent), services (around 36 percent), and industry (around 12 percent) has remained relatively steady since 2000. The share of employment in agriculture has over time exceeded the share of the sector's value-added contribution to GDP, reflecting low labor productivity levels and the prevalence of poor quality (low-paid) jobs.

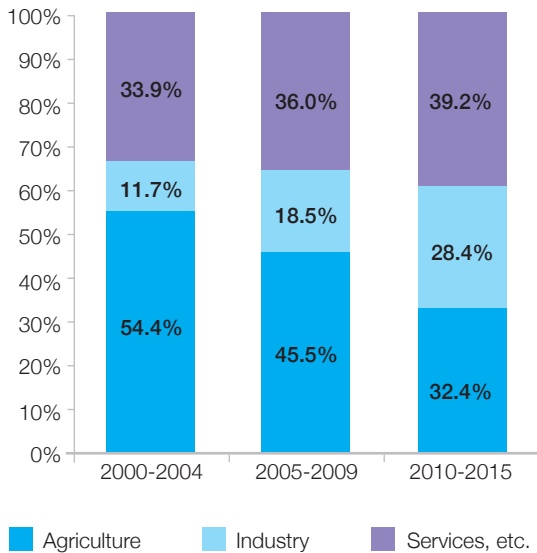
² The dummy variables are: shares of employment in services and industry, degree of conflict, average trade as a percentage of GDP 1991-2003, average trade balance 1991-2003, and malaria deaths per 100,000 inhabitants. The regressions also control for the interactions between GDP and these dummy variables.

³ These estimates suffer from omitted variable bias, and output data prior to 2010 is not reliable.

Figure 1.3

Sector Value-Added Contribution to GDP (%)

Myanmar's economy has been moving towards industry and services...



Source: World Development Indicators (WDI), January 2017

Figure 1.4

Distribution of Employed Workers, by Sector (%)

...but the sector profile of employment remains broadly unchanged.



Source: IHLCA (2004/05; 2009/10), Census (2014)

Box 1.1: Faster Growth Does Not Guarantee More or Better Jobs

Economic growth is a prerequisite for job creation, but its impact on the quantity and quality of jobs differs depending on the context. Given that growth occurs partly through the destruction of low-productivity jobs and the creation of more productive jobs, economic growth can have a negative impact on employment in the short term. This is particularly acute for countries undergoing structural transformation, where job losses are likely to occur in less productive sectors and subsectors as labor shifts to relatively more productive activities. Moreover, demographic factors matter: if increases in the share of the working-age population or in the labor force outpace job creation, then unemployment may rise. This is especially relevant in Myanmar's case, where the working age population is estimated to rise by 5.5 million people over the next 15 years.

Importantly, the sectoral composition of growth can influence the quality of jobs created, and by extension the ability of jobs to lift living standards. Loayza and Raddatz (2010) find that more labor-intensive sectors (agriculture, construction and manufacturing) have stronger effects on poverty alleviation by increasing absolute income. Other studies place greater emphasis on the importance of export-oriented manufacturing growth in generating more (and more productive) jobs. Cross-country work by Arias-Vasquez et al. (2012), for example, finds that manufacturing growth is associated with a substantial increase in employment and a decline in unemployment among middle-income countries. Rodrik (2015) cautions that premature deindustrialization—the observed decline in manufacturing employment and real value added in low and middle-income countries over the past decade—may inhibit income convergence, economic development, and political stability.

Deliberate policies are therefore needed to translate economic growth into more and better jobs that can improve living standards. This is especially crucial in fragile and conflict-affected states such as Myanmar that have high levels of poverty and vulnerability, since jobs are the primary mechanism through which poverty reduction occurs. Examining 16 countries that experienced substantial declines in moderate poverty from 2000 to 2010, Azevedo et al. (2013) find that growth in labor income is the most important contributor to poverty reduction, accounting for more than half the reduction in 10 countries and more than 40 percent of the decline in 4 countries. In addition, public interventions may amplify the ability of jobs to generate positive social externalities. Encouraging business and trade cooperation across groups of different ethnicities can foster trust and social cohesion, thereby reduces the risk of conflict (Kilroy 2011). Studies of multiethnic cities in India show that greater economic interdependence of Muslims and Hindus, including through jobs leads, to more interethnic cooperation and peace (Varshney 2002). There is also evidence that training programs reduced mercenary interest in Liberia (Blattman and Ralston 2015).

Reforms since 2011 have accelerated capital accumulation and productivity gains

Reforms since 2011 have accelerated capital accumulation and productivity gains, which are estimated to have been the main drivers of subsequent economic growth. Between 2010/11 and 2015/16, GDP expanded by an average of 7.3 percent per annum. World Bank estimates based on the Solow model⁴ indicate that total factor productivity (TFP) contributed almost half (42 percent) of Myanmar's growth between 2010/11 and 2015/16, followed by capital accumulation (39 percent). This is to be expected as reforms helped accelerate factor accumulation after years of repressed demand.

Myanmar's overall growth pattern is similar to that of other countries when they were at the same stage of development. Enhanced TFP also contributed at least 40 percent of growth in China, Vietnam and Cambodia during their respective periods of liberalization reform (Figure 1.5). The pace of TFP growth in Myanmar over 2010-2015 (3.1 percent annually, on average) is also comparable to that of these countries, although Myanmar's is slightly lower than China's (3.6 percent) and Cambodia's (4.3 percent) were during their respective growth spurts.

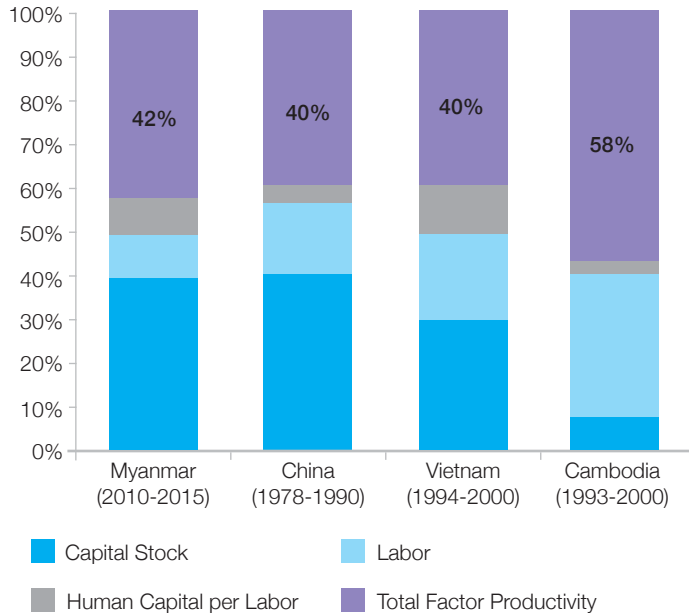
Large TFP gains reflect Myanmar's rapid structural transformation and greater integration with the global economy. One major driver of productivity is structural transformation, where the economy moves from less productive to more productive activities. The pace of transformation in Myanmar has been on par with that of China or in Vietnam during their early phases of economic takeoff (Figure 1.6), contributing to large TFP gains. Increased investment and trade could help accelerate this process further. Moreover, greater integration with the global economy accelerates productivity gains as it brings new capital, technology and knowledge that help drive TFP growth.

⁴ Using a growth accounting model including human capital developed by the World Bank. Annual GDP is modeled as a function of capital, labor, and human capital adjusted labor; the residual (growth in GDP unexplained by increase in factor inputs) represents productivity gains, or total factor productivity. The income share of capital is assumed to be 40 percent.

Figure 1.5

Post-Liberalization Factor Contribution to GDP Growth (%) in East Asia

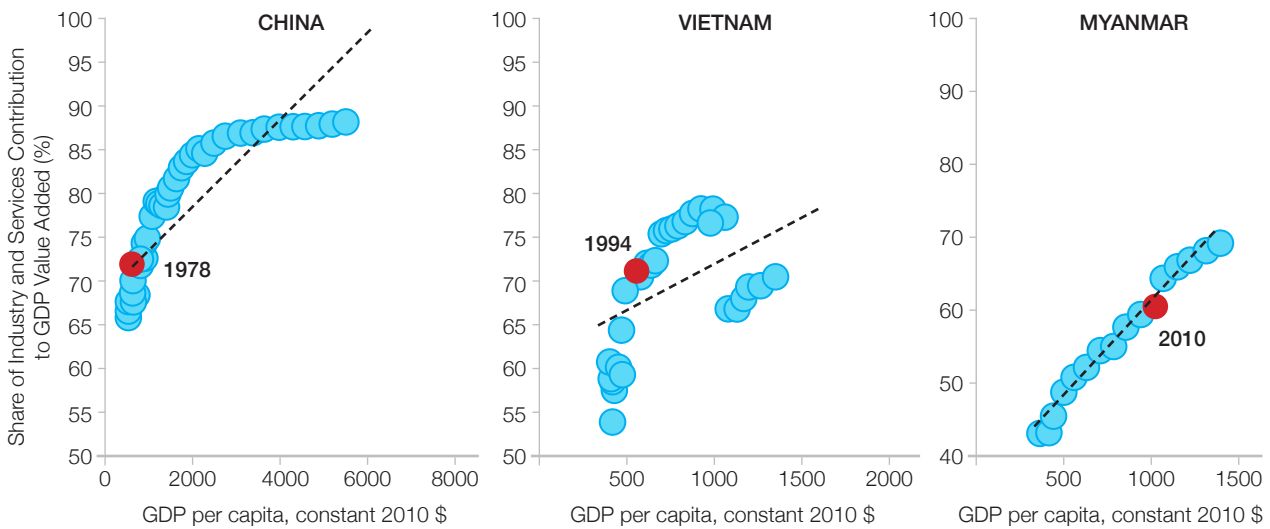
Productivity gains have driven growth during initial stages of liberalization across East Asia



Source: World Bank staff estimates using Solow decomposition

Figure 1.6

Structural Transformation in Myanmar is On Par with that of China and Vietnam



Sources: WDI, World Bank staff calculations. Note: Data points marked in red refer to the start of the liberalization period.

Further gains from productivity may be possible from creative destruction in the private sector, a process by which less productive firms and old production processes are displaced by new and more efficient ones. Through this churning, the economy’s scarce resources are reallocated to more productive firms and sectors, speeding up the process of structural transformation. The upcoming

Myanmar Enterprise Survey finds that, of the 1,000 formal enterprises surveyed in Yangon, Mandalay, Bago, Taunggi and Monywa, about a third of those interviewed in 2014 had ceased operations by 2016, and about 17 percent of firms ceased annual operations within the past two years. This rate of churning is substantially higher compared to the 7 percent average annualized exit rates found in 47 countries (Aga and Francis 2015), but not unusual given Myanmar’s robust economic growth. However, exiting and surviving firms are virtually identical in terms of labor productivity, employment and sales growth to firms that remain in operating, indicating significant reallocation of resources in low productive firms.

Increased labor productivity relative to job creation is driving growth in labor value added

Relative to TFP and capital accumulation, employment creation has played a smaller role in driving GDP growth in recent years. Estimates from the Solow model indicate that employment creation contributed 11 percent to Myanmar’s economic growth from 2010/11-2015/16. The contribution of labor gradually picked up, growing by 1.4 percent annually during this period. However, the pace of the expansion has been moderate as labor market participation is already relatively high at 63 percent, comparable to the average of 64 percent for the East Asia and Pacific region. Moving forward, labor force participation rates are expected to rise further due to Myanmar’s demographic dividend and as more women enter in the labor market.

Examining output per capita growth also illustrates that increased labor productivity rather than new employment creation has driven per capita output growth. Between 2010 and 2015, Myanmar’s real GDP per capita grew by 6.5 percent annually on average. According to World Bank estimates using the Shapley decomposition method,⁵ almost all of this growth in output per capita was driven by increases in labor productivity. Labor productivity accounted for on average 5.95 percentage points out of the total 6.5 percent real GDP per capita growth annually (92 percent). In contrast, the contribution of employment to growth seems negligible. The relatively large contribution of labor productivity can be linked to structural transformation in the economy, as discussed above, and to the resulting pattern of job creation in recent years. With higher value-added sectors such as industry and services growing as a share of GDP on the one hand, and the share of labor across all sectors remaining stable on the other, the relative contribution of labor productivity has increased on average.

Table 1.1

Increases in Productivity have Driven Value Added Growth per Capita from 2010-2015

Total Period : 2010 to 2015		
	Percent Change	% Contribution
Annual Growth Per Capita Value Added	6.46%	100%
Change in Productivity	5.95%	92.0%
Change in Employment rate	0.00%	0%
Change in Participation Rate	-0.12%	-2%
Change in Share of Working Age Population	0.63%	10.0%

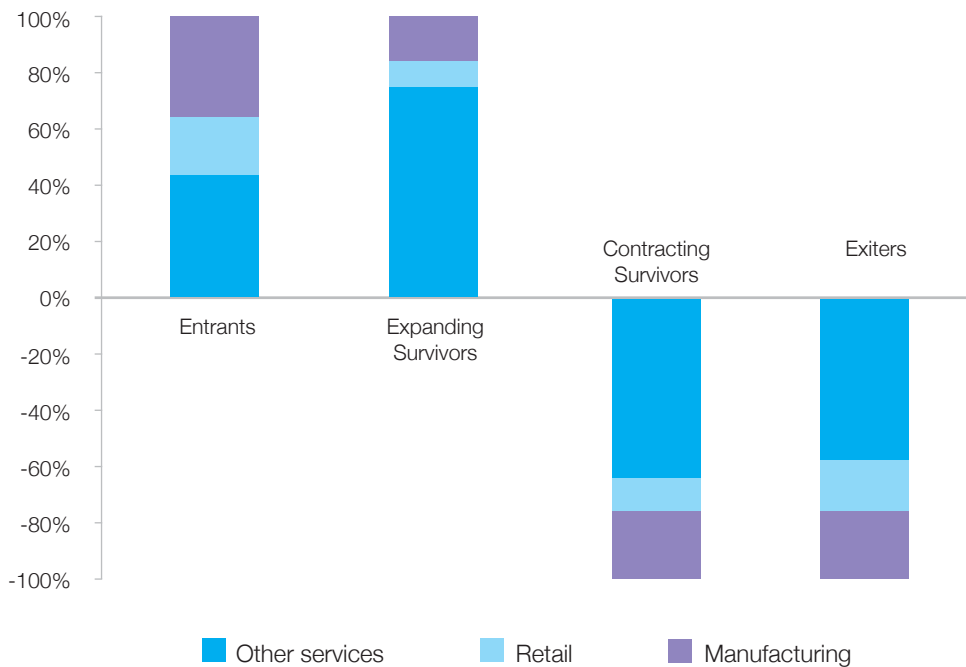
Source: World Bank staff estimates using Shapley decomposition method. Data from WDI and ILO Trends Econometric Models (July 2015).

⁵ The Shapley decomposition method splits changes in per capita output into four components: changes in productivity, employment rates, labor force, and the working age population. It also calculates different sectors’ contribution to aggregate productivity and employment growth, shedding light on the roles of productivity and employment creation in driving overall economic growth.

Evidence from more recent years (2014-2016) also indicates strong job creation in manufacturing and services. The 2016 Myanmar Enterprise Survey reveals that the net impact of firms entering, exiting, expanding, or contracting has been positive for job creation in the manufacturing and services sectors. Overall, the net annual job creation rate was 13 percent,⁶ with the number of jobs from new entrants growing at 18 percent per year and those from the expansion of surviving incumbent firms growing at 7 percent a year. These expansions offset annual job losses from the contraction of certain surviving firms (4 percent job loss per year) and from firms exiting the market (10 percent job loss per year). The manufacturing sector has been particularly dynamic. Between 2014 and 2016, 40 percent of jobs from new entrants, and over three-quarters of job creation from the expansion of existing firms were in the manufacturing sector—along with the majority (near 60 percent) of job losses from both firm contraction and firm exit (Figure 1.7).

Figure 1.7

Per Sector Share of Job Creation by firm type



Source: World Bank staff estimates using Shapley decomposition method. Data from WDI and ILO Trends Econometric Models (July 2015).

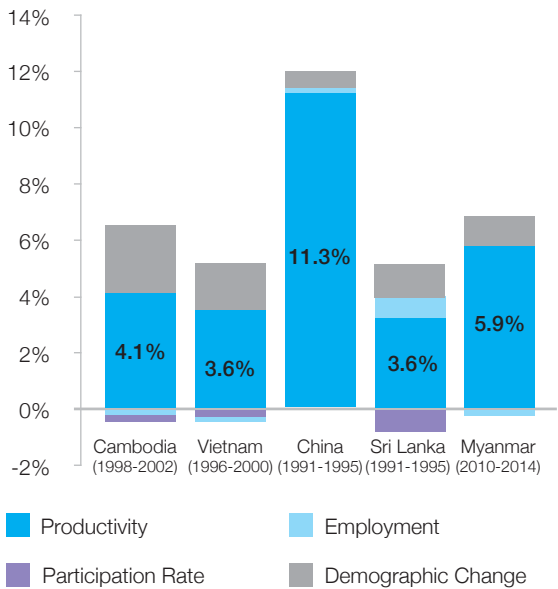
Labor productivity gains occurred in the manufacturing and services sectors, indicating within-sector shifts from less to more productive activities. According to the Shapley decomposition results, manufacturing and services are key sources of productivity gains, expanding approximately 1.8 percent on a yearly basis between 2010 and 2014. These sectors account for nearly 60 percent of the overall contribution to per capita growth. This is consistent with earlier analysis showing high rates of turnover in manufacturing and services in Myanmar between 2014 and 2016, along with high rates of exit among smaller less productive firms (World Bank 2016).

⁶ Since figures are only from 2014 and 2016, rates are annualized assuming a compound growth function of three periods.

As in Myanmar, labor productivity growth was a major contributor to per worker value added growth in other countries—including Vietnam, Cambodia, Sri Lanka, Lao PDR and China—during their economic liberalization (Figure 1.8). With the exception of China, which had extremely high annual labor productivity growth rates of 11.3 percent per year between 1991-1995, the relative contribution of labor productivity grew faster in Myanmar compared to in other countries during their liberalization. One possible reason for this is that mean years of schooling in Myanmar was relatively high at the outset of their liberalization, standing at 4.1 years in 2010/11 compared to 3.9 years in China in (1980), 3.6 years in Lao PDR (1995) and 3 years in Cambodia (1995).⁷

Figure 1.8
Per Worker Annual Value-Added Growth (%)

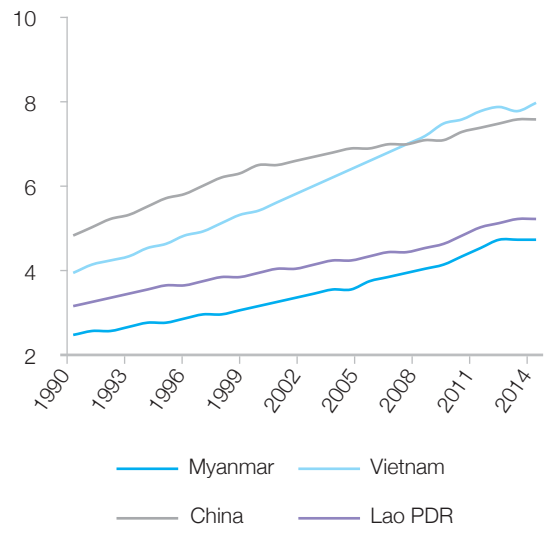
Labor productivity has grown faster in Myanmar during its transition than it did when other countries liberalized...



Source: World Bank estimates from Shapley decomposition; data from WDI, ILO
Note: Starting years differ from Figures 1.5 and 1.6 due to data availability

Figure 1.9
Mean Years of Schooling

...but human capital levels lag behind those of neighboring countries



Source: UNDP HDI, UNESCO Institute for Statistics (2016), Barro and Lee (2016), ICF Macro Demographic and Health Surveys, and UNICEF Multiple Indicator Cluster Surveys.

Despite seeing relatively high labor productivity growth, overall labor productivity in Myanmar remains very low and poses a major obstacle to economic progress. Sustaining labor productivity gains will require Myanmar to accelerate the pace of human capital development, which lags far behind other countries in the region (Figure 1.9). About 30 percent of production workers in Myanmar are unskilled (compared to 20 percent in developing East Asia and Pacific countries), and 4 in 10 hiring employers find that the workforce is inadequately educated (Enterprise Survey 2017). The overall skills level in Myanmar may be unable to keep pace with economic growth, and will thus become one of the country’s major constraints.

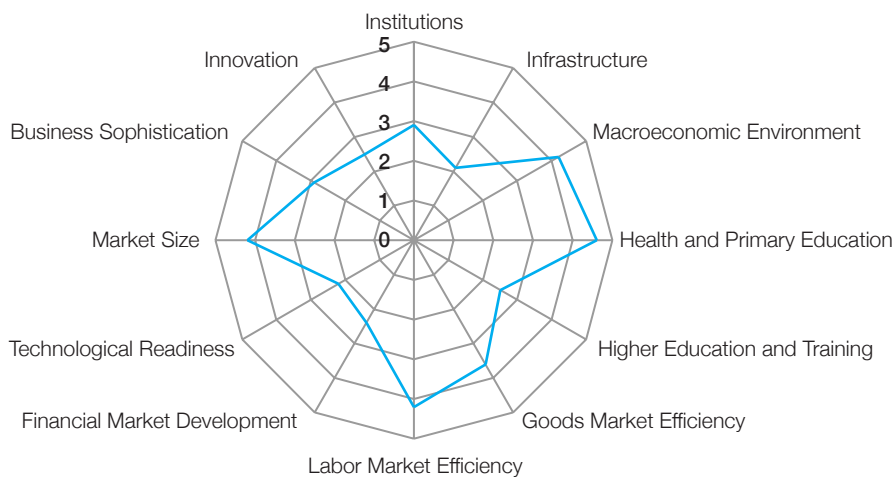
⁷ Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level.

Macroeconomic Constraints to Creating More and Better Jobs

Recent growth in TFP and labor productivity is in large part a reflection of base effects rather than increased productivity, since Myanmar, even with recent reforms, must still address severe competitiveness constraints that hamper investment, job creation and growth (Figure 1.10). National competitiveness can be broadly defined as the institutions and policies that determine the level of productivity in a country.⁸ Poor policy implementation and weak institutions can lead to low competitiveness, visible through macroeconomic instability, poor public service delivery, and high costs of doing business. Even though Myanmar is endowed with low-cost labor, productivity enhancing reforms in the near-term will be critical for increasing its competitiveness and driving job creation.

Figure 1.10

Myanmar Ranks Poorly on Various Aspects of National Competitiveness



Source: WEF Global Competitiveness Index, 2015-16

Note: Scores are weighted averages of components ranked from 1 (worst) to 7 (best).

While Myanmar faces competitiveness challenges across a range of dimensions,⁹ addressing those relating to the macroeconomic environment, along with those which impact investors' perception of risk, will be a precondition to sustaining inclusive growth and employment creation. Changes in price and exchange rate, for example, directly impact investment returns, and macroeconomic policies that influence investors' expectations around inflation, the cost of borrowing, access to public services, labor costs, and exchange rates will be critical to making investment decisions—and thus determine the level, quality and time horizon of investment projects. Investors will be more willing to stake long-term commitments in labor intensive, manufacturing-type operations if macroeconomic risks are deemed to be manageable. Macroeconomic instability, on the other hand, could spur short-term, speculative investments with little positive impact on employment.

⁸ World Economic Forum – Global Competitiveness Report.

⁹ For example, Myanmar is still at the bottom of the World Economic Forum (WEF) Global Competitiveness Index. Its overall rank (131 out of 140 countries in 2015-16) is far behind the next lowest-ranked economies in the region, Lao PDR and Cambodia, at 83rd and 90th place respectively. Infrastructure, the quality of public institutions, and technological readiness are areas of competitiveness where Myanmar scores the lowest.

Growing Macroeconomic Challenges and Vulnerabilities

After experiencing four years of strong growth within a relatively favorable macroeconomic environment, Myanmar has faced a more difficult environment since 2014, reflected in slowed growth rates (Figure 1.11). First, declining commodity prices affected Myanmar’s gas sector, which accounts for around 7 percent of GDP, close to 40 percent of merchandise exports, and 15-20 percent of general government receipts. Second, Myanmar experienced heavy flooding in the summer of 2015, which hit the country’s main agriculture producing areas, causing knock-on effects in the transportation services, food processing, and other sectors. Third, Myanmar underwent a major political transition following general elections in November 2015, which coincided with a moderation in private investment growth. Fourth, slowing global demand combined with tightening external financing conditions further delayed foreign investments, including in the tradable sector.

Figure 1.11

Economic Growth, by sector (%)

Economic growth has slowed in recent years...

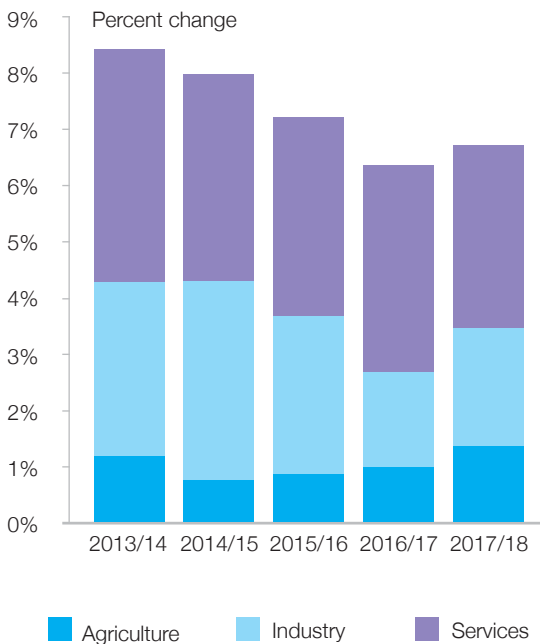
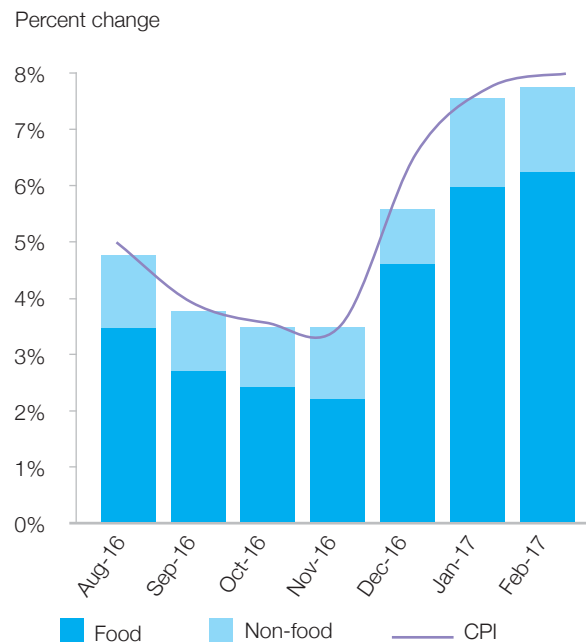


Figure 1.12

Consumer Price Index growth (%)

...though inflationary pressures remain high.



Sources: MOPF, WB Staff estimates

These developments highlighted a number of Myanmar’s short-term economic vulnerabilities that affect investors’ perceptions of risk. The agriculture supply shock contributed to a sharp rise in inflation, which peaked at 16 percent (y-o-y) in October 2015, and remained over 7 percent in January 2017 (Figure 1.12). The drop in commodity prices contributed to a widening of the current account deficit to 4.8 percent of GDP in 2015/16, up from an annual average of 4 percent in the previous 3 years. Combined with slowing foreign investment flows, foreign exchange reserves declined to below the value of 3 months of prospective imports. The exchange rate depreciated by close to 30 percent between 2015 and 2017 as a direct result of the high inflation caused by the shocks and growing demand. The interventions intended to address this caused a divergence between parallel and official exchange rates, and created uncertainty about the price and availability of foreign exchange. A weaker kyat also increased operational costs in the power

sector, requiring additional government subsidies—even as gas receipts to the public sector declined. These events caused the budget deficit to rise from 1.1 percent of GDP in 2014/15 to 3.2 percent of GDP in 2015/16.

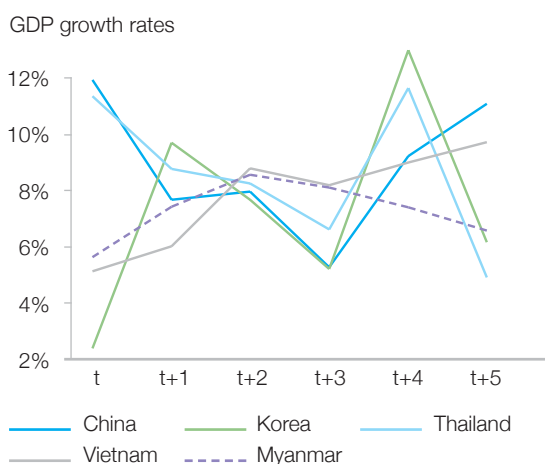
Recent developments have underscored the risk of volatility in economic growth, which can pose difficulties to people seeking to sustain formal, stable employment. Growth has remained strong, though it fell from 8 percent in 2014/15 to 7.3 percent in 2015/16, and is estimated to have dropped even further in 2016/17, to 6.5 percent. One factor exacerbating growth volatility in Myanmar is the lack of resilient agricultural infrastructure. In the agriculture sector, which employs more than half of the total labor force, recent floods have adversely impacted farm production and incomes. While such negative shocks are not unique to Myanmar, low irrigation coverage and other longstanding productivity constraints in agriculture (e.g. an insufficient supply of good seeds) prolong the pace of recovery. Therefore, farm workers are highly exposed to the seasonality of output and employment, and are forced to seek income from other sources, typically in low-paid and informal jobs.

Another source of volatility in growth is Myanmar’s relatively narrow production base, which is driven by lack of competitiveness. Around two-thirds of manufacturing output comes from the food processing sector. While manufacturing is traditionally one of the more stable sources of employment and growth in countries, the dominance of food processing in Myanmar makes the sector vulnerable to agricultural supply and price changes. The recent slowdown in the agriculture sector has had negative spillover effects on manufacturing. Food processing firms responded to these shocks by reducing workers’ wages and hours employed in early 2016. The food processing sector’s relatively high dependence on imported inputs makes it also vulnerable to exchange rate volatility. Furthermore, it is also increasingly struggling to compete against cheaper and better quality processed foods imports.

Figure 1.13

GDP Growth Rates (%)

Myanmar has experienced relatively strong and stable growth...

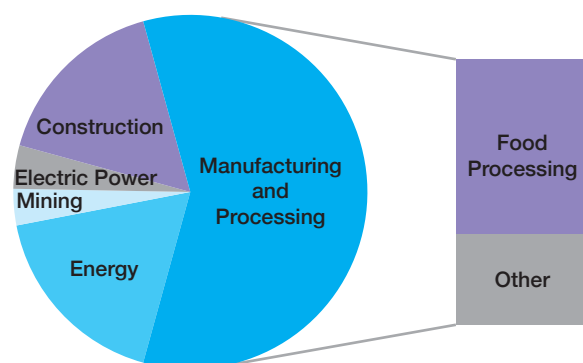


Sources: MOPF, WDI and WB Staff estimates
 Note: t = estimated year of economic take off

Figure 1.14

Subsector Share of Industrial Output (%)

...but is vulnerable to growth volatility due low productivity and a narrow production base.



Unfortunately, past policy choices have further exacerbated the risks of volatile growth. In May 2016, for example, concerns over the adequacy of permits and building standards led to the suspension of around 200 high-rise building projects in Yangon City, impacting the construction sector, which employs around 5 percent of the workforce and holds around 30 percent of outstanding credit from the banking sector. Ultimately, shocks have a wide economic impact, and further exacerbate growth volatility. Ensuring predictability, transparency and a phased approach to any policy change will be critical to avoiding large shocks to the economy.

Output volatility can have serious long-term consequences on economic growth and incomes, limiting the ability of the labor market to improve living standards through jobs. It is estimated that increasing output volatility by one standard deviation leads to a 1.3 percent reduction in per capita growth—a figure that can rise up to 2.2 percentage points during crises (Hnatkowska and Loayza 2005). Lower-income segments of the population are less protected during economic downturns, compounding the effects of macroeconomic volatility on poverty and inequality. At the aggregate level, volatile levels of household disposable incomes may lead to further feedback effects on consumption, domestic demand, and output, leading to a second-round of reductions in the demand for labor.

Policy Challenges to Addressing Macroeconomic Shocks and Imbalances

Institutional capacity and policy responses to deal with macroeconomic shocks and imbalances have faced some challenges. This is to be expected given the pace at which the economy has opened up. In the past five years, policymakers have had to manage a rapidly expanding public sector, a surge in foreign capital inflows, and rapid growth in private sector credit. These challenges have been heightened by increased exposure to exchange rate fluctuations and commodity price volatility, and by natural disasters. The government's policy toolkit to address these issues is growing, though from a relatively low base.

Turning to fiscal policy, pressures in 2015/16 led the Central Bank of Myanmar (CBM) to sharply increase inflationary financing of the budget deficit. Monetization has declined since 2010, though it remains an important and steady share of financing due to a lack of either domestic or external alternatives. The legacy of monetization before Myanmar's reintegration with outside creditors has caused the stock of CBM debt to average around 85 percent of the total outstanding domestic debt stock since 2005 (compared to less than 20 percent on average for a sample of Low Income Countries in the early 2000s) (Bua and Presbitero 2014). The prolonged period of monetization in Myanmar stands in contrast to other countries where spikes in central bank financing is most often in response to fiscal crisis (Easterly and Schmidt-Hebbel 1991). CBM financing in Myanmar has averaged 2.7 percent of GDP per year over the last 10 years, peaking at 5 percent in 2015-2016.

Reducing deficit monetization is critical to managing monetary growth and inflationary pressures. Public sector financing needs have historically been a big driver of reserve money growth and M2. Although reduced since 2012/13, fiscal pressures in 2015-2016 increased CBM net claims on government debt. The government introduced Treasury Bill auctions in 2015, and Treasury Bond auctions in 2016. However, it will take time before the market substantially takes up the long-term government securities needed to finance development expenditures. Results from recent auctions produced negative real interest rates due to hesitation in allowing rates to rise, given the impact this would have on government debt servicing costs. The debt market operations clearly demonstrate the need to set out clear macroeconomic policies to anchor economic expectations and properly price government securities.

Figure 1.15

CBM Financing and Shares of Debt

CBM financing, which is highly volatile, peaked in 2015-16...

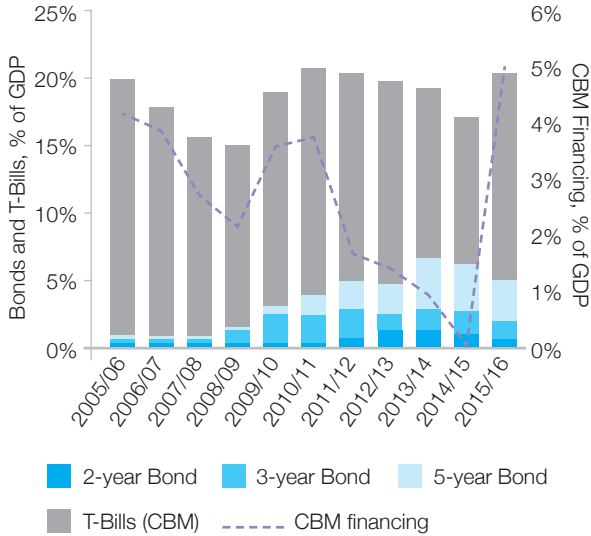
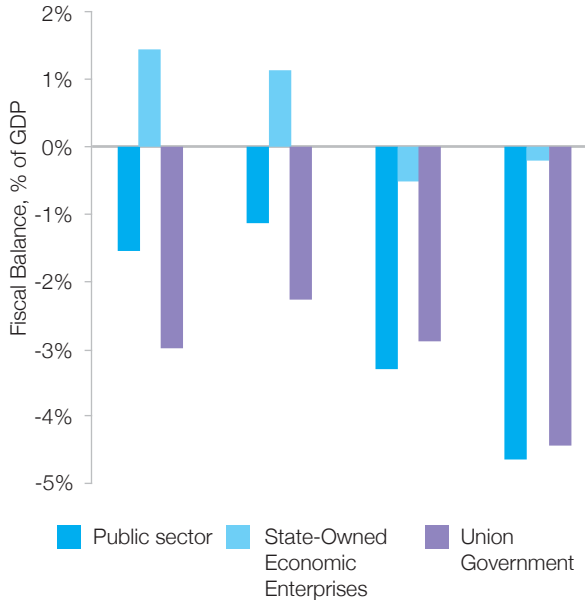


Figure 1.16

Debt by Sector

...as the public sector deficit tripled



Notwithstanding recent supply shocks, monetary expansion has contributed to inflation and growing pressures on the current account. Demand pressures have outstripped supply-side capacity. This has impacted the trade and current account deficits, as illustrated by the relative resilience in demand for imports of consumer items. This has added to currency pressures and contributed to exchange rate depreciation.

Figure 1.17

Contribution to Inflation Variation, 2011-2016 (%)

Money supply growth has increasingly fueled inflationary pressures...

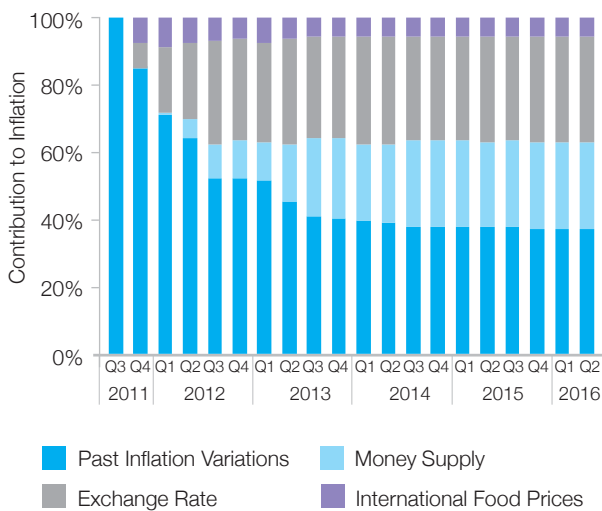
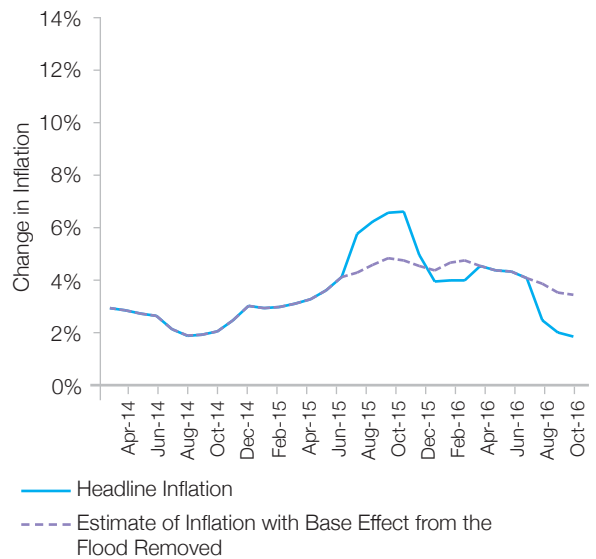


Figure 1.18

Change in Inflation (%)

...which remains strong even after removing flood effects



Source: IMF staff estimates, in IMF (2017)

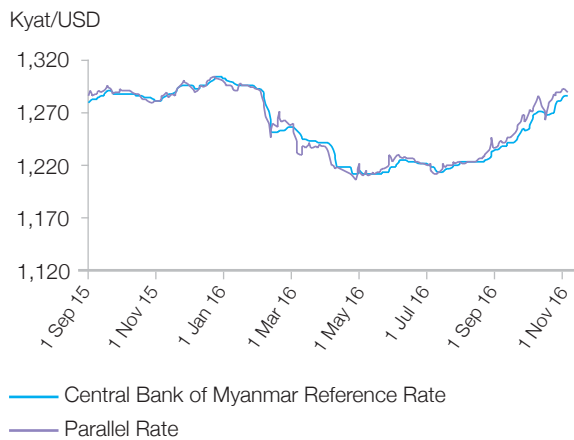
Source: IMF staff estimates, in IMF (2017)

High inflation has contributed to Real Effective Exchange Rate appreciation, hurting Myanmar’s external competitiveness and, by extension, demand for labor in tradable sectors. The IMF estimates that, as a result of recent developments, the kyat REER was overvalued by about 7 to 16 percent, depending on the model (IMF 2017a). This real appreciation of the domestic currency is a disincentive to investing in export sectors that could create new and good quality jobs, and also harms jobs in the production of tradable goods that compete with more competitive imports.

Figure 1.19

Kyat/USD Exchange Rate

CBM has maintained exchange rate flexibility, adjusting to external pressures...

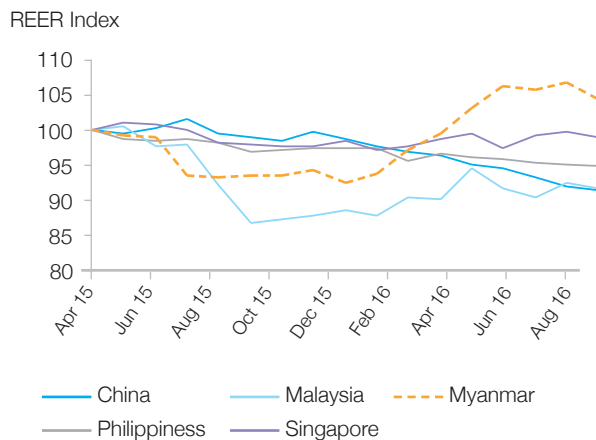


Source: Central Bank of Myanmar, WB Staff estimates

Figure 1.20

Real Effective Exchange Rate

...though high inflation did lead to REER appreciation in 2016.



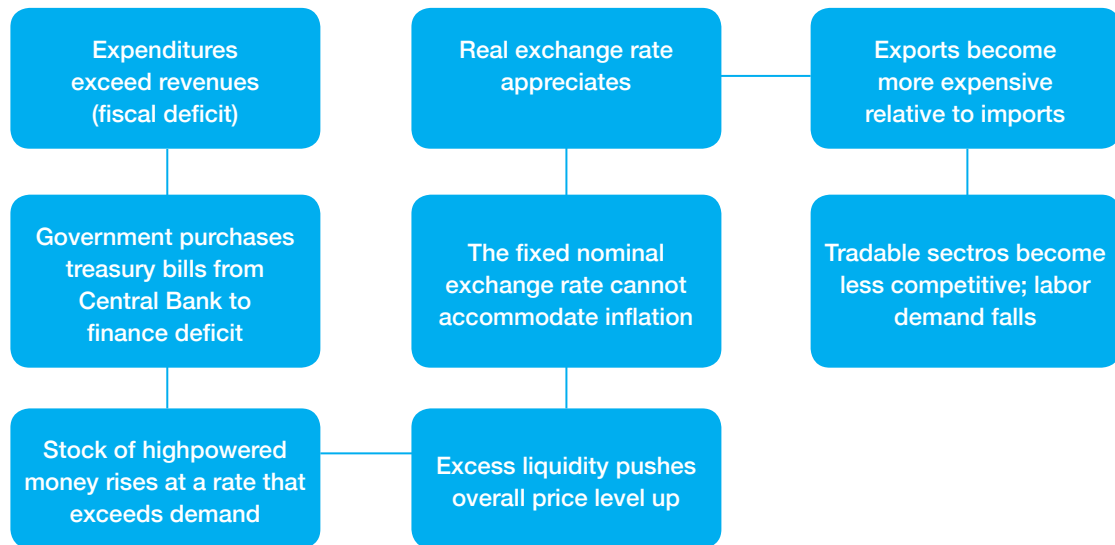
A sustained real appreciation of the exchange rate can have detrimental effects on a country’s external competitiveness and growth (Hausmann et al. 2005; Easterly 2005; Frenkel and Taylor 2006). As imports become relatively cheaper, producers of importable goods face more competition from foreign goods and may have to cut costs, oftentimes shedding labor, to maintain profitability. On the other hand, firms in export-oriented sectors suffer from a reduced competitiveness and profits as demand for their goods declines, both at home and abroad.¹⁰ This similarly reduces the demand for labor in tradable sectors. Given the importance of export-oriented sectors relative to low-skilled services sectors in generating more productive, better paid jobs, maintaining a competitive real exchange rate in line with fundamentals is crucial.

To manage pressures on REER, the Central Bank has recently allowed the nominal rate to float. When the kyat first came under pressure in late 2014, the government reacted by introducing administrative controls. This led, among other effects, to a widening gap between the official and parallel markets, speculative trading, and a hoarding of foreign exchange. Since the second half of 2015, however, the reference rate has adjusted to reflect market pressures.

¹⁰ It is possible that real exchange rate appreciation benefits exporting firms that are heavily reliant on imported inputs as these become relatively cheaper. However, if labor and imported inputs are complements in the production process, then greater demand for cheaper inputs would also hurt labor demand.

Figure 1.21

Deficit monetization and maintaining a fixed nominal effective exchange rate are not conducive to creating jobs in export-oriented sectors



Source: Authors

The experiences of Indonesia, Thailand and other neighboring countries has shown that maintaining a competitive exchange rate is important for growth and jobs. Export-oriented manufacturing industries, which made significant contributions to development in these countries, tend to generate substantial employment and wage income, and can produce positive spillovers in other sectors of the economy. In Cambodia, manufacturing wage-earners (often female) send remittances to rural households, raising consumption and enabling them to invest in productive assets that indirectly affect agricultural productivity growth (World Bank 2016). The trickle-down effect of manufacturing employment in Cambodia has also been magnified by agreements with companies to provide jobs with fair remuneration under the ILO’s ‘better factories’ program.

Rapid Credit Growth but Low Financial Inclusion Hampers Job Creation

Another key challenge is the rapid growth in credit to the private sector, which has not been matched by equal acceleration in financial inclusion. Credit to the private sector has been an important driver of M2 growth in the last five years, growing by 34-36 percent annually from 2014-2016, up from 53 percent in 2013-2014. Credit is concentrated mostly among a few big borrowers with collateral, and there are emerging signs of sector concentration and other associated risks. The financial system in Myanmar is small, however, even by the standards of low income countries (19 percent credit/GDP in 2015-2016, growing from 9.6 percent in 2012-2013) and financial inclusion is very low. The lack of access to credit is often cited as the most binding constraint to private sector growth.

One of the factors limiting financial inclusion is the practice of administratively fixed interest rates. In response to the banking crisis in 2003, Myanmar imposed both a floor on deposit rates (8 percent) and a ceiling on lending rates (13 percent).¹¹ Moreover, the 2011 Microfinance Law also imposes interest rate caps on micro loans (maximum 2.5 percent flat rate per month) and micro savings (minimum 1.25

11 In 2010/11, the CBM reduced these rates from 12 percent and 17 percent respectively to stimulate the economy.

percent rate per month). These rules apply to public and private institutions, with some exceptions for banks serving specialized groups. The Myanmar Agriculture Development Bank (MADB) and the Small and Medium Industrial Development Bank (SMIDB) are allowed to offer subsidized loans to farmers and micro, small and medium enterprises (MSMEs) with an 8.5 percent interest rate, but these make up a minority of their portfolios.

Interest rate caps have restricted MSMEs' and rural households' access to credit. Loan distribution remains substantially uneven since MSMEs still have limited access to finance for investment needs. It is not uncommon for private commercial banks, including relatively large ones, to serve only a few hundred borrowers with relatively large loans on average. While the agriculture sector represents 30 percent of GDP and employs about half of the population, only about 2.5 percent of all outstanding loans are made to this sector. It is estimated that more than 3.5 million farmers are not served by MADB due to the lack of land titles (World Bank 2014c).

Although interest rate caps are not unique to Myanmar, they are more binding on a widespread range of products (such as loans or deposits) than they are in other countries. Interest rate caps are used in 76 countries worldwide, and are often justified on prudential grounds where credit and risk management skills are weak, and regulators' supervisory capacity is low (Maimbo and Gallegos 2014). In Myanmar's case, it is argued that the floor on deposit rates ensures sufficient returns to Kyat deposits and mitigates against dollarization risks and depreciation pressures (World Bank 2016).¹²

The constraints that the interest rate caps impose on the portfolio of banking products has hurt private sector development. Since the minimum and maximum interest rates are set by CBM with a spread of only 5 percent, banks are very restricted in the type of products they can offer (GIZ 2013). In general, commercial banks are largely restricted to offering savings accounts, deposit accounts, and short-term loans. Apart from SMIDB, there are no banks offering specific products targeted towards MSMEs. MFIs and cooperatives offer a similarly limited range of products. Moreover, given the high-risk portfolio of MFIs and the existence of a 13 percent interest rate cap on bank lending, MFIs are severely underfunded. According to the United Nations Capital Development Fund (UNCDF), current demand for microfinance in Myanmar is around USD 1 billion, even though the Microfinance Supervisory Enterprise reports that the total loan portfolio of 116 newly licensed MFIs only amounts to USD 118 million (GIZ 2013).

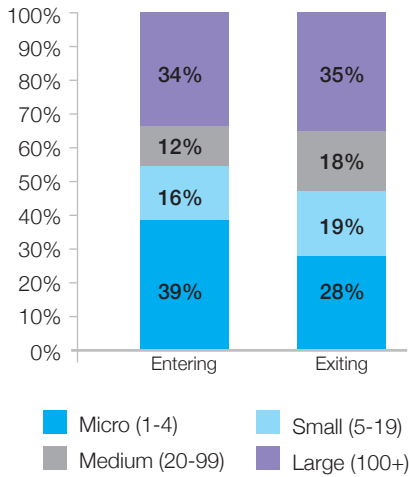
Making it easier for MSMEs to access credit would likely have a significant impact on their ability to grow and to create jobs. Analysis from an ongoing Myanmar Enterprise Survey (2017) shows that micro-sized establishments account for the bulk of job creation and destruction. Between 2014 and 2016, the entrance of small firms accounted for nearly 40 percent of new jobs created and 30 percent of jobs lost due to exits from the market. This is consistent with the analysis of enterprise surveys from 99 countries that suggests that small and young private firms contribute disproportionately to job creation (Ayyagari et al. 2011). However, these firms are credit constrained and face difficulties in expanding their operations. Almost a quarter of firms surveyed in the 2014 Myanmar Enterprise Survey identified the (lack of) access to finance as the major constraint for their business, more than access to land (22.7 percent), electricity (17 percent), and a skilled workforce (10 percent). Small (including micro) firms are twice as likely as large firms to identify access to finance as a major constraint, and ten times less likely to have a bank loan or line of credit. To put some of these numbers into context, the percent of firms with a bank loan or line of credit in Myanmar (3.2 percent) is far below both the regional average (22.1 percent) and global average (33.8 percent).

¹² CBM requires strict adherence to the actual rates, so banks are expected to compete on service standards. The fixed interest rate structure has meant that real interest rates have been very volatile, given the variance in inflation rates (ADB, 2015).

Figure 1.22

Share of Jobs Created/Destroyed by Entering/Exiting Firms (%)

The smallest firms are the biggest contributors to job creation...

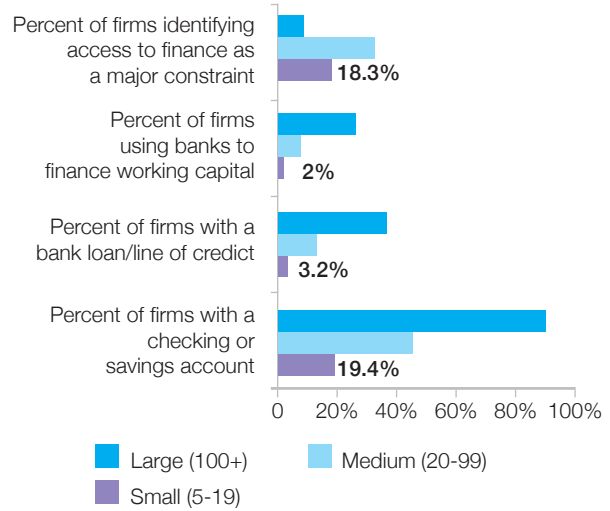


Source: World Bank Enterprise Survey (2017), staff calculations

Figure 1.23

Firm Access to Finance (% of firms)

...which remains strong even after removing flood effects



Source: World Bank Enterprise Survey (2014)

Note: Sample size of 632 firms

Macroeconomic Policy Priorities for More and Better Jobs

Clarity, Communication and Credibility of Economic Policies

The ability of Myanmar’s economy to generate more and better jobs, while already strong, will increase through sound macroeconomic policies that address emerging challenges and sustain investor confidence. There are positive signs with growing foreign investment commitments in labor intensive sectors. The biggest increase in commitments have been in the manufacturing and the transport and communications sectors. Between June 2014 and November 2016, FDI commitments to these two sectors increased by 77 percent and 275 percent respectively. As of November 2016, China accounted for around 28 percent of approved investments, followed by Singapore (23 percent), and Thailand.

To sustain high levels of investment, it will be critical to ensure economic policies are clear, credible, and well communicated. Despite their economic optimism, investors still need to see reassuring economic policies. The National League for Democracy’s election manifesto released in October 2015, together with the government’s 12 economic policy objectives, promote inclusive growth and poverty reduction in Myanmar. There has also been good progress following the implementation of such policies as the adoption of fiscally prudent budgets, the expansion of the domestic debt market, the maintenance of exchange rate flexibility, and the adoption of the new Investment Law.

Figure 1.24

FDI by Sector

FDI commitments in labor intensive sectors picking up...

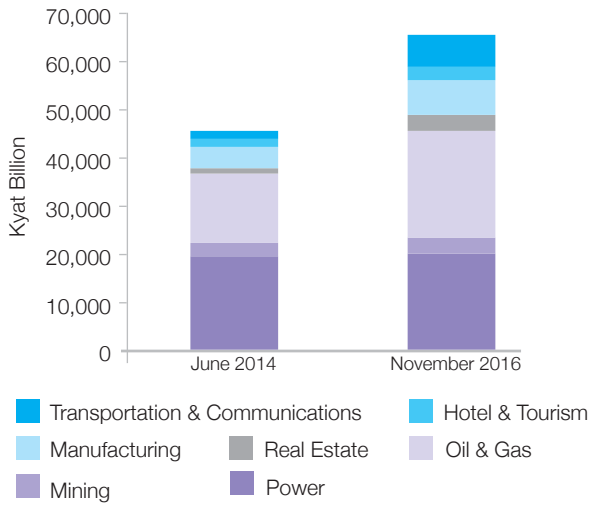
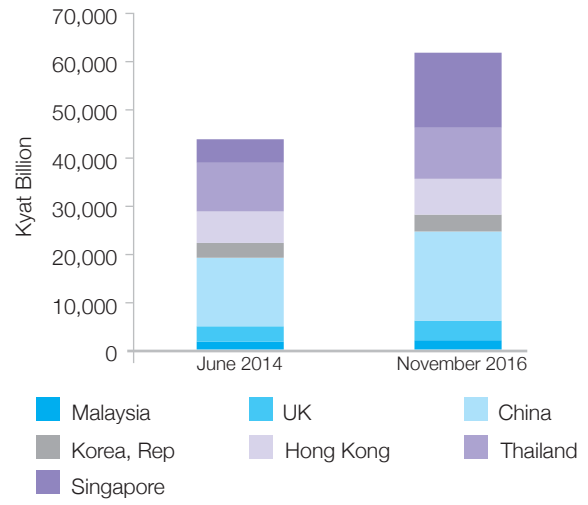


Figure 1.25

FDI by Source country

...with much coming from other Asian countries

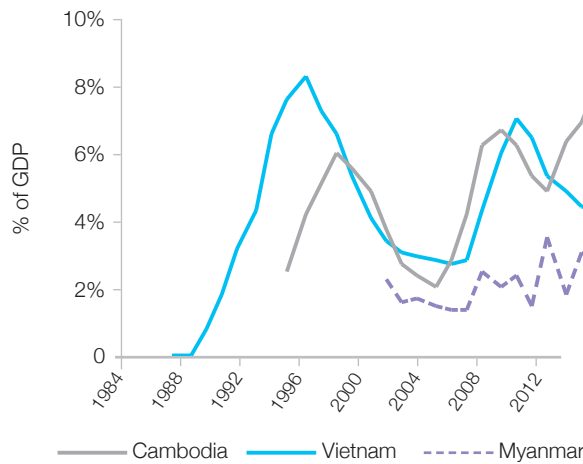


Sources: WDI, IMF BOP Statistics, WB Staff estimates

Figure 1.26

FDI as Percentage of GDP

Total FDI flows are starting to pick up.



Sources: WDI, IMF BOP Statistics, WB Staff estimates

There exist several options to strengthen the clarity, communication and credibility of economic policies. One is to release an economic vision, the foundations of which have been set out in the NLD's election manifesto and 12 policy objectives. The vision would spell out expected sources of growth and job creation, enabling policies, and an implementation plan. Clearly communicating these priorities could help further build confidence in the government's economic agenda, as would regular reporting about progress towards its goals.

Complementing this vision with regular reporting on economic policies and conditions would play an important role in anchoring economic expectations and sustaining investor confidence. The government could build on existing economic reporting by government agencies on fiscal, monetary, financial sector, and exchange rate policies, on policy outcomes, and on macroeconomic projections. For example, clarity over fiscal and monetary policy measures to contain demand pressures would help anchor exchange rate expectations and avoid speculation. In this regard, MOPF has published fiscal policy statements and a Citizen's Budget, while the CBM communicates with Parliament through various media on exchange rate policies.

Continued Fiscal Adjustments for Macroeconomic Stability and Growth

Government policies to limit CBM financing would help manage inflationary pressures. Introducing a quantitative limit on CBM financing would be a sensible approach in the short-term, as it would support the CBM Reserve Money target and help anchor inflation expectations. Over the medium-term, a prudent policy goal would be to only resort to monetization for specific emergency purposes such as natural disasters or severe cash shortages. This would further strengthen the credibility of government financing reforms and of commitments to a more independent monetary policy.

Ongoing efforts to expand the domestic debt market, and reduce reliance on monetization would further support monetary independence. Over time, the existence of a greater volume of domestic borrowing instruments helps lower exposure to currency risks and support the strengthens of the institutional infrastructure for local financial markets—as is starting to be seen in Myanmar—thus driving fiscal and monetary policy transparency and credibility. In the short-term, these are unlikely to crowd out financing for the private sector given the small size of the government securities market and to the presence of other, more binding constraints on private sector access to credit.

Although developing the domestic debt market is a long-term process, it could be supported in the near term by accepting higher interest rates at Treasury Bill auctions. The current level of market participation is not unusual at this very early stage in domestic debt market development. Other Lower Middle Income countries with more mature public debt management systems have been able to develop deeper and more reliable domestic debt markets, by, for example, expanding non-resident investor participation.¹³ In the near term, accepting higher interest rates at the auction would imply higher costs to the government. However, these could be partially offset through greater returns (or lower losses) to CBM, and would enable greater market participation, and would further reduce inflationary financing. At the same time, financing for public investment cannot be driven by domestic debt in the near or medium-term. Aside from the challenges of raising sufficient resources to do this, public investments have long gestation periods. Current tenors on domestic Bonds (2, 3, 5-year) can lead to maturity mismatch and rollover risks. The ability to issue longer-term liabilities at lower cost will go hand in hand with the gradual strengthening of wider policy and institutional capacity.

As part of its financing diversification, Myanmar should therefore make the most of its access to long-term external concessional financing. Domestic financing cannot substitute for this in terms of volume, interest cost, or maturity. Earlier studies have shown that in low-income countries, external financing can have a positive impact on long-term growth.¹⁴ A rebalancing towards longer-term concessional finance, which is currently below the average share of total financing in low-income countries, could help to lower the cost and risk of Myanmar's public debt portfolio. It could also help address weaknesses in public investment management capacity through external technical assistance.

¹³ The World Bank, IMF, "Public Debt Vulnerabilities in Low Income Countries: The Evolving Landscape," (November 13, 2015).

¹⁴ Gupta, S. et al, "Expenditure Composition, Fiscal Adjustment and Growth in Low-Income Countries," IMF Working Paper WP/02/77 (April 2002).

Having a clear strategy on external concessional finance is particularly important given that Myanmar may graduate from access to concessional finance in the next 5-10 years. Such a strategy should prioritize the use of concessional finance for major projects in the Union Budget or for general budgetary financing. It should also include the full integration of external concessional finance in the government's borrowing strategy, enabling an assessment of the costs and risks of alternative financing mixes. This strategy could help create fiscal space in a sustainable and non-inflationary manner to promote longer-term economic growth and jobs opportunities.

In addition to rebalancing the composition of financing, government spending should be further rebalanced to help accelerate growth and employment creation. Ever since the country opened up in 2011, it moved quickly to allocate more resources to priority public services, following decades of Myanmar having among the lowest rates of government spending in the world for essential social and economic services. The ramp-up in spending was possible thanks to a large jump in revenue (from 6 percent to 12 percent of GDP) following the expansion of the tax base and an increase in gas receipts. Expenditure on education quadrupled during 2009-13 and expenditure on health increased nine-fold during the same period—all while fiscal deficits remained below 3 percent of GDP.

However, fiscal constraints have made increased spending on priority public services and infrastructure more challenging. Government revenue remains low and financing options very limited. As a result, priority public investments in economic services are too low to meet the country's needs.¹⁵ The energy and transportation sectors are notably under-funded in the Union Budget relative to their needs. It would be possible to reallocate resources from other ministries to support these sectors as well as other priority areas such as education and health. This would be critical to improving Myanmar's productivity and competitiveness, increasing the country's attractiveness as an investment destination. Public investment could, in other words, help crowd in private investment in productive sectors.

Maintaining Monetary Discipline and Exchange Rate Flexibility

Greater fiscal discipline and the expansion of the government securities market are expected to ease pressures on monetary policy. Liquidity is also expected to increase from foreign capital inflows and growing deposits in the commercial banking sector. This will require scaled-up Central Bank deposit auctions to help tighten liquidity conditions, and keep them in line with the CBM's reserve money target and price stability goals. Government securities and deposit auctions have, to some extent, liberalized the interest rate for wholesale money market transactions, reflecting a gradual move to use indirect instruments for money supply control. Indirect instruments provide more effective monetary control, contribute to money and capital markets development, and reduce risks of misallocating resources.

Together with monetary discipline, ensuring exchange rate flexibility is important to alleviating external pressures. Monetary expansion has impacted the trade and current account deficits, as illustrated by the relative resilience in demand for imported consumer items. This has added to currency pressures and contributed to imported inflation. At the same time, the government is aiming at ensuring exchange rate flexibility by allowing the reference rate to adjust to market conditions through foreign exchange auctions. Although the reference rate has adjusted, it has done so more recently with a lag. Also, when the market rate goes beyond the +/- 0.8 percent official trading band, official dealers get effectively excluded from the market, which hampers the development of the formal market.

The experiences of neighboring resource-rich countries illustrate the importance of exchange rate flexibility and sound natural resource management for promoting export-oriented sectors. While

¹⁵ World Bank, "Public Expenditure Review: Fiscal Space for Growth" (forthcoming)

Myanmar is not facing a Dutch disease problem at the moment—and, in fact, is concerned with the opposite—the exchange rate should be allowed to depreciate more readily, and, following the example of other countries in the region, policies should be implemented that strategically take advantage of Myanmar’s natural resources. Malaysia, for example, succeeded in investing its resource rents abroad to avoid real currency appreciation and in supporting exports by investing in infrastructure and services that boosted growth in non-resource tradable sectors. Similarly, Indonesia used resource revenue to support the agricultural sector and reduce costs in the industrial sector.¹⁶ Strategic use of revenues from oil and gas increased the productivity of capital in non-rents sectors, lowering the cost of education, irrigation, fertilizer, and infrastructure. This supported livelihoods and food security in agriculture, while also increasing productivity of labor-intensive industries and ultimately creating jobs. Overall, the exploitation of natural resources helped to support high levels of savings and investment. Investing the proceeds from natural gas and other commodity receipts in export-oriented infrastructure (particularly electricity, transport and logistics, which are key bottlenecks to competitiveness) will help Myanmar reduce its vulnerability to Dutch Disease, support job creation in these sectors, and increase investment and growth.¹⁷

Mitigating Financial Sector Risks

As monetary policy capacity develops, the CBM policy rate could play a bigger role in managing inflation and mitigating financial sector risks. The authorities should consider a phased relaxation of interest caps that balance market liberalization with financial stability. Such a phased approach would have a number of benefits. Lenders would be able to plan better, price risks more adequately, and reduce operating cost, while borrowers would have a stable source of financing for business expansion and investment. Regulators and supervisors would also be able to better guard against loan ever-greening, which seems to be a problem in the current system. These positive impacts, however, would have to be carefully assessed against the potential financial risks of abrupt financial liberalization.

Despite the theoretical benefits of lifting interest rate caps, Myanmar does not yet seem ready for full liberalization (IMF 2017a). Liberalizing interest rates too early in the absence of a strong financial infrastructure and a supervision and risk management system can lead to risky bank behavior and exacerbate systemic risks (Nehru 2015). Moreover, lifting caps on interest rates may exacerbate inequality if access to credit mostly improves for those who already have it (IMF 2017b), as opposed to enabling new entrepreneurs to start-up of new firms or existing firms and firms to expand or invest by existing firms and farms

In the near term, the implementation of the new Financial Institutions Law (2016) through the issuance of prudential regulations will be critical for financial sector stability. Regulations on the acquisition of substantial interest, large exposure, loan classification, and provisioning will help set good practice standards, transition to risk-based supervision, and further empower supervisors to implement the Financial Institutions Law. These could also provide a stronger basis for regular reporting on Financial Sector Soundness Indicators, which the CBM plans to do in the near future. Without this reporting, it is difficult to gauge the real health of the banking system, which in turn can distort economic expectations.

These efforts could be complemented by the development of a creditor reporting system, which is also envisaged under the Financial Institutions Law. This would help to improve lending decisions and reduce risks, while potentially expanding access to finance. There is currently no credit bureau or registry to facilitate lending decisions. The regulation on credit reporting is expected to be issued soon, with at least one credit bureau starting operations by June 2017. Consumer protection (for borrowers) should therefore be strengthened accordingly.

¹⁶ World Bank (2016): An Integrated Framework for Jobs in Fragile and Conflict Situations.

¹⁷ Simulations by the IMF (2017b) show that investing in infrastructure that benefits all economic sectors generates an annual GDP growth rate that is 3.1 percentage points above the trend and increases annual investment growth 7.4 percentage points above the trend.

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NOTE 2:

MYANMAR'S LABOR FORCE¹

¹ This Note was prepared by Wendy Cunningham and David Alejandro Huertas, with inputs from Reena Badiani-Magnusson, Roxana Martinelli, and Ikuko Uochi.

A typical worker in Myanmar is a prime-age (25-54 years old) male with a primary school education who is working in rural areas of the Dry or Delta Zones. Nearly 56 percent of workers are men although they only comprise 45.4 percent of the working age population (age 15 and older) (Table 2.1).² Prime aged workers are a larger share of the population than their population share (65.9 percent compared to 55.7 percent), as youth and (particularly) elderly are not working due to school or retirement. The largest share of workers have only a primary education (40.2 percent), but this is close to the share of Myanmar adults with only primary school (37 percent). However, more of those who have a secondary or tertiary education are working than their population share would predict while those without any education are a smaller share of the working population. Urban and rural workers comprise the same share in the working population as in the working age population. There are more workers in in dry zones and the Ayeyarwady than expected given their population shares (Table 2.1).³

Table 2.1

Characteristics of Working Age Population and Working Population, as share of total

		Working Age Population	Working Population
Gender	Male	45.4%	55.9%
	Female	54.6%	44.1%
Age	Youth (15-24)	24.2%	22.4%
	Prime aged (25-54)	55.7%	65.9%
	Older (55+)	20.1%	11.7%
Education	No formal education	19.3%	14.1%
	Primary only	37.9%	40.2%
	Middle school	21.7%	23.6%
	High school or above	21.1%	22.1%
Region	Urban	32.0%	32.1%
	Rural	68.0%	67.9%
Agro-Zone	Hills	17.9%	17.0%
	Dry	29.7%	31.0%
	Delta	26.7%	28.3%
	Coastal	9.6%	7.6%
	Yangon	16.1%	16.1%
	Total Count	35.4 million	24 million

Notes: WAP is defined as those age 15 or older. WP is defined as those who worked for wage or income in the 7 days prior to the date surveyed.

This rough picture of Myanmar’s workers tells us little about what makes Myanmar workers unique and what can be done to improve their lot. To this end, we explore factors that hinder more and better workers in Myanmar. We begin with a profile of Myanmar’s workers, in terms of how many are working and the nature of their work. Then we turn to factors that may limit Myanmar’s worker’s success as well as means to overcome those constraints.

² Given the low unemployment rate in Myanmar, the number of labor force participants is similar to the number of workers. For presentational purposes, these terms are used interchangeably unless otherwise specified.

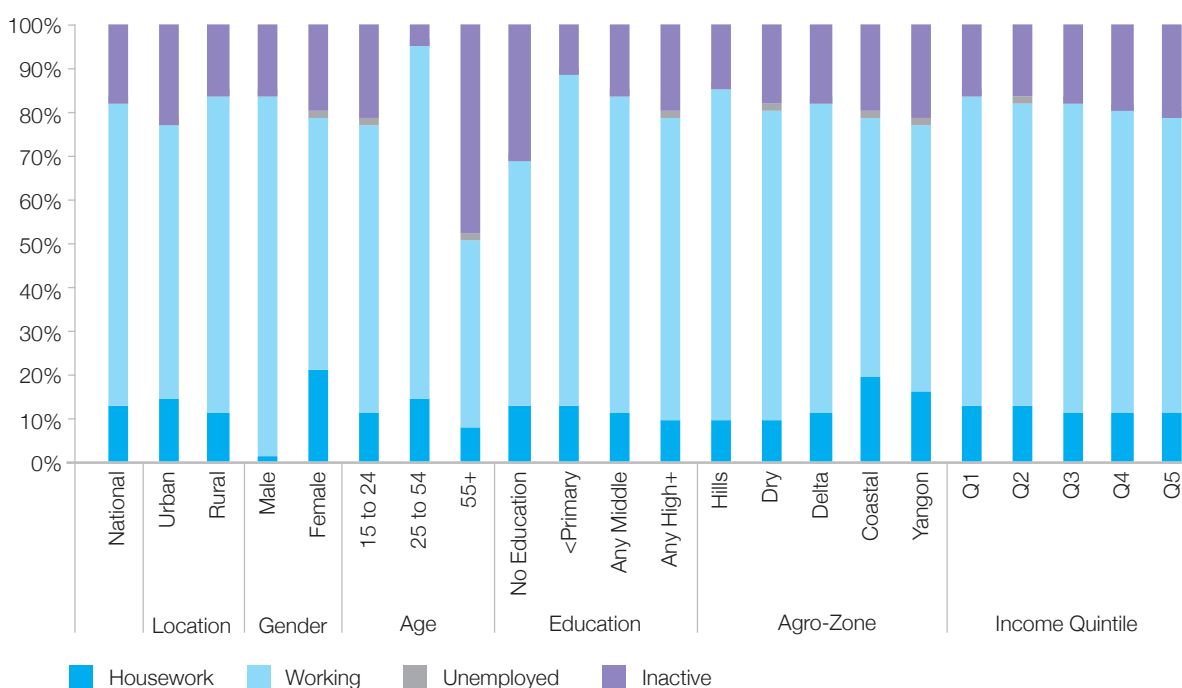
³ This Note relies heavily on the Myanmar Poverty and Living Conditions Survey (MPLCS) that was collected in early 2015. The MPLCS draws a national population sample of 3648 household, that is representative at the agro-region level. Thus, statistics cannot be presented at the state or region level. For a full description of the MPLCS (2015), see World Bank et al (2014).

Myanmar People are Hard Workers

Two-thirds of Myanmar's population age 15 or older is working. The working age population, defined as those age 15 or older in this study,⁴ numbers more than 35.4 million people in Myanmar.⁵ More than 58 percent worked an hour or more for pay in the seven days prior to the survey. However, if we consider the share who held a job in the past 12 months, nearly 65 percent of the working age population held a job (Figure 2.1). These estimates are consistent with those calculated using the 2014 Census data (67 percent) and the 2015 ILO Labor Force Survey (64.7 percent). Box 2.1 presents a discussion of the factors underlying the different labor force participation rates emerging from each survey.

Figure 2.1

Time Use of the Working Age Population, 2014-2015



Source: author's calculations using MPLCS 2015.

Notes: age 15 and older; population weights

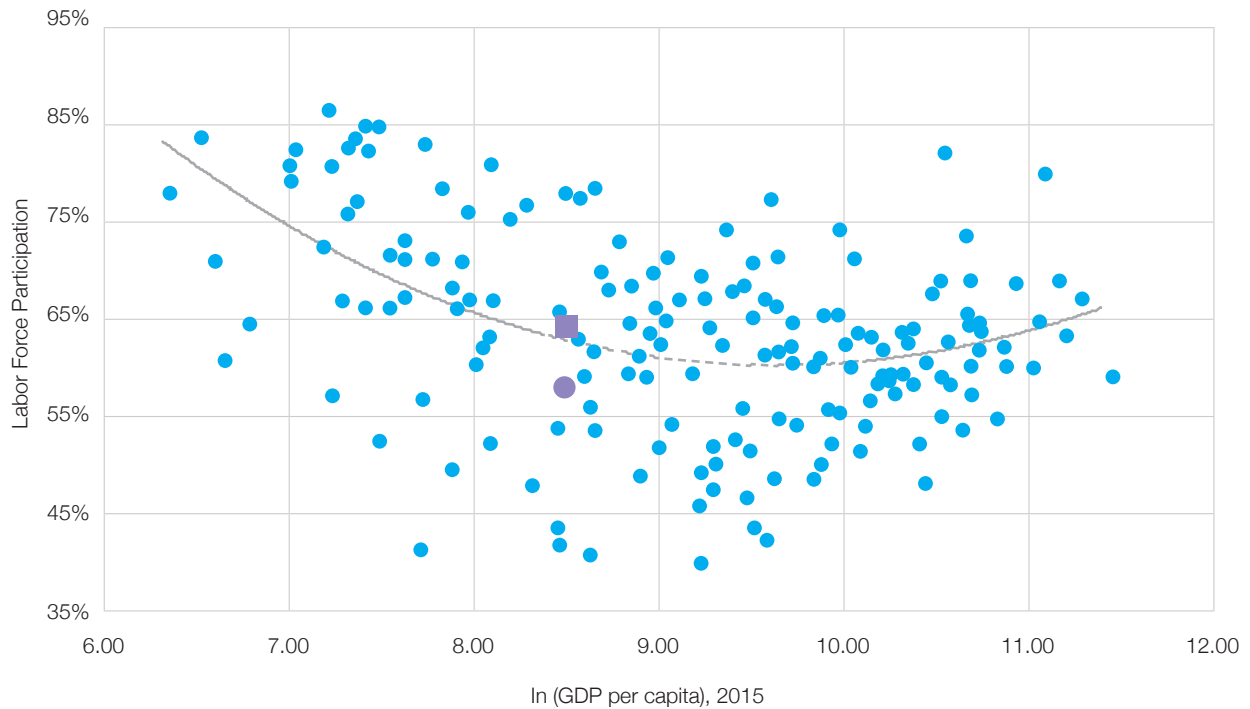
At first glance, labor force participation rates are lower than they should be for a country at Myanmar's level of development. Figure 2.2 plots the labor force participation rates of 177 countries against GDP per capita (in natural logs) and draws a trend line through the data points. Myanmar's labor force participation rate measured in the seven days prior to the survey, is below the trend line – indicated by the large circle in Figure 2.2 – meaning that it is lower than expected given its level of income.

4 This Note defines the working age population as those age 15 or older, which is consistent with the definition used by the Department of Population's 2016 report on occupations and industries based on the 2014 Census (note that LFP and unemployment rate use the age range 15-64 in that document while all other statistics are based on 15+). While age 15-64 is the common age range set by the ILO to define the working age population, this study uses age 15 and older for two reasons. First, the ILO definition assumes that workers can retire and earn a pension by age 65. Pension coverage is quite low in Myanmar so workers may have to work much longer than if they were in a country with a robust pension system. Second, the international database that allows us to benchmark Myanmar against other countries defines the working age population as age 15 and older. Since this benchmarking is a primary contribution of this study, we choose to use the comparable definition of the working age population.

5 The 2014 Census counts 36,761,184 people as working, as compared to 35,431,976 in the MPLCS. The difference between the Census and the numbers reported from the MPLCS is due to the different years in which the Census (2014) and MPLCS (2015) were collected, as well as the fact that the MPLCS is a sample, with a sample frame that is representative only at the agro-zone level.

Figure 2.2

International Labor Force Participation Rates



Source: author's calculations from WDI. <http://mydatabank.worldbank.org>.
 Notes: The large circle indicates Myanmar's labor force participation rate, relative to GDP per capita, based on the share of those who worked in the week prior to the MPLCS survey (January 2015). The large square indicates Myanmar's labor force participation rate, relative to GDP per capita, based on the share of the working age population that worked in the year prior to the MPLCS survey. Labor force participation rate for all other countries is the proportion of the population ages 15 and older that supply labor for the production of goods and services during a nationally-specified period. The trend line is derived from an OLS estimation of labor force participation regressed against ln (GDP per capita, PPP, constant international \$) and its square.

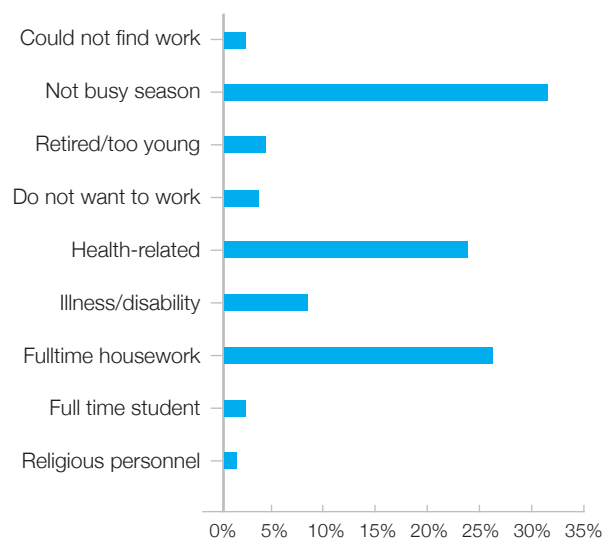
However, when considering the share who worked over the year, Myanmar people work more than expected given Myanmar's level of development. Labor force participation rates of 65 percent put Myanmar above the trend line, as demonstrated by the large square in Figure 2.2. So are people in Myanmar particularly hard working or not? The answer lies behind the numbers.

A high share of Myanmar's jobs are in the agricultural sector, and thus affected by seasonality. One-third of those who worked over the year but not in the week prior to the survey stated that their idleness was due to it not being the busy season (Figure 2.3). This is reflected in the gap between weekly and annual labor force participation rates by location: 5 percentage points in urban areas as compared to a 13 percentage point difference in rural areas (Figure 2.4). Indeed, the survey was fielded in January 2015, which is a low-agricultural activity period. Households average 17 days of labor per household during the dry season as compared to 157 days of work during the wet season (June – October) (World Bank 2016). This seasonality is more of an issue when measuring labor force participation rates in Myanmar than in other countries since Myanmar has among the highest agriculture employment levels of the countries in the global sample.⁶

⁶ Of the 102 countries in the WDI database that report “% of the labor force in agriculture,” only four have a higher share of agricultural workers than does Myanmar

Figure 2.3

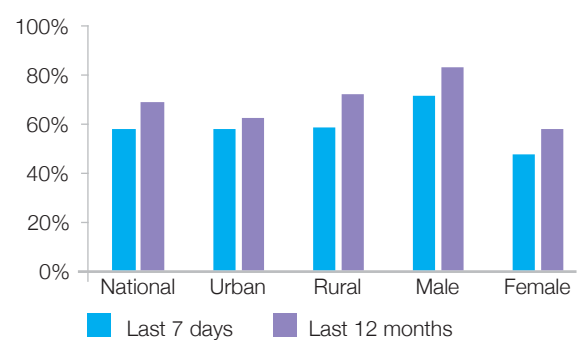
Reason for Not Working in the Past 7 Days, among those who worked in the past year



Source: MPLCS (2015)

Figure 2.4

Labor Force Participation Rates, 7 days prior to the survey and 12 months prior to the survey



Source: MPLCS (2015)

Seasonality together with the blurring of women’s domestic and market duties in agricultural households, results in higher annual labor force participation rates. Another third of those who worked during the year but not in the week prior to the survey were engaged in fulltime housework (Figure 2.3). The respondents are nearly exclusively women. Women’s work is particularly seasonal; women’s labor force participation rises by nine percentage points when using the annual rather than weekly definition of work while men’s rates increase by seven percentage points (Figure 2.4). Since working women are likely doing the majority of homecare, if they stop working in the market, homecare becomes the primary activity.

Another third of those who worked during the year but not in the previous week reported temporary health-related reasons. Although the survey differentiates between those who are disabled or have a long-term illness and those who are temporarily out for health-related reasons, the difference between the categories is not so clear. However, there may be shortcomings in Myanmar’s health care system that is affecting work.

Those who are not working are mostly out of the labor force. Unemployment is almost negligible in Myanmar. Instead, most of the 30.3 percent who are not working are engaged either in full time housework (12.0 percent) or in a range of other activities in the year prior to the survey, primarily being a student, retired, or suffering from a disability. The reasons for inactivity vary by characteristics: the elderly are retired, very young are in school, prime-aged workers are ill or disabled and could not work, and men are waiting for the busy (agricultural) season.

Box 2.1: What is the True Labor Force Participation Rate?

Census data, Labor Force Survey (LFS) data, and the Myanmar Poverty and Living Conditions Survey (MPLCS) data produce similar, yet different, statistics for the labor force participation rate. The point estimates differ among the three surveys for several reasons.

First, the data were collected in different periods. Census was fielded in March 2014, MPLCS was January 2015 and LFS was March 2015.

Second, the sample differed in each survey, with the Census being a population sample, the MPLCS using a sample frame that is representative at the agro-zone level and collecting data from 3648 households, and the LFS collecting data from a sample of more than 23,000 households. Population weights were generated to proxy the population based on these samples.

Third, the definition of the working age population differs between surveys. The Census uses 15-65, MPLCS uses 15 and older, and LFS uses 15-64.

Fourth, the definition of “work” differs among the surveys. The Census defines “employed” as “those who in the previous 12 months to census night [March 29, 2014] reported to have worked for 6 months or more, or were working for a period that was likely to last for more than 6 months.” The MPLCS asks if the person worked (i) in the past seven days and (ii) in the past 12 months. The LFS does not specify the definition of work used in the subsequent report of survey results (MLESS et al 2016).

Given these differences, it perhaps is remarkable, rather than disturbing, that the estimates are so close.

Sources: MOLIP (2016), MOLES et al. 2016, World Bank et al (2014)

Age and Gender are Strong Determinants of Time Use Patterns

The working population differs by gender and age across the year, but is similar by region and education level during the dry season. More than 83 percent of men worked in the year prior to the survey, as compared to 58 percent of women, in-line with the expected gender gap given Myanmar’s level of economic development.⁷ More than 80 percent of prime-aged people are working, while 2 of every 3 youth – those age 15-24 – are working, much higher than expected for Myanmar’s level of development. And 43 percent of people older than age 55 are still working. Work rates hover around 70 percent for those with different levels of education, with less skilled working less. About 58 percent of both urban and rural workers worked in the year prior to the survey; but the gap expands by nine percentage points when taking into consideration activity over the year (Figure 2.1). Seventy percent of people in each income quintile are workers, though the share declines to 67 percent for the least poor.

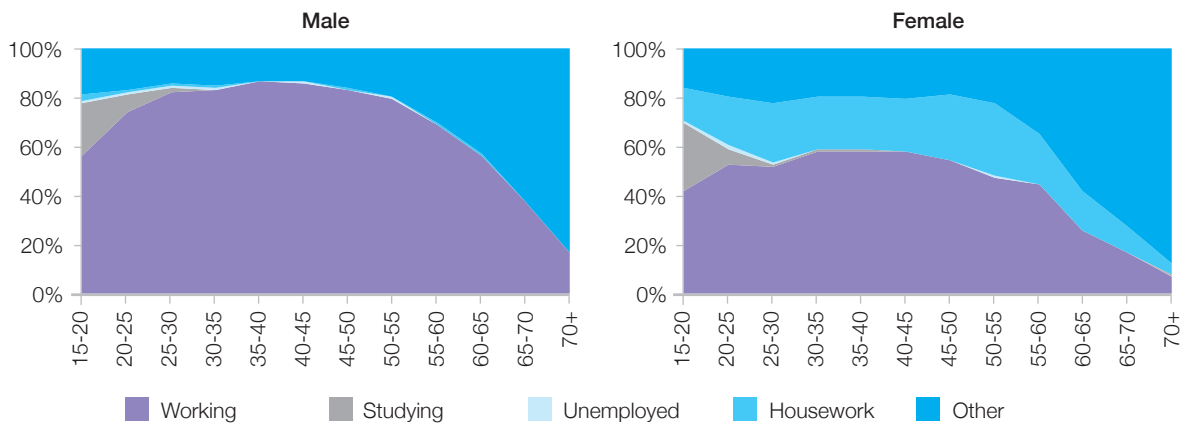
People’s relationship with the labor market changes with age and differs by gender. Figure 2.5 shows the share of males (left) and females (right) at each age who spent the majority of their time in each of the five principle types of activities: working, unemployed, studying, house or family care, or inactive.

⁷ Calculated from World Development Indicators (<http://mydatabank.worldbank.org>). The value for Myanmar is derived from the MPLCS 2015. The ratio of the share of women to men who worked in the year prior to the survey is also in-line with the expected gender gap relative to other countries.

While 55 percent of boys age 15-20 are already working, with most of the non-working in school, nearly all have traded school for work by age 25-30. International comparisons of youth (age 15-24) labor force participation rates show that a higher share of young men in Myanmar are working (60 percent) as compared to East Asia (52 percent), developing East Asia (53.4 percent) and globally (45.9 percent).⁸ More than 80 percent continue working through age 50-55. In spite of a very limited old-age pension scheme, working falls off at a rather young age in Myanmar, though 20 percent of men age 70 or older are still working.

Figure 2.5

Principle Activity, by age and gender



Women have a similar relationship with the jobs market throughout their life-cycle as men do, though with more schooling and less market work. Girls' schooling at age 15-20 is a few percentage points higher than that of boys, but they also leave school by age 25-30. Half go into the job market while 40 percent go into full time home and family care. Women's market work also begins to decline at age 50-55, though the steep drop-off occurs after age 60.

Female labor force participation is a bit higher than the global standard for a country at Myanmar's level of development (Figure 2.6).⁹ However, it is rather low compared to low- and low-middle income countries in Southeast Asia. For example, nearly 79 percent of Vietnamese women and 77 percent of Cambodian women are in the labor force. The gap may be due to a range of factors. Vietnam and Cambodia have successfully built an FDI-led garment and textile industry that is particularly skewed toward female workers (Cunningham and Pimhidzai 2017). Myanmar has a high rural population and limited transportation corridors, making access to jobs difficult, particularly for those who carry a high housework time commitment. Those living on farms may also blur the lines between market-work and domestic work, leading to an under-reporting of market work. Also, dependency ratios are higher in Myanmar relative to most countries in the region, which puts a higher value on women's home work.¹⁰

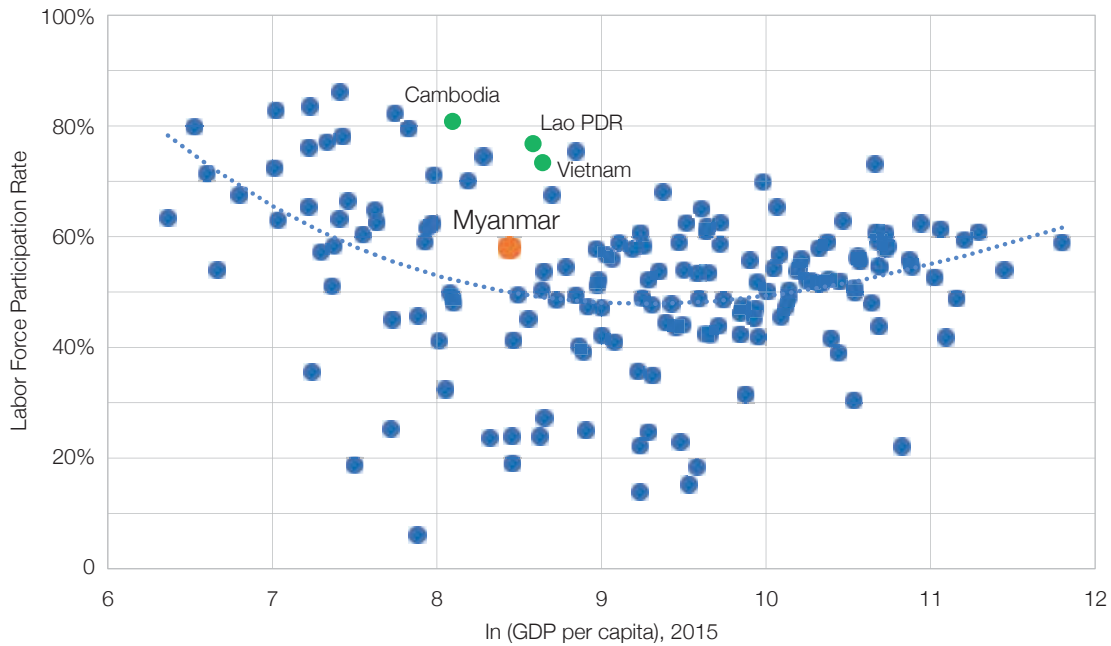
8 World Development Indicators (2015); Myanmar estimates from MPLCS 2015.

9 Calculations from MPLCS (2015) findings place Myanmar's female labor force participation rate at 58 percent (Figure 2.6). Calculations from the World Development Indicators place Myanmar female labor force participation closer to 53 percent. We use the MPLCS (2015) estimate as it is based on the most recent national data.

10 United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, custom data acquired via website.

Figure 2.6

International Female Labor Force Participation Rates



Source: Author's estimates from WDI and MPLCS (2015)

Although more men than women have jobs, more women work than do men. While a job is defined as a productive activity to earn income (or in-kind), a lot of unpaid and unrecognized (by GDP statistics) work is happening, namely homecare. Seventy-one percent of men say that they worked an hour in the past week and 46.8 percent of women make the same claim. However, 1 in 4 women also said that they spent the majority of their time caring for their household or family, as compared to 1 in 50 men (Figure 2.1).¹¹ The importance of this activity for women across their lifetimes is clearly visible in Figure 2.5, with a high share of women dedicated to housework during their prime-age. Though information about the hours dedicated to this activity is not available for Myanmar, time use data from other countries suggest that these women are not “inactive”, but rather working full-time producing goods and services that are not captured in GDP numbers.¹² If we include home or family care in the calculation of the “working” variable, then 73.2 percent of men work and 74.1 percent of women do. However, when we allow for men’s higher employment during high agricultural seasons, men again outpace women, with 83.3 percent of men working, as compared to 80.2 percent of women in market or home work over the year (Figure 2.1).

The jobs situation is quite dire in conflict-affected zones. The data do not allow disaggregation by affected and non-affected zones but data from other countries allow us to sketch a rough picture. The conflict can manifest itself in various ways. First, due to theft, destruction, or relocation, the populations in conflict-affected zones is likely have few productive assets. Second, they may not have been able to accumulate assets for a lack of institutions, such as schools (to accumulate human capita), banks, or land titling offices. Third, the conflict would prevent the development of local markets and limit links to external markets, through a lack of connectivity (roads, tele-communications) or business ties between producers and wholesalers (World Bank 2013).

11 Individuals are defined as working in home or family care if they declared that they did not work for pay in the previous week and they dedicated their time to “household work” or to “family responsibilities.” This is clearly an underestimate of the share who spend a large share of time in homecare since those who work full time may also spend a large amount of time in homecare. For example, a study in Mexico found that women with a paid job spent a full 34 hours weekly on homecare, as compared to 48 hours weekly for women without a market job.

12 For example, Vietnamese women spend an average of 35 hours weekly caring for their homes and families, nearly equivalent to a full time job. If we assume that their work creates value equal to the minimum wage, the total value of all women’s homecare work in Vietnam is equal to 40% of GDP (ActionAid Vietnam, 2017).

Myanmar Workers Engage in Low-Quality Jobs

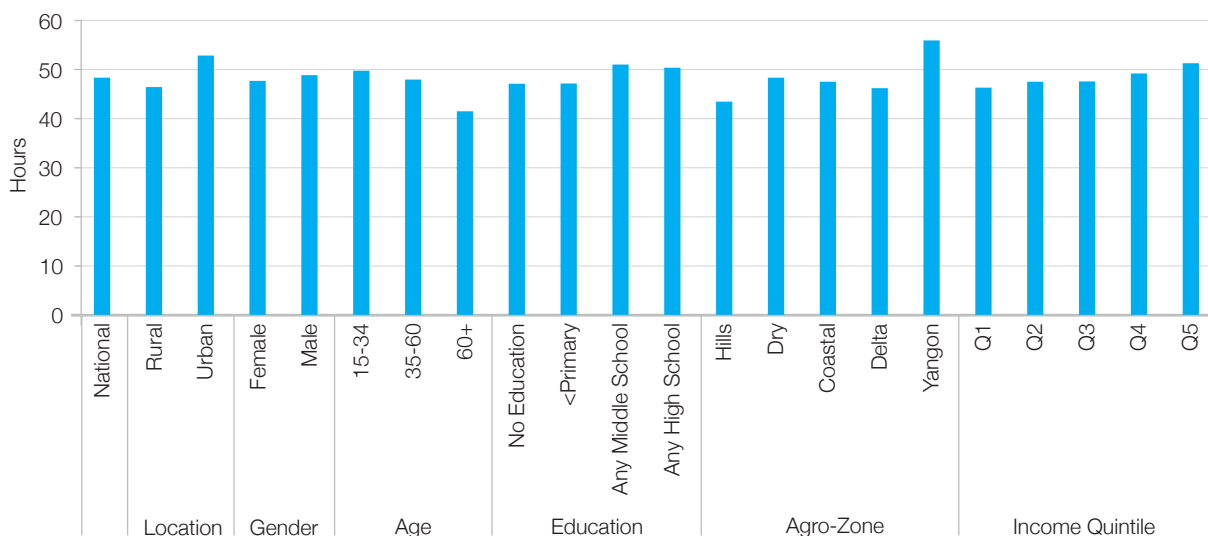
There is not a single variable to measure job quality, and much about a job is not measurable, such as the satisfaction one derives from one's work, the personal learning, or the freedom certain jobs bring. However, there are some variables that we can assume are associated with better (or worse) jobs, such as work time, wages, benefits associated with work, and work conditions. As there are little data or information on the last factor, this section reports on work time, wages and benefits.

Myanmar jobs require long hours, with substantial uncertainty

The length of the work week varies substantially across workers. On average, Myanmar people work long weeks – averaging 48 hours of work per week in their main job (Figure 2.7).¹³ Urban workers put in particularly long work weeks (53 hours) but all geographic (by agro-zone) and demographic (gender, age, education level) groups work an average of more than 40 hours a week. Disaggregated data reveal a more mixed picture. Nearly 33 percent of workers report working less than 40 hours weekly, and 10 percent work less than 20 hours weekly. This is particularly prevalent among rural, agricultural, and female workers. Notably, these data were collected during the dry season, when work hours in agriculture, the primary employer in Myanmar, is particularly low.

Figure 2.7

Average Hours Worked in the Week Prior to the Survey



Source: MPLCS 2015

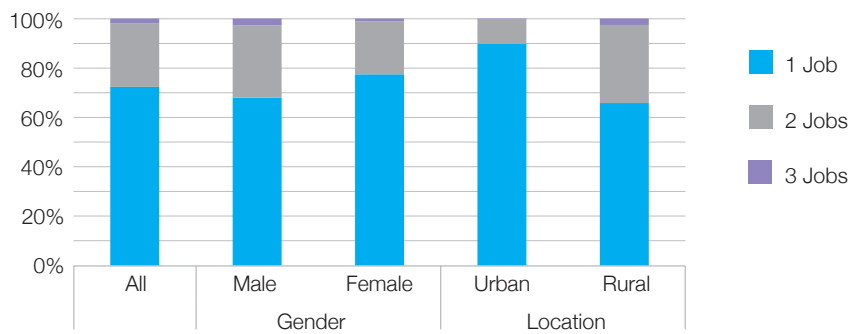
One in three Myanmar people work multiple jobs. About 26 percent of workers say they worked a second job, and 2 percent report three jobs over the past year (Figure 2.8). Rural workers have a higher tendency for multiple jobs: 1 in 3 as compared to 1 in 10 urban workers. For example, about six percent of rural workers combine own farm and wage farm labor, another 5 percent combine own farm work with non-agricultural labor, and about 7 percent do both own farm work and own non-farm (household enterprise) work. No urban workers have these combinations (Badiani-Magnusson et al. 2017). Women work a fewer number of jobs than men, though this does not account for women's unpaid housework. Poorer and younger people also work more jobs, though both are correlated with rural employment (Badiani-Magnusson et al. 2017).

13 There are no data on the number or hours worked in secondary jobs, so it is not possible to calculate the total work load.

Most Myanmar workers run their own businesses or work as informal employees. Sixty percent of Myanmar's workers own their own businesses, whether on- or off-farm (Figure 2.9). Nearly 29 percent of the working population states that their principle job is to work their own farm. Those who are older than age 55 (39 percent), without a formal education (47 percent) and living in rural zones (40 percent) have particularly high rates of farm ownership as the primary type of work. Another 29 percent of those who are working own their own non-farm business. This is particularly prevalent among urban dwellers, women, and more educated people (Figure 2.9). Most of these businesses tend to be small and do not have access to financing, institutions, client-bases, or innovation to provide more opportunities and benefits to the firm or farm owners (see Note 4 for a discussion of household enterprises). The firm owner likely does not have access to any social benefits, other than those that she can access through private markets.¹⁴

Figure 2.8

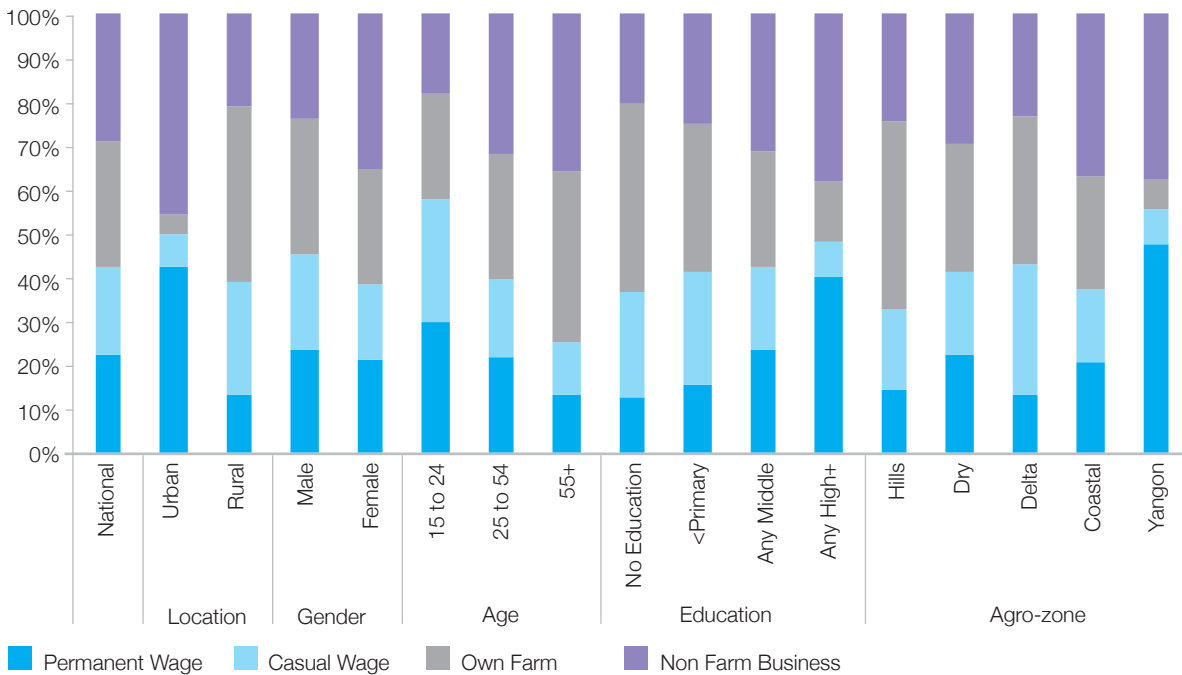
Number of Jobs Worked Over the Year



Source: Badiani-Magnusson et al. (2017)

Figure 2.9

Distribution of Workers Across Firm Types



Source: author's calculations based on MPLCS (2015);
Notes: job worked in the seven days prior to the survey

13 In fact, the MPLCS (2015) does not even ask firm or farm owners if they have access to social benefits.

Although Myanmar's labor regulation is rather robust, a small share of Myanmar's employees have "good" jobs. The labor law¹⁵ is perhaps less protective than in other countries in terms of no restrictions on fixed-term contracts and limited notice period for firing due to redundancies, but quite supportive to labor in the laws regulating severance payments, work hours, the wage premium to overtime pay, and paternity leave (Table 2.2). The labor force tells a different story. Only one in five Myanmar workers define themselves as having permanent wage jobs. But among permanent employees, only 12 percent – equivalent to 5 percent of the workforce - have a work contract and (if the employer follows the labor law) are guaranteed regularly paid wages, social benefits, paid vacations, maternity and paternity benefits, and dismissal rights (Figure 2.10). The absence of a contract does not eliminate all job benefits, though. Twenty-one percent of permanent wage workers are registered with a pension plan, 25 percent enjoy paid vacation time and 33 percent are granted paid sick days. These workers are primarily clustered in urban areas, held by those with higher education, and taken by younger workers.

The structure of the labor law may impede a movement toward better jobs, but poor enforcement is likely the culprit. The combination of high severance and no restrictions on fixed-term contracts may incentivize firms to not offer permanent contracts to avoid potentially high severance pay. Similarly, the high cost of overtime pay may encourage firms to stay with less formal contracts (Kuddo 2017). However, enforcement is likely so low due to the shortage of labor inspectors (Bernhardt et al. 2016) that these laws are likely only followed by public sector and larger firms (see Note 5 on the quality of jobs in exporting versus non-exporting firms).

Perhaps the most precarious job – casual wage – is held by nearly 1 in 5 workers. None of these workers have a work contract and are thus not covered by labor legislation, though up to four percent of them enjoy some job-related benefits, namely paid sick leave (Figure 2.10). Even benevolent employers are likely to first cut wages or employment of casual wage earners if the firm or enterprise faces economic hardship. Rural and less educated workers have a particularly high incidence of being a casual wage worker.

Daily wages and earnings cluster around the minimum wage. The median wage in the period January to April 2015 was about 3500 kyat (US\$ 2.80) daily, slightly below the minimum wage that was instituted six months later. Men earn above the median wage (4000 kyat) while women earn below (2900 kyat) (Figure 2.11). Urban workers earn above and rural earn below the median wage. The daily wage increases with age and with the skill-level associated with occupation: high skilled workers (professional, managers) earn an average of 5800 kyat daily as compared to 3000 kyat daily among low-skilled (elementary occupations) workers. Notably, once controlling for education level, semi-skilled and low-skilled workers earn the same daily wage. The manufacturing and service sector have the same median wage (4500 kyat), though the mean wage is higher in the manufacturing sector. Agricultural laborers pull in 2500 kyat daily.

15 A myriad of laws regulate labor relations in Myanmar, ranging from the 1920s to the 2000s (e.g., Shops and Establishments Act, 1951, as amended in 2016; Employment and Skill Development Law (2013), Social Security Law (2012), Labor Union Law (2011), Employment Restriction Act (1959), Payment of Wages Law (2016), Employment and Training Act (1950), Employment Statistics Act (1948), Factories Act (1951), Leave and Holidays Act (1951), as amended in 2014, Payment of Wages Act (1936), Social Security Act (2012), Workmen's Compensation Act (1923); and Formulation of Overtime Wage Rates under the Factories Act (Directive under the Factories Rules, 1935).

Table 2.2

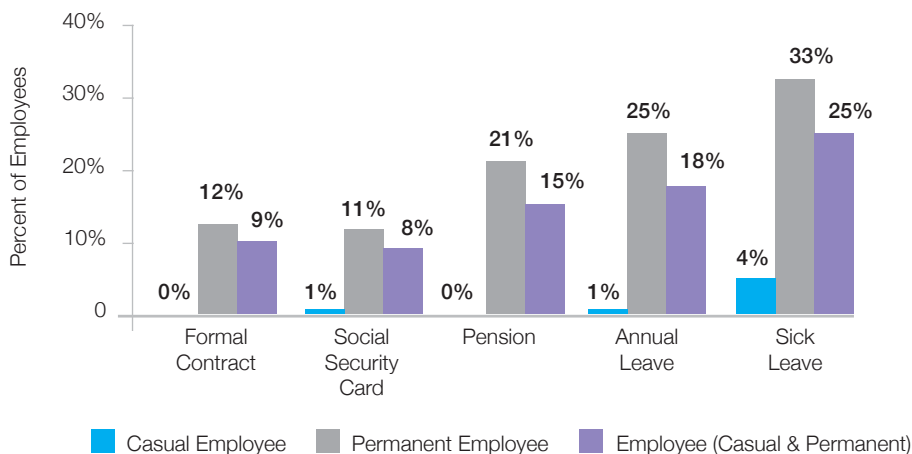
Labor Protection Country Comparison

	Cambodia	China	Lao PDR	Myanmar	Thailand	Vietnam
Fixed-term contracts prohibited for permanent tasks	No	No	No	No	Yes	No
Maximum cumulative duration of a fixed-term employment relationship (in months), including all renewals	24	No limit	36	No limit	No limit	72
Premium for overtime work (% of hourly pay)	50	50	50	100	50	50
Restrictions on night work	No	No	No	Yes	No	No
Paid annual leave for a worker with 10 years of tenure (in working days)	21	10	15	10	6	14
Retraining or reassignment obligation before redundancy	No	Yes	No	No	No	Yes
Notice period for redundancy dismissal after 10 years of continuous employment	13.0	4.3	6.4	4.3	4.3	0
Equal remuneration for work of equal value stipulated in law	Yes	No	No	No	No	Yes
Gender nondiscrimination in hiring stipulated in law	Yes	Yes	No	No	No	Yes
Minimum length of maternity leave (minimum number of calendar days that legally have to be paid by the government and/or employer)	90	98	105	98	90	180
Paternity leave (days)	n/a	3	3	15	n/a	n/a

Source: <http://www.doingbusiness.org/data/exploretopics/labor-market-regulation>

Figure 2.10

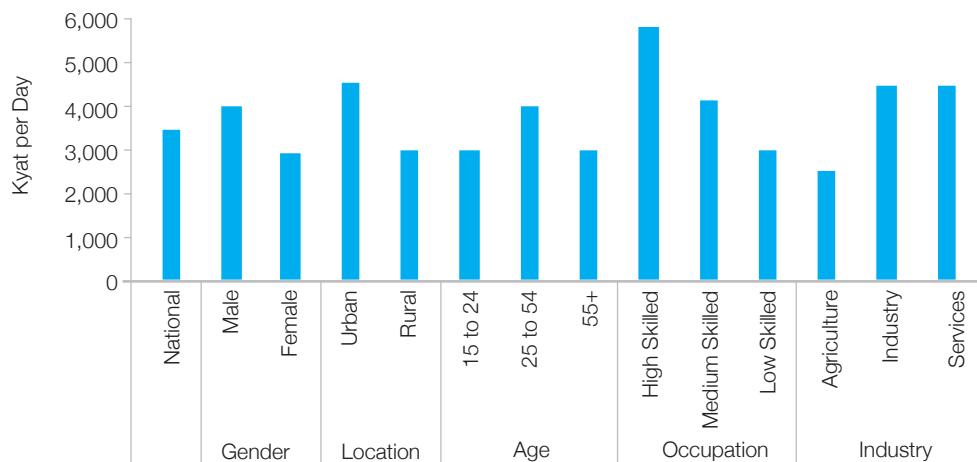
Employee Benefits, by nature of work arrangements



Source: MPLCS (2015)

Figure 2.11

Median Daily Earnings, 2015 kyat



Source: author's calculations based on the 2015 MPLCS.
 Note: Earnings based on the seven days prior to the survey

Myanmar's minimum wage is low with respect to the poverty line, but high relative to labor productivity. The Law on Minimum Wages (Law No. 7/2013) states “the objective of the Minimum wage in Myanmar is to meet with the essential needs of the workers, and their families.” If we use the consumption poverty line as a proxy for the cost of providing “essential needs of the workers and their families,” the minimum wage is just adequate to cover the food and basic non-food needs of a family of three.¹⁶ Given that an average household in Myanmar has 5.5 members, people need more than just basic consumption to advance in life, and Myanmar is a country that is highly susceptible to economic-related shocks (World Bank 2016), the minimum wage level seems less than adequate to meet the objective of the minimum wage law. However, if wages are intended to compensate workers for their contribution to output, Myanmar's minimum wage is high by global standards. Figure 2.12 presents the ratio of the minimum wage to the average value added per worker for Myanmar, other countries in the region, and the OECD.¹⁷ The Myanmar's ratio exceeds 50 percent, as compared to 12 to 40 percent in OECD countries and 13 to 65 percent in East Asia.

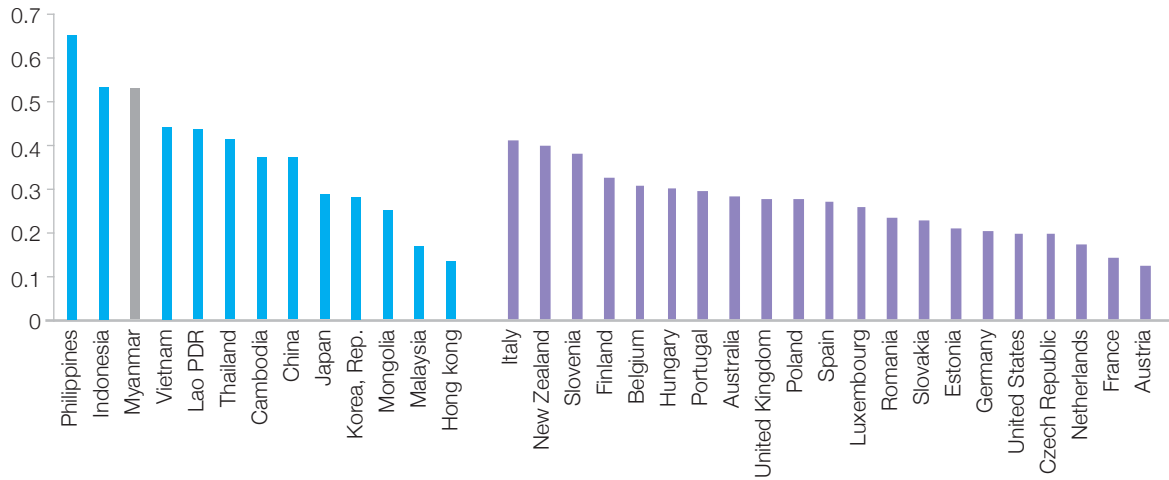
By law, the minimum wage has limited reach. Only workers in firms with more than 15 employees are covered by the minimum. Unskilled workers, who comprise a very large share of the labor force, can legally be paid a fraction of the minimum for up to six months. Countries operating in Special Economic Zones are not bound by the law, either. The limited number of inspectors – 1 for every 180,000 workers or 1 for every 60,000 private sector employees) - also likely limits the explicit effectiveness of the minimum wage law (Bernhardt et al. 2016). However, evidence in a range of countries in East Asia (del Carpio and Pabón 2014) and Latin America (Cunningham 2007) find that minimum wage laws can be “binding” even when not explicitly enforced, by setting a societal expectation of a fair wage.

16 The precise value of the “poverty line” is subject to many factors, including the time when the data are collected, prices, assumptions about “adequate” food and non-food consumption, customs, and a range of other issues. World Bank and MNPED (2017) presents a detailed discussion about the components in the poverty-line calculations.

17 The ratio of the minimum wage to the value added per worker is a common indicators used in the literature to make cross-country comparisons about the minimum wage. There are however some limitations of this indicator. Firstly, reliable indicators are hard to calculate in countries that have multiple minimum wages, making it difficult to establish the mean. Secondly, this measure does not take into account the differences in the coverage of the minimum wage and cross-country differences in the wage structure and the composition of the labor force (Pabón 2016).

Figure 2.12

Ratio of Minimum Wage to the Average Value Added per Worker



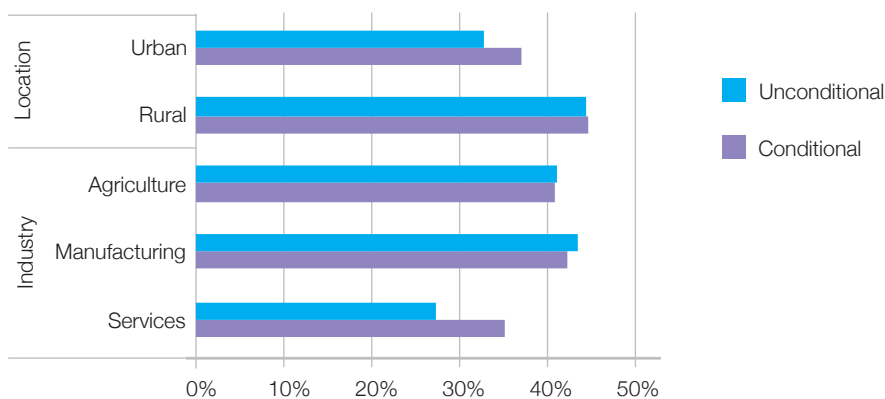
Source: Pabon (2016).

Notes: OECD and East Asia figures are for 2013. The ratio for Myanmar is for 2015 and for Hong Kong is for 2014. The average value added per worker is the ratio of an economy's GNI per capita to the working-age population as a percentage of the total population.

Women earn about 30 percent less than men, even when controlling for factors that may drive the wage differential. Women and men tend to work in different types of jobs, have different amounts of work experience, and have different education levels, all of which may lead to different wage levels. However, Figure 2.13 reports that whether comparing wage rate within zone (urban or rural) or within industry (agriculture, services, manufacturing), women earn 30 to 40 percent less than men. This is observed when comparing total wages (unconditional bars) or when accounting for different education levels and ages of men and women (conditional bars). The wage gap is larger in rural zones and in manufacturing and agricultural jobs. The gender wage gap could be due to various factors, which emerge in the general literature: unobservable or unmeasured factors that lower women's productivity (such as intermittent labor force participation, ownership of factors of production particularly land in highly agricultural Myanmar), employer or family (or self) selection out of more lucrative jobs, or competing time demands linked to gender roles (homecare, childcare) (World Bank 2011). Unlike most countries, Myanmar labor laws do not stipulate the principle of equal remuneration for work of equal value, and do not contain a provision of gender nondiscrimination in hiring, which may contribute to the wage discrepancies.

Figure 2.13

Wage Premium to Being Male



Source: author's calculations, based on MPLCS (2015)

Factors Limiting Worker's Access to Better Jobs

Why are Myanmar's workers in a situation of poverty-level wages, few benefits, and uncertain job prospects? And what can be done to help workers to move up the jobs ladder?

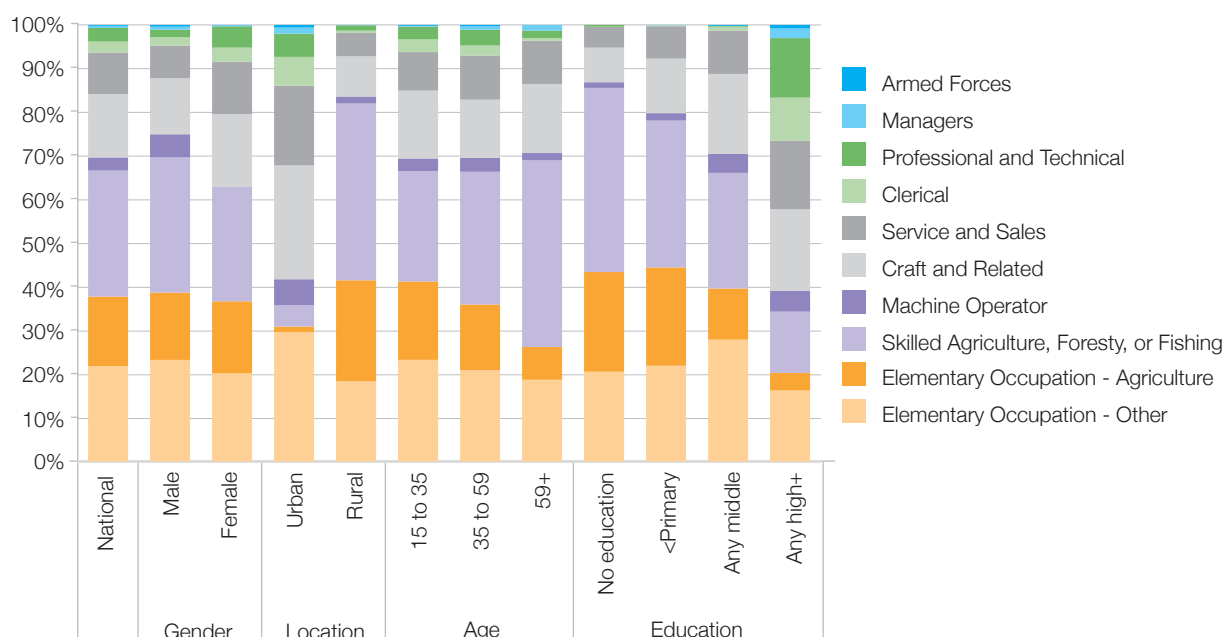
Low-skilled occupations and low-value added industries associated with low wages and few social benefits

Only three percent of Myanmar's workers are classified as professionals, managers, skilled technicians or associate professionals. These occupations drive an economy and manage a government. But only 13 percent of Myanmar people with a high school education or above work in professional occupations. Women are three times as likely as men to be engaged in professional occupations (Figure 2.14).

In contrast, 2 of every 3 workers are engaged in low-skilled or subsistence agricultural work, the lowest paid and most informal types of work. Nearly 38 percent are working in unskilled jobs, which require simple, mostly manual tasks. This might be street vendors, care and maintenance of homes or buildings, casual security guards, garbage collectors, messengers, drivers, or low-skilled agricultural workers. While these tasks are fundamental inputs to the functioning of a society, they are low-value added jobs, with the lowest median wages of the nine occupational categories in the MPLCS. Another 29 percent are subsistence agricultural workers or those who sell their agricultural outputs directly to markets, and have median wages equal to low-skilled workers. Those living in rural areas and with low education levels are particularly crowded in these occupations, but 35 percent of urban and highly educated are also in these jobs. Surprisingly, the propensity to be a low-skilled worker does not vary much with age (Figure 2.14).

Figure 2.14

Distribution Across Occupations



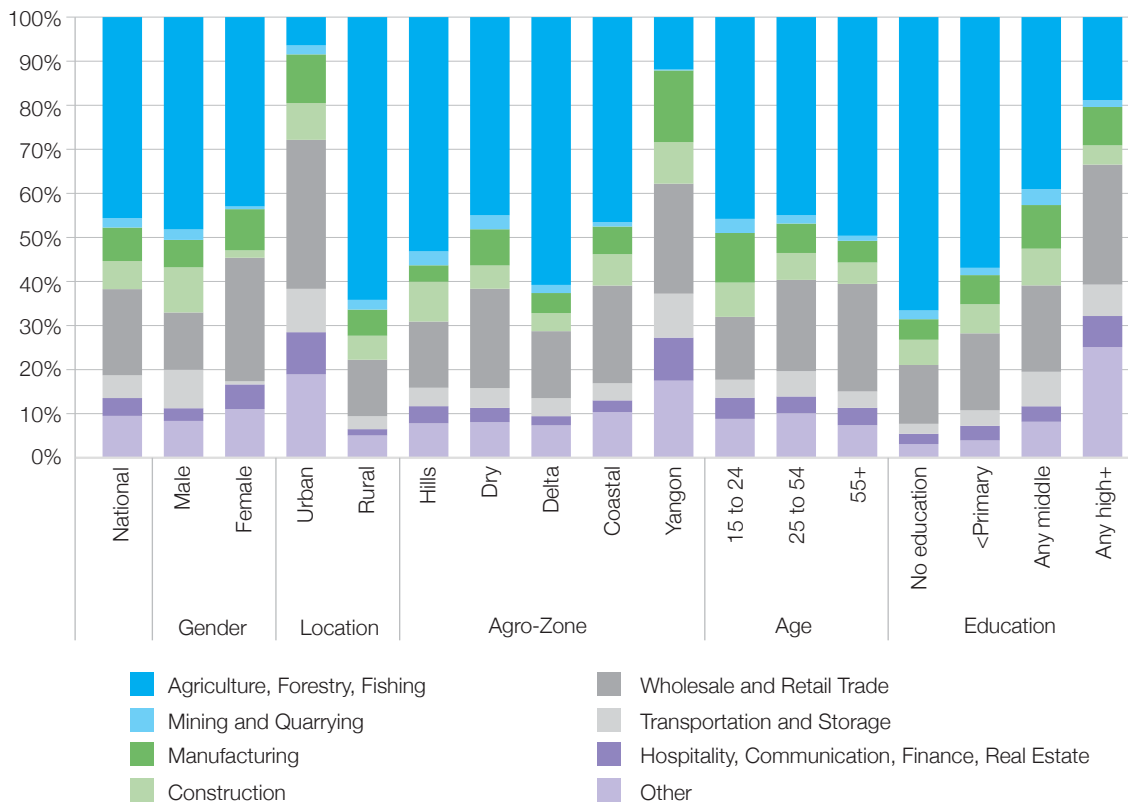
Source: author's calculations based on MPLCS 2015

The highest paid sectors are also among the smallest. Those engaged in construction, transport, and professional activities have the highest earning potential. But together they employ only 13 percent of the workforce (Figure 2.15). Men dominate in the first two while women are more engaged than men in hospitality, communication, finance and real estate. Not surprisingly, the sectors are larger in urban areas

The majority of Myanmar's workforce is employed in low value-added sectors. The primary sector of employment is agriculture, forestry and fishing, employing 46 percent of workers. This is a sizable share relative to neighboring countries, though not too different from Vietnam, for example. In Myanmar, this sector has the lowest median wage of all sectors and, even when considering the best paid agricultural workers, few exceed the daily minimum wage. More than half of men, rural, older, and less educated people are engaged in agriculture (Figure 2.15).

Figure 2.15

Distribution Across Occupations



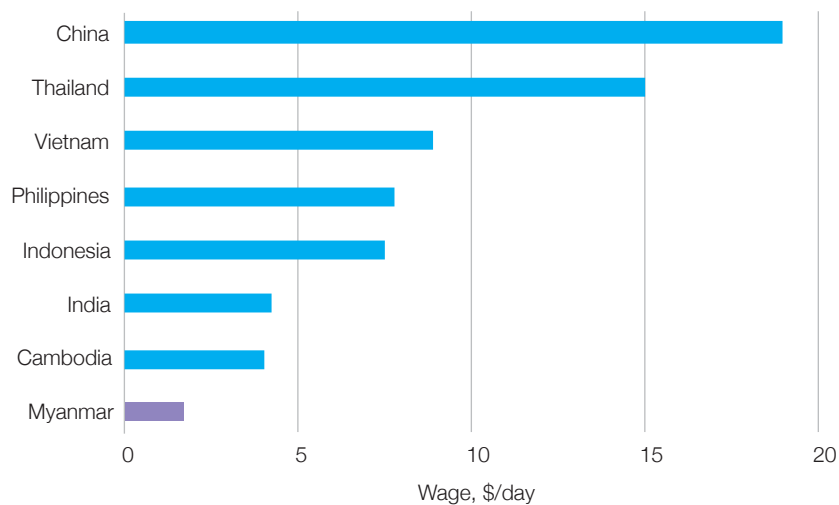
Source: author's calculations based on MPLCS 2015

Perhaps more importantly, though, a large share of agricultural workers are day laborers. More than half of those who declare the agricultural sector as their primary source of employment (61 percent) work their own land; the rest are wage laborers. Wage laborers in rural areas generally do not enjoy social benefits and they earn low wages, both relative to wage laborers outside of agriculture and in international comparison. For example, Figure 2.16 shows that the daily rate of an agricultural wage laborer in Myanmar is about US\$2 daily, compared to \$4 daily in Cambodia and nearly \$18 daily in China. Although there is a shortage of wage labor in rural areas (see Note 3), market factors prevent a higher wage.

Wholesale and retail trade are also prevalent, particularly in urban areas. One in three urban workers are in this sector, and women and the more skilled also tend toward this sector. Though median wages are above those of the agricultural sector, they are below those of the other sectors (Figure 2.15).

Figure 2.16

Daily Wage Rate of Agricultural Hired Labor



Source: World Bank (2016)

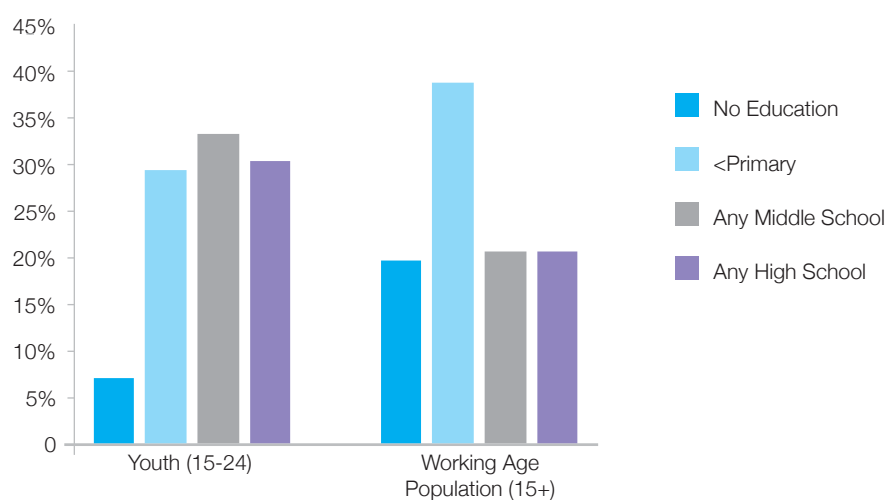
... with an unskilled population

One in ten Myanmar employers complain of an inadequately skilled labor force. In 2014, it was the second biggest obstacle to firm performance, after access to finance, land, and electricity (Rutkowski 2014) but by 2016, the skills level of the labor force was the second biggest obstacle (14 percent of urban firms), only superseded by access to finance (15.8 percent). The skills constraint is most severe for medium-sized firms, foreign firms, and those that are expanding (Cunningham and Huertas, 2017). The low levels of skill acquisition and low job-relevance of the skills that students acquire contribute to this perception.

Myanmar has low educational attainment. More than half of Myanmar's workers did not reach middle school. Twenty percent said that they never attended school (or only attended monastic schools) while another 39 percent did not complete primary school. Only 21 percent had a high school education or above. However, the youngest workers (age 15-24) have much higher secondary and tertiary education rates than older workers, with 30 percent having attended high school or above and much higher middle-school completion rates (Figure 2.17)

Figure 2.17

Highest Level of Education, by age



The benefit to acquiring additional years of school substantially increases with education level. For example, those who have a middle school education earn 20 percent more than those without any formal schooling, those who have at least some high school earn 26 percent more than those without schooling (and 6 percent more than those with only middle school) and those who have post-secondary education earn 65 percent more than those with no education and more than double the earnings of those with only high school (Table 2.3, column 1, bottom panel). The very high returns to high school graduates may indicate that there are jobs waiting for more educated workers.

Table 2.3

Estimated Education Premium, by age and economic sector (% of wages)

	Total	Area		Sex		Economic Sector		
		Urban	Rural	Male	Female	Agriculture	Industry	Services
Average return to a year of education (% increase in earnings for each additional year of education)								
Years of education	5.1	5.8	4.4	4.0	6.4	1.5	4.5	4.9
Average premium to each level of education, relative to having no formal education (% higher earnings than those with no education, by level of education obtained)								
Primary school	0	0	0	0	0	0	0	0
Middle school	20.1	23.4	17.8	0	0	11.5	0	14.3
High school	26.2	30.1	24.4	22.5	0	0	0	24.7
College or more	65.3	69.6	63.9	51.9	84.0	0	54.3	59.2

Source: Badiani-Magnusson 2017.

Note: The estimates are based on Mincerian-style regressions (first row) or a derivation thereof. All regression control for agro-zone and urban locations in order to take into account spatial cost of living differences. The base education category is those individuals with no education, monastic or less than primary education. Most of the reported values were significant at the 0.1 percent level. A value of "0" indicates that the estimate was not significant at the 5% level.

The earnings gains to education only begin to accrue with middle school. Those who have only a primary education earn the same wages as those with no schooling. This relationship is robust to gender, location (urban or rural) and sector of employment (Table 2.3). The lack of an earning differential between primary and no education suggests that the skills taught in primary school are not sufficiently valued by the labor market to pay higher income than would be paid to those without any education. It also may point to the high share of the labor force, 40 percent (Table 1) who have only a primary education, thus creating downward pressure on wages of these workers.

The benefits to more education differ significantly across the working population. While the wage gains from acquiring each level of education are relatively similar in urban, as compared to rural areas, with about a 5 percentage point premium in the former, they differ significantly across industries (Table 2.3). The service industry reflects the overall trend: greater gains (relative to workers with no formal education) with each successive level of education, topping out at 59.2 percent for high school graduates. However, the premium to education in agricultural jobs is only observed for those with middle school (though they are a sizable 11 percent gain) while additional school is only rewarded for manufacturing workers with a post-secondary education.

The average return to an additional year of education in Myanmar is lower than the returns in other countries. The average incremental wage earned for each additional year of school for the employed Myanmar population is about 5.1 percent (Table 2.4, column 1), about half that of the East Asia and Pacific region (9.4 percent). While Myanmar's return to an additional year of schooling is on par with Cambodia and Lao PDR, it is far below that of regional economic leaders China (16.6 percent), Malaysia (12 percent) and Thailand (9.4 percent) (Table 2.3).

Table 2.4

Estimated Average Return to Schooling Across Comparator Countries

	Average Return to Schooling (%)	Average Years of Schooling
Myanmar (2015)	5.1%	5.7 (4.1)
Bangladesh (2005)	7.1%	4.9
Cambodia (2008)	5.6%	4.1
China (2002)	16.6%	7.5
Lao PDR (2008)	5.1%	4.6
Malaysia (2010)	12.0%	9.8
Sri Lanka (2009)	9.5%	9.8
Thailand (2011)	9.4%	7.3
Vietnam (2015)	9-10%	7.5
East Asia and the Pacific	9.4%	10.4

Source: East Asia and the Pacific figures from Montenegro and Patrinos (2014), using data circa 2011.

Note: The rate of return to an additional year of schooling is calculated using the standard Mincerian approach, where the log of (daily) wages are regressed against years of school, experience (calculated as age minus years of schooling minus 5) and sex. The average years of schooling is from Barro-Lee 2010 statistics. The Myanmar statistic is derived from MPLCS 2015, though the Barro-Lee estimate is included in parentheses.

Myanmar's low average rates of return to an additional year of education may be due to the absence of returns to primary school. The wage premium for having acquired secondary education (Table 2.3) in Myanmar exceeds the estimates in comparator countries. For example, Myanmar workers with middle and high school earn 20 and 26 percent, respectively, more than those without formal school, compared to a 3 percent wage gain for Cambodian workers with secondary school, 5 percent in Laos, and 2 to 5 percent in Vietnam (Patrinos, Thang, and Thanh 2017). However, there is no gain to primary only in Myanmar, which is where most of the working population is clustered.

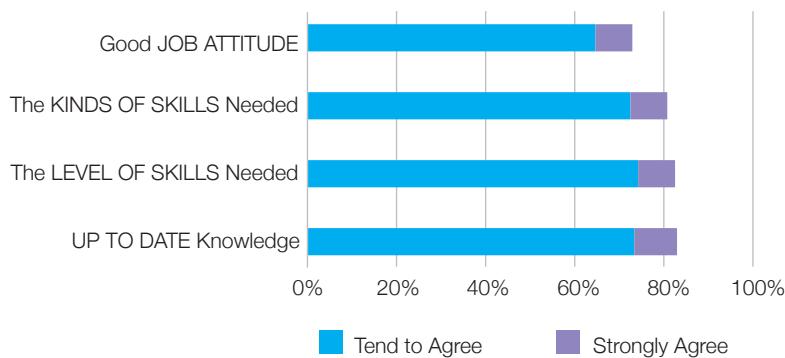
A significant share of Myanmar's students is not acquiring the most basic skills, partly explaining the low rates of return to primary school. The effectiveness of Myanmar's education system is not documented, but a recent Early Grade Reading Assessment (EGRA) gives some insights to mastery of one of the most basic skills - reading. The EGRA was administered to a sample of 1680 students in Yangon in January 2014. The test is intended to assess reading fluency and comprehension among first, second, and third graders. By the third grade, students should be able to read and understand a short text. The EGRA found that nine percent of third graders could not read a single word. And among those who can read, 12 percent could not answer any questions about what they had just read. More worryingly, international evidence finds that poor readers become worse readers over time, as opposed to catching up (Stanovich 1986). Myanmar students perform worse than students in comparator East Asian countries, where nearly all third graders are fluent readers (Vietnam, the Philippines). The EGRA evaluation concludes that the

variation in reading ability is largely determined by non-school factors – socio-economic status, help with homework – but better schools can moderate these external forces (Cloutier and Sondergaard 2015).

Employers recognize that the education system is not meeting their needs. A 2014 survey of Myanmar employers shows that the education system is failing Myanmar’s workers on several fronts. More than 80 percent of employers agree that the education system does not produce up to date knowledge or the level of knowledge needed to carry out their jobs. Another 80 percent point to a mismatch between the skills learned and those needed by industry. And 3 in 4 lament a poor attitude toward work – characterized by workers who are not punctual, who do not treat others with respect, or who do not give sufficient attention to ensure that a task is well done (Figure 2.18).

Figure 2.18

Percent of Employers Who Agree Education System Does Not Produce Enough People



Source: Rutkowski (2014)

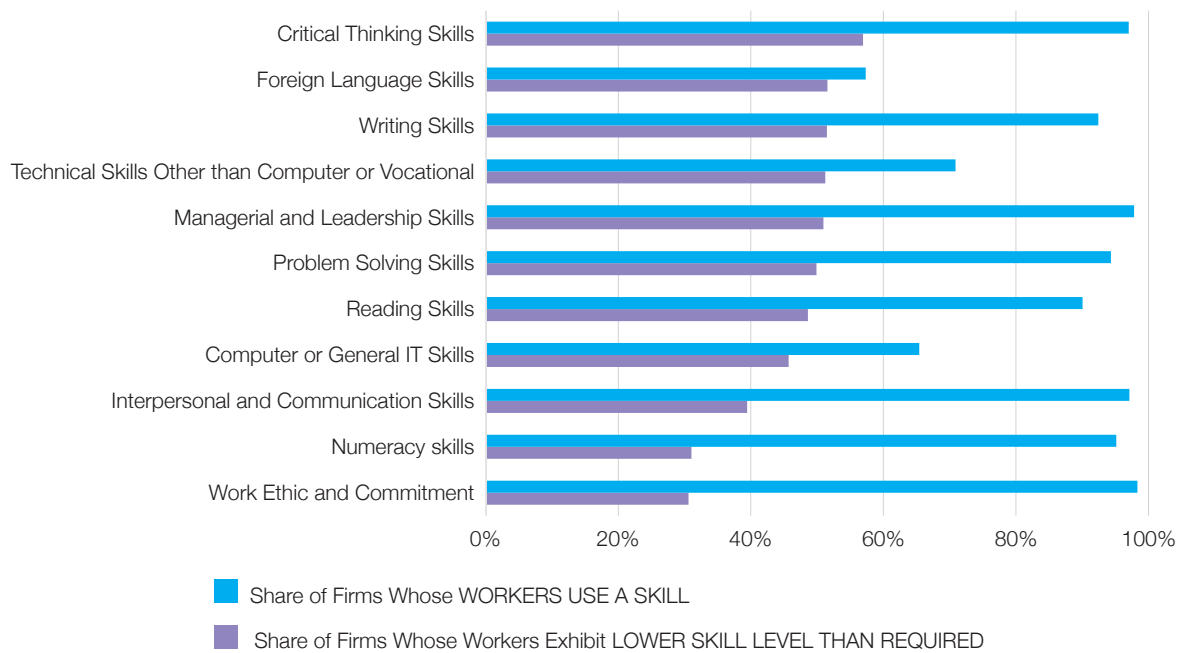
Employers value a range of skills. Nearly all firms expect employees with reading, writing, and numeracy skills, but they also value skills that are not commonly taught in schools (Figure 2.19). More than 90 percent of firms require these academic skills, as well as managerial/leadership, interpersonal, critical thinking, problem solving, and work/ethic and commitment. Job-specific skills play an important, but lesser role, with 70 percent of employers needing workers with technical skills (other than computers) or vocational skills, 65 percent needing computer skills or general IT skills, and 57 percent needing workers with foreign language skills. Among the skills needed, foreign language, IT and technical are the most lacking (Cunningham and Huertas 2017).

Post-secondary education does not meet market demand. Only 10 percent of Myanmar people have supplemented their education with technical training even though most jobs would benefit from a more technical workforce. Although most occupations in Myanmar require basic skills, labor productivity could be enhanced through quality basic and vocational training (Figure 2.20). Farmers, craft-workers, service providers and Myanmar’s many entrepreneurs could hone their technical and business skills through technical and vocational training. Of the types of training that were classified in the data, the most prevalent subject studied in vocational training was related to craft work, equal to 40 percent,¹⁸ followed by computers and languages (28 and 21 percent, respectively). Notably, very few studied agricultural-related fields, even though this is the most prevalent sector of employment (Figure 2.21).

¹⁸ This may include skills related to working with materials (wood, textiles) or utilities (plumbers, electricians).

Figure 2.19

Skills Myanmar Employers Require in Workplace

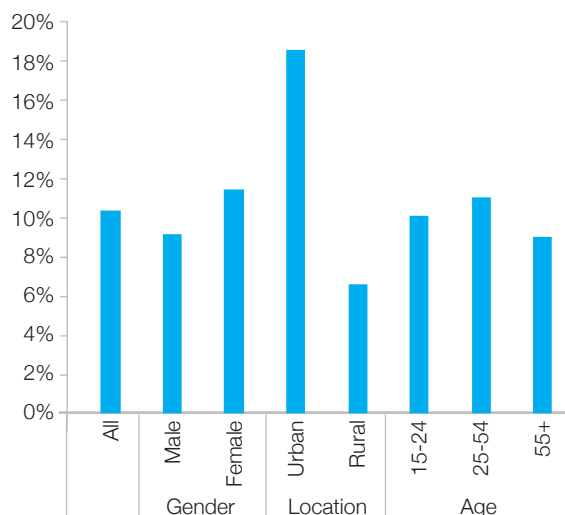


Source: Cunningham and Huertas, 2017

Young, urban, and women seek vocational training, though field of study differs by age and location. More “modern” skills – English language and computers – are more sought among those age 15-24: 32 percent of young trainees, compared to 8 percent of those older than age 55 enroll in language courses while 45 percent of youth enroll in computer courses, compared to 5.9 percent of older workers. Similarly, 20 percent of urban trainees are enrolled in language courses as compared to 12.2 percent of rural trainees. In contrast, 95 percent of older workers who had enrolled in vocational training took classes related to specific sectors, as compared to 60.3 percent of youth. The high training in crafts in rural areas contrasts with agriculture being the primary occupation.

Figure 2.20

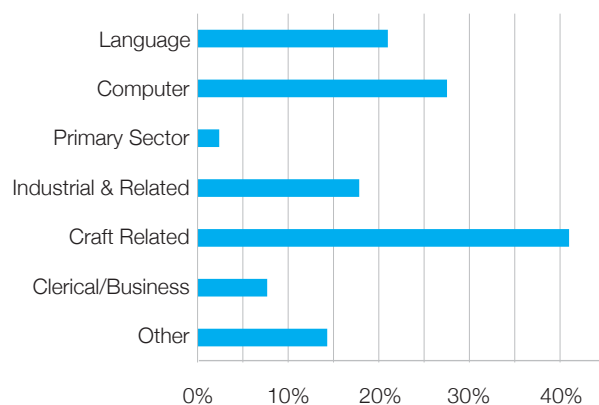
Enrollment in Vocational or Technical Training



Source: derived from MPLCS 2015

Figure 2.21

Subject of the Vocational Training Attended



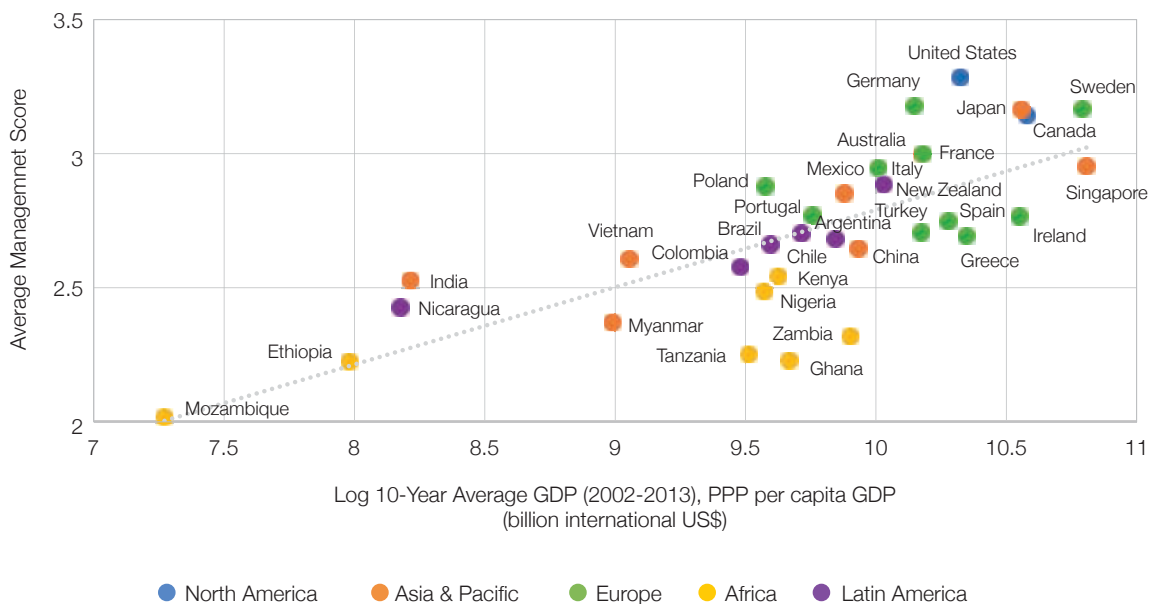
Source: derived from MPLCS 2015

The existing TVET System is inadequate to meet demands of the labor force. The system is highly fragmented, with training services offered by the public and private sector, by numerous ministries, and at national and local levels. There are no quality standards that are applied across institutions and no accreditation system so students cannot gauge how effective the training will be. Upon completing coursework, there is no skills certification system that the graduate can take to the labor market to confirm skill-level. The training institutions are supply-drive and focused on the delivery of courses, with little attention to the skills demanded by the labor market or to job placement of graduates. These factors help explain why technical and vocational education has limited success in building human capital leading to higher quality jobs (ADB 2016, Milio et al. 2014).

Myanmar's professional skills are also weak. Perhaps the professional skills that is most important for developing the country – management – is in short supply. There is an increasing recognition in the development literature of the importance of management skills for firm productivity and economic growth (Maloney 2015, Bloom et al. 2013). However, fewer than four percent of 15-19-year-old students are studying management (MOLES et al 2016). Myanmar's quality of management is among the lowest in the world, on par with that of middle-income African countries (Figure 2.22).

Figure 2.22

International Management Scores



Source: World Management Survey and IMF World Economic Outlook

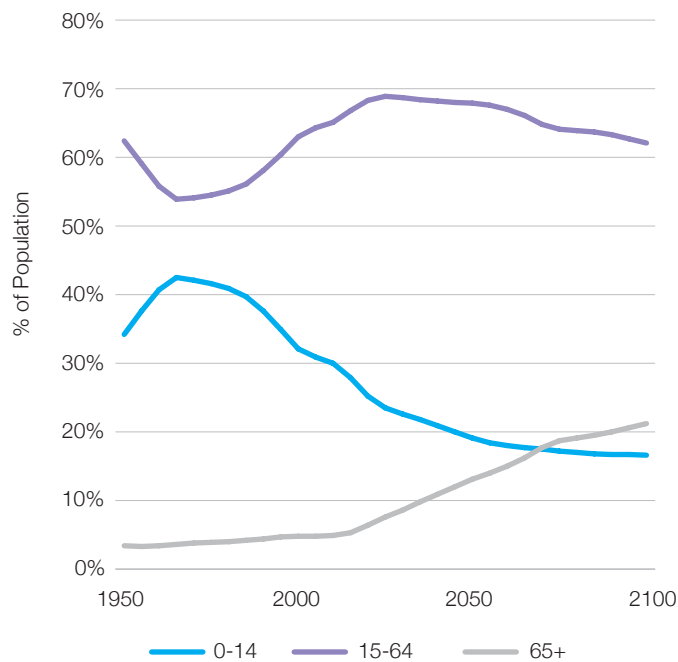
... A growing labor force that will need jobs

Population growth projections assert that Myanmar's working age population will grow until the year 2055, increasing by 7 million people. UNFPA predicts that the population of Myanmar will grow by 18 percent between today and 2050, when it will top out at 63.7 million people.¹⁹ Most of that growth will be among the working age population, namely those age 15-64. The working age population will also peak at 42 million in 2055 (Figure 2.23).

19 <https://esa.un.org/unpd/wpp/Graphs/DemographicProfiles/>

Figure 2.23

Projected Share of Population, by age group



Source: Rutkowski (2014)

If managed well, there will be more time to work in spite of a U-shaped dependency ratio curve.

The dependency ratio is the number of people who are “dependents”, namely children and elderly, per 100 prime-aged adults. In 2015, Myanmar’s dependency ratio was 49.1, which meant that there were about 49 children and elderly in Myanmar for every 100 prime-age adults. This number is expected to fall to 43.9 by 2025, meaning that each prime-aged adult will have fewer people to take care of, thus freeing up time for work. However, the dependency ratio is expected to swing upward again, reaching 47.3 by 2050, caused by increased longevity as fertility rates continue falling. The increase in the dependency ratio may crowd out market work of prime-age workers, especially women. However, if Myanmar prepares for its aging through policies and technologies to alleviate old-age care (O’Keefe 2016), the rising dependency ratio may not be a hindrance to the future labor force.

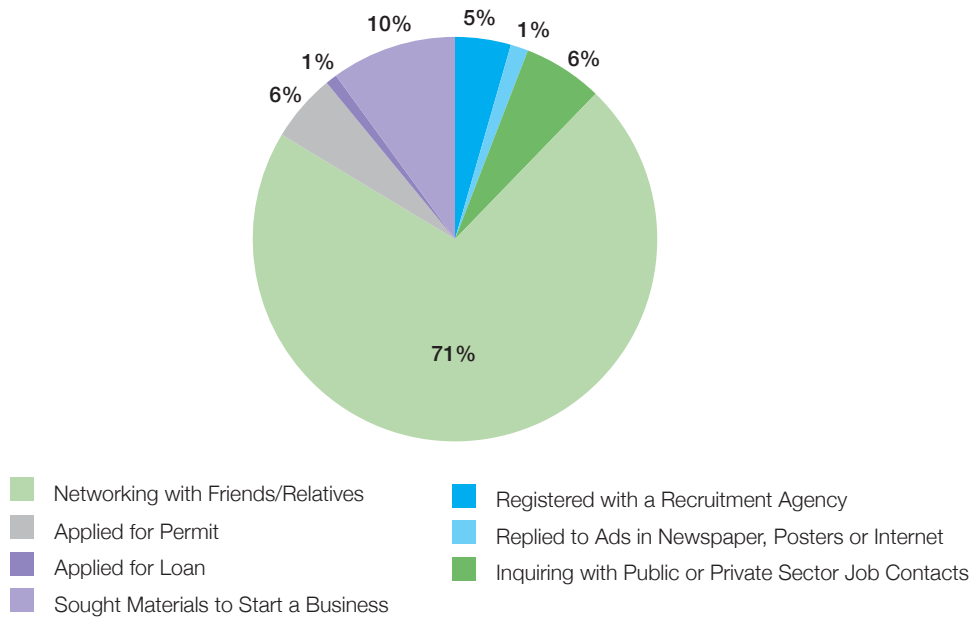
.... and without skills to find the right jobs

In spite of the existence of labor exchange offices and a wide-spread media, most job searches are informal. Among those who looked for a job in the week preceding the survey, more than 70 percent did so through personal networks with family and friends (figure 2.24). Fewer than five percent each registered with a job search agency or replied to ads in newspapers or the internet. People’s networks tend to be limited and replicate the environment that the job seeker already knows, so, for example, a person whose household engages in rural agriculture likely knows people working in similar jobs. This may lead to “sectoral mismatches”, where people end up in occupations that may not be well aligned with their talents and skills.

Myanmar’s dispersed population also limits the efficient allocation of people to jobs. Social networks are often spatially constrained so job-seekers are exposed to only a small share of potential jobs. Such limited information may lead to under-employment or inefficient employment.

Figure 2.24

Job Search Methods



Source: MPLCS 2015

Jobs go unfilled, though. A 2016 survey of firms in Yangon and Mandalay asked hiring firms what were their primary challenges in finding workers. More than half said that they received few or no applications; this response rate was similar across all occupations, with a particular shortage of applicants for mid-skilled non-production workers (Table 2.4). The firms that most complain about skills shortages are large and foreign firms. If Myanmar’s skills shortages are not addressed, not only will workers not get better jobs, the skills shortages may impede modernization and growth of the Myanmar economy.

Table 2.4

Employer difficulties in Hiring, 2016 (% of firms)

	Manager or senior level professional	Semi-skilled non-production	Skilled production worker	Unskilled production worker
There were no or few applicants	52%	64%	42%	50%
Applicants lacked required job-specific skills	76%	78%	79%	72%
Applicants lacked required personal skills or behaviors	77%	82%	86%	79%
Applicants expected higher wages than the establishment can offer	78%	76%	45%	62%
Applicants did not like the working conditions	55%	39%	54%	44%

Source: Cunningham and Huertas (2017)

Poor career planning and little information about the labor market leads to mis-aligned expectations between workers and employers. Employers report that job seekers expect higher wages than what is being offered. This observation is noted across occupations, with managers and mid-level professionals (technicians, associate professionals, and sales workers) being the most unhappy with offered wages. Given low productivity levels, employers cannot increase wages to attract wages; instead the mis-match in expectations results in job turnover, with its inherent inefficiencies (Table 2.4).

Labor Force Policy Priorities for More and Better Jobs

Labor supply policies will not increase the number of jobs in Myanmar, but they can better prepare workers to meet labor demand and to get the right workers into the right jobs. Myanmar currently has few active labor market programs. It is in a good position to draw from the global experience to craft a set of policies, practices, and programs that serve today's workers in the context of today's markets as well as laying the groundwork for a more sophisticated support to labor supply and job matching as the jobs market grows and becomes more complex. Three policy areas are proposed: (i) providing job-relevant skills through the education and training sectors, (ii) creating and disseminating labor market information to inform skills development and jobs decisions, and (iii) improving information on job vacancies through technology and the private sector. A brief discussion of programs for conflict-affected zones is also presented. Policies specifically targeted to agricultural jobs are addressed in Note 3 and for household enterprise owners in Note 4. Migration policies - a key component of the labor supply portion of Myanmar's jobs strategy - are discussed in Note 6.

More Skills and More Job-relevant Skills (as Defined by Employers)

Myanmar's education laws and policies define a comprehensive, modern, results-oriented education system with limited reference to the jobs market. The National Education Law (2014) and Amendment (2015) and accompanying National Education Strategic Policy 2016-2021 (NESP) detail the objectives of the education system, its component pieces and the underlying logic to fit it together, systems issues, reform areas, and a strategic plan to undertake those reforms. It implicitly links to jobs since quality education from pre-kindergarten and beyond is a prerequisite for good workers, though "quality" is not well-defined. The legislation's explicit link to jobs is more limited. First, the socio-emotional and higher-order skills - which the above analysis shows are highly valued by Myanmar's employers - are presented throughout the NESP in very vague terms. Second, the discussion of Technical and Vocational Education and Training (TVET) refers to the interplay between employment, careers and the education system.

The Private Sector Development Framework and Action Plan (PSDFAP) more explicitly refers to skills in the context of jobs. The Framework identifies five pillars to spur the private sector: legal and regulatory reforms, trade and investment, the state and private enterprise, access to finance, and human capital. The last pillar includes four objectives: education financing and planning, legislative framework (to rationalize skills-related laws), general education reforms, and TVET reforms. The Framework emphasizes the need to shift education and training systems away from degrees and diplomas and toward workplace skills, to be more responsive to enterprise needs, and to rationalize the fractured TVET system. The Asian Development Bank, as well as bi-lateral partners with particularly strong job-training systems in their own countries are providing implementation support and financing to the Ministry of Education to realize these reforms.

Four short-term actions may make the NEL and NESP even more jobs friendly. First, complement the Education Strategy with an Employer-Driven Skills Strategy. While education and training systems have a range of objectives, its contribution to obtaining meaningful and gainful employment is perhaps the

primary objective for students and parents. However, the stated goal of the NESP stops at the school doors: aiming for “measurable improvements in student achievement in all schools and educational institutions.” This delimitation is reasonable given the Ministry of Education’s institutional reach but it can lead to a severe mismatch between what the education and training system teaches and what employers need.²¹ However, the TVET section of the NESP and the short presentation of pillar five in the PSDFAP nicely lays the groundwork for a more explicit definition of, and strategy for, an employer driven skills strategy.

An Employer-Driven Skills Strategy would go beyond existing strategies in three primary ways.

First, identify the skills profile that enterprises and the market (for those who are self-employed) value. Using tools from industrial psychology, collect firm-level data on the skills that employers prioritize when hiring and when promoting workers. Second, given that skills profile, experience from Myanmar, and international experience, identify the appropriate means to acquire those skills. Consider a broad range of actors: enterprises, private sector training, internet-based training provider, the public training and education system as well as a broad range of interventions, such as monetary incentives, direct provision, partnerships, stipends to learners, etc. Third, measurement and signaling. To complement the Myanmar-specific student assessment, participate in international assessment tests that allow Myanmar to benchmark its students (such as PISA, TIMSS) and workers (such as PIAAC).

Table 2.4

Optimal Stages for Development Socio-behavioral (PRACTICE) Skills

Dimension of socioemotional skills	Practice taxonomy	Stage of development and key actors			
		0-5	6-11	12-18	19-29
		(parents)	(parents, school)	(school, peers)	(school, family, workplace)
Achieving goals	Achievement motivation		Optimal	Reinforcement	
	Ethics	Foundational	Optimal	Optimal	
	Initiative	Optimal	Optimal	Optimal	Optimal
	Problem solving	Foundational	Optimal	Optimal	Reinforcement
Working with others	Team work	Optimal	Optimal	Optimal	
Managing emotions	Confidence	Foundational	Optimal	Reinforcement	Reinforcement
	Control	Optimal	Optimal	Optimal	Reinforcement
	Resilience	Optimal	Optimal	Reinforcement	

Source: Guerra, Modecki, and Cunningham 2014. Note: PRACTICE is a taxonomy of socioemotional skills that summarizes a long list of socioemotional skills that employers recognize as very important in their workers. The acronym stands for Problem solving, Resilience, (Achievement) Motivation, Control, Teamwork, Initiative, Confidence, and Ethics. “Foundational” refers to the initial skill-building process that will predominately occur in a following period. “Optimal” refers to the period of maximum sensitivity when it is easiest for individuals to acquire the specific skills. “Reinforcement” means that intense practice is necessary to master the skill.

Second, supplement foundations skills with the skills that enterprises seek. Myanmar’s students lag in literacy skills and their education attainment lags that of children in the region; all issues that the National Education Law intends to address. However, the education system can also do a better job at teaching other skills needed for job success. The brief Myanmar skills survey discussed above, as well as international evidence, reports that enterprises value socio-emotional and higher-order cognitive skills.

²¹ A global study found that 72% of educators agree with the statement: graduates are adequately prepared for the labor market. Only 42 percent of employers agree (Mourshed, Farrell and Barton, 2012)

However, many of those skills are best taught long before children start thinking about their adult jobs. Table 2.5 shows (in column 2) the skills that employers across the world identify as the most important in their workers. The next four columns tell us at what age people are most adept at acquiring the skills. For example, the drive to complete tasks (achievement motivation) is best developed during the elementary school years and the skills is reinforced (and solidified) during adolescence. This schematic also illustrates the importance of secondary education and beyond. Some skills cannot be effectively learned before adolescence. And skills development should continue after school, through the workplace and family life.

Global evidence shows a range of methods for teaching socio-emotional and higher-order cognitive skills. The NESP mentions teaching socio-emotional skills through a curriculum. However, global experience has shown a range of successful methodologies for teaching socio-emotional and higher-order skills that are valuable for future labor market success (CASEL 2014):

- Develop teacher's socio-emotional skills so they model them in the classroom. Socio-emotional skills are best learned through observation and practice. In Peru, teachers attended a year of courses to learn the theory behind, and to practice using, positive socio-emotional skills such as empathy, problem-solving, teamwork, and self-efficacy. Not only did they manage their classrooms in a more positive and creative way, they also reported that their home lives improved significantly (Paredes 2014).
- Strengthening the school environment to provide a safe place for practicing pro-social behavior. Schools and the personnel in them can set the rules and give students the chance to practice living within these pro-social behaviors. Such a model has been implemented in schools across the world, leading to higher academic learning and better student behavior in schools (Bradshaw, Mitchell and Leaf 2012).
- Creating and implementing a socio-emotional curriculum. The curriculum can take many forms – a full class period or just a 10 minute daily exercise, using worksheets or using playacting and music, for 5-year olds or for adolescents – but all require engagement and practice. A range of toolkits have been created in developed and developing countries.
- Incorporating socio-emotional skills into the pedagogical method. Course content is best learned when the student actively works with the information. There is an increasing appreciation of the use of a range of socio-emotional and higher-order cognitive based learning, which may incorporate teamwork, problem-solving, oral presentation skills, empathy, and other skills that are valuable for the labor market.

Third, expand the supply of, and delivery mechanisms for, short TVET courses for reskilling. The NESP presents the initial efforts that Myanmar is making to provide short-duration modular TVET courses. These courses are not intended to create a class of technical workers, but instead to quickly upgrade specific, practical skills of the semi-skilled workforce at a low cost.²² If Myanmar is to go through a rapid structural transformation in an age of quickly evolving technologies, such courses will be useful for life-long learning by workers of all age.

There is a role for public financing and regulation of privately provided training modules. In terms of financing, workers themselves would ideally pay for their short courses, as they do now, but this limits access for the poorer classes. Publicly subsidizing training institutions through demand-driven mechanisms, such as vouchers to students or to employers can expand access. Such vouchers are both a means to

²² The NESP proposes that short courses are useful for unskilled and low-skilled workers. However, the pilot short-course project that the ADB supported finds that such courses may be useful for a semi-skilled youth cohort.

guide the development of the private training system toward the types and quality of training defined in the Employer-driven skills strategy and to not burden the public sector with service provision.²³ Further, vouchers can be designed to encourage women to learn skills to access (higher paid) non-traditional female occupations.

Fourth, home-grown quality managers. The Enterprise Survey showed that management skills are the most difficult workers to find, though they may be the key to unlock the creation of new and more productive jobs in Myanmar. Few students study business administration and the NESP's higher education strategy is geared toward knowledge creation and research centers. However, the most rapid, and most effective, training may be in-firm coaching by management specialists; the strategy that was undertaken by Japan and Korea in the 1950 (Maloney 2015). For example, the Japan Productivity Center goes into firms to provide technical assistance on a range of business management skills. These skills may be as simple as more efficiently organizing the production process, cleanliness and industry standards, or firm discipline or as complex as implementing entire management systems, such as Total Quality Management. For such a model to be effective, though, it must aim to bring outside knowledge in, namely to not to use Myanmar managers to advise others, but for global experts to advise Myanmar's managerial class. Such an intervention in Indian textile factories increased productivity by 11 percent (Bloom et al 2013).

Creation and Dissemination of Labor Market Information to Inform Skills Development and Jobs Decisions

Job opportunities in Myanmar will grow as the market becomes more diverse and new entrants will need better information about the kinds of jobs that are emerging, the wages associated with them, and the skills and experience needed to fill them.²⁴ A lack of labor market knowledge by jobseekers partly underlies current employer frustrations. As discussed above, jobseekers do not have the skills employers need and their wage and work condition expectations exceed those that employers will provide. Jobseekers need information about the kinds of jobs that the job market offers, the skills (not only education level, but actual skills) that are associated with those jobs and the associated wages in order to better prepare for the world of work and to manage a realistic work experience.

Low-cost interventions can address some information gaps. For example, middle school students in the Dominican Republic exposed to short information sessions about the earnings gains to completing secondary school had lower school dropout rates than those who did not (Jensen 2010). A similar intervention in Madagascar showed even stronger results, both in terms of higher school attendance and test scores (Nguyen 2008).²⁵ Ugandan girls who were taught about the higher earnings in traditionally "male" work – such as motorbike repair – had a higher incidence of entering these fields of work and three times higher wages, as compared to girls who were not informed of an encouraged to explore these types of jobs (Campos et al 2016).²⁶

For such an intervention to be successful, there must be information about jobs trends. Myanmar's recent efforts to systematically collect labor force data provide a base for a labor market information system (LMIS). A LMIS analyzes labor market data, creates indicators, and presents them in formats that are accessible by and useful for end users: schools that are guiding students on education pathways toward

²³ There is some evidence that privately provided technical training yields modest return, though higher than returns to publicly-provided training (Hirshleifer et al. 2016). However, an evaluation of a US program that provided high quality training by experienced providers in sectors that are in high demand found impressive returns (14 percent over a two-year period) (Hendra et al. 2016).

²⁴ The poor knowledge about labor market opportunities is not limited to Myanmar or to developing countries. Babcock et. al (2012) point to evidence from the United States that demonstrates that job seekers commonly pass up job opportunities due to inaccurate assessment of own skills and a misunderstanding about how markets will reward their skills and experience.

²⁵ McNally (2016) argues that these low-cost, simple interventions are more successful in environments with low information flows.

²⁶ A similar program is underway in Lao PDR, where training institutes that participate in the program must follow quotas to ensure that girls receive training in non-traditional areas, such as construction and automotive repair. The girls are also given a 6-month post-training wage subsidy (ADB 2013).

a career, universities and TVET institutions that are designing courses for jobs that are in high demand, students that are figuring out what they would like their future work lives to look like, parents who guide their children toward an education pathway and world of work, workers who want to upskill or change jobs, and the public sector that designs education, training, and labor policy. While many countries collect data and produce statistical summaries, they fall short of a true LMIS since they do not produce the indicators needed by the end users or share the information in easy-to-access formats that are tailored to the end user needs. While Myanmar is just developing tools toward a full labor market information system, its recent work (with ILO support) to collect labor force data can be a starting point for producing short-reports on labor trends to guide decision-making by workers, employers, and skill-development institutions.

Once students, parents, and workers have the labor market information in hand, simple tools can help them to use it. Goal setting, and supports to translate goals to behavior, is emerging as a low-cost means to prepare for a broader range of job options.²⁷ Some schools and guide students or clients through “life plans,” where students from a young age identify the job that they want as adults and the associated implementation map²⁸ – the schooling, family decisions (marriage, family formation), migration – to get there. This not only utilizes behavioral economics concepts that demonstrate that specific, defined, and measurable goals are more likely to be met than are ill-defined dreams, but also gives an opportunity for children and young people to learn about alternative fields of employment. While the effect of early life planning on later labor force outcomes has not been empirically established, a strong psychology literature suggest that it may be effective. Notably, this strategy is used by public employment centers to orient adults, as well. In fact, it can have more immediate effects on adult job search (Babcock et al 2012, van Hooft et al 2005, Latham et al 2005), particularly in markets where there are jobs or in the context of migration programs (see Note 6).

Improving Information on Job Vacancies through Technology and the Private Sector

Job search can be particularly challenging in Myanmar where most firms are small and information flows on new jobs is limited. Policies to help people access different labor markets than those in their networks are some of the few active labor market policies that have been found to be effective (McKenzie 2017). This may mean providing information or facilitating access to sectors of employment, types of jobs, or other locations where the job seeker may not naturally search for jobs. Myanmar's Labor Exchange Offices contribute to this information exchange by offering job vacancy information, among their many other tasks. However, the job offerings tend to be modest and infrequent as these offices are not resourced or staffed to generate a complete and dynamic database of job vacancies across Myanmar. Client access to Labor Exchange Offices is limited since the job-seeker must live nearby. They can also be costly to staff and maintain.²⁹

The private sector and technology can play the dominant role in collecting and disseminating information about job vacancies. Given the rapid expansion of cell phone services across Myanmar, increased electrification, and digital literacy, these technologies are an increasingly viable means to collect and share information about job vacancies. The private sector already does this through on-line jobs boards such as JobStreet.com or Indeed.com, where employers post job-listings, hoping to tap into the large number of job seekers who use these job sites. But low-skilled jobs are rarely posted. This is due to a range of factors, including the abundant supply of low-skilled labor and reliance on less technologically-

²⁷ The power of goal setting to orient people toward long-term desired outcomes has been proven across a range of behaviors including weight loss (Stadler et al 2010), savings (Ashraf et al), school performance and attendance (Duckworth et al 2013), and time management (Oettinger et al 2015).

²⁸ Duckworth et al (2013)

²⁹ Fully developed public employment offices that provide intensive career counseling, information on skills upgrading, cash incentives for job search or acceptance, and a long list of vacancies in dynamic labor markets, underpinned by labor market information systems with information on longer-term industry and occupational trends, show limited success (O'Leary 2004).

savvy methods including newspaper ads. But even in these conditions, as stated above, employers still have difficulty in filling these positions.

A vibrant private sector has emerged to create job boards; the challenge is to incentivize these firms to undertake the more labor-intensive task of engaging with employers of low-skilled workers.

It is feasible to bring employers of low-skilled labor into on-line job matching services. For example, Kenya's Duma Works (www.dumaworks.com) is a mobile social network and allows informal workers to connect to jobs through friends of friends. Souktel (www.souktel.org) uses SMS to reach a wider clientele than just internet users.³⁰ Informal employers can post vacancies in a simple manner that does not require extensive registration processes.³¹ In July 2011 Souktel surveyed their clients in Palestine and found out that 84 percent of job seekers reported a 92 percent reduction time spent on job hunting while Palestinian employers reported a 50 percent or greater reduction in hiring costs and time spent, compared to traditional methods. TaskRabbit (www.taskrabbit.com) takes many forms in different countries, but the basic premise is that it posts requests for those who need support on short task. Many manual tasks are included on this platform, the workers receive a ranking by anyone who has employed them, and it is designed to be short-term work. Or this may point to a different model to centralize vacancy information for low-skilled workers, which is not driven by employer activity, but perhaps by job seekers themselves.

The public sector's role is to finance, regulate, and provide the telecommunications channels for these services to be accessible.

Short-term financing can incentivize these services for low-skilled workers, where the private firm would need to develop its own financing model in the long-run. Regulations to avoid abuses may be more necessary in the informal labor markets that these platforms would advertise. None of this will matter if the electricity and telecommunications networks are limited; the development of these public services are clearly in the public sector's realm. In the long-run, additional services may need to grow-up to complement mobile job matching application available.

Stimulating Jobs in Conflict-Affected Zones, for Income and Building Social Cohesion

Conflict-affected zones may not have the conditions for real job creation, but social assistance, in the form of work, can provide short term income and contribute to rebuilding social capital. Ideally, jobs programs would provide market-based sustainable jobs. But as discussed above, the conditions are not in place in post-conflict zones for this approach, so a social assistance approach, where a job is simulated through public sector demand and financing, is increasingly used in post-conflict zones to begin moving toward conditions where markets, and real jobs, will emerge. These interventions should be short term and put emphasis on stabilizing a work-type environment and interactions.

Public works programs are short-term programs that can provide an immediate answer to demobilized and victims of the conflict and, if designed properly, can also result into social cohesion gains.

This type of program usually relies on community participation to identify local projects, creating forums for collective decision-making and facilitating community participation and engagement between local authorities and individuals. While they are not jobs, in the sense that they are not tied to markets, they can offer the opportunity to build skills, provide income (that can then be spent on other goods and services, thus spurring the local economy), and create social connections that may facilitate market connections later on. These programs need to be community-based, particularly when operating in conflict-affected zones, transparent, and short term.

³⁰ (Education Development Center, 2013a, 2013b).

³¹ Souktel has 15,000 registered users in the West Bank and Gaza, and more than 75,000 worldwide. Souktel also offers its services through SMS which makes the experience even more inclusive since not only smart phones users are targeted.

Myanmar is implementing such a program (see Box 2); a question is how to facilitate the transition out of the program and into the market. While many of the work activities in the current CDD project require very low skills, some of the tasks lead to skills development for participants. Can those skills be more widely marketed? For example, as infrastructure and agricultural development expand in recovered zones, there will likely be a demand for workers with basic know-how, both for construction and maintenance. These activities are undertaken by some CDD communities, which may prepare some of those workers for similar new works outside their community. Further, with the small incomes and mending social capital, the programs may be followed by support for household enterprise start-up, as discussed in Note 4.

Box 2: Building Communities through Myanmar's National Community Driven Development Project

In 2011, the government of Myanmar defined a development strategy centered on communities. With World Bank support, the Government of Myanmar designed the National Community Driven Development Project (NCDDP) to enable impoverished communities to be at the center of planning and managing resources to access basic infrastructure services and improve government's capacity. In this scenario:

- the community members decide and prioritize how to use public resources to address their needs; the technical and administrative aspects are managed by a local township assistant and local community facilitators engage community members in the design, planning, and implementation of the projects.
- The local Ethnic Armed Organizations (EAOs) are consulted to ensure cooperation and engagement in the NCDDP implementation in those remote areas that are outside exclusive government control
- The Department of Rural Development (DRD) runs the program nationwide; providing guidance and support
- The selection criteria are transparent and easily verifiable. All villages are eligible. Poverty rates are the main criteria to select participating townships. Additional criterion includes: lack of external funding for similar activities, willingness from the local authorities to implement the project, peace and stability to ensure a safe implementation and project monitoring, and access to and within the township

The National Community Driven Development Project (NCDDP) was launched in 2013. As of 2017, the program benefited 47 townships and 5.2 million people in Myanmar, renovated approximately 1,500 schools and built over 2,300 kilometers of footpaths and access roads. Over 90 percent of the works are assessed as being satisfactory. the NCDDP projects were cost-effective compared to other government funded infrastructure projects in Myanmar. The goal by 2021 is to have reached 63 townships, which host 7 million people in 15 states/regions.

Sources: <http://www.worldbank.org/en/news/feature/2014/03/31/qa-myanmar-national-community-driven-development-project#1>, <http://www.worldbank.org/en/news/feature/2017/05/11/on-the-frontlines-of-community-development-in-myanmar>; <http://cdd.drdmyanmar.org/eng/>; <http://cdd.drdmyanmar.org/eng/regions-and-states/>. All retrieved June 2017.

An alternative model that has been used is skills training accompanied by a cash transfers. This model has also been used across the world, ranging from Colombia to Liberia. For example, the Northern Uganda Social Action Fund offered a combination of cash grants for vocational training, life skills, and counseling. An impact evaluation found that two years after program completion, the beneficiaries reported to receive more social support from their families and those males who received the grants experienced a 31 percent decline in aggressive behavior relative to the control group. The *Juventud y Empleo* program in violent communities in the Dominican Republic showed that a combination of vocational and life-skills training for unemployed youth increased earnings (especially of females) and reduced the likelihood of engaging in illicit activities.

Once security is restored, the jobs focus will gradually move from public programs to private sector job creation. But first, it is needed to bring work experiences that help to shape the social identity, build networks, include those groups that have been excluded, and dissipate tensions.

The winning strategy

The best chance for developing higher quality jobs is to create the environment and incentives for the growth of higher value-added industries and occupations. The rest of the notes in this volume are dedicated to strategies to create and grow these jobs.

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NOTE 3:

JOBS IN AGRICULTURE IN MYANMAR¹

¹ This note was prepared by Izabela Leao, Mansur Ahmed, and Indira J. Ekanayake

The Myanmar jobs market is broadly agriculture dependent. More than fifty percent of all jobs in the country—a figure that includes all income earning activities, including both wage-earning and farm and non-farm self-employment—are in agriculture. In rural areas, the sector accounts for more than two-thirds of total jobs, and about half of rural workers are women (MPLCS 2015). Moreover, many non-farm jobs are also linked, directly or indirectly, to the agriculture sector, including in areas of food processing, food services, and agricultural trade.

Even though half of Myanmar jobs are in agriculture, the sector only accounted for about 29 percent of the country's GDP in 2015-16, implying that the returns to agricultural labor are low compared to those of labor in the services and trade sectors. This is due to a range of factors, including an over-abundance of agricultural workers and a corresponding over-reliance on labor in the sector. Overall, Myanmar's agriculture sector remains largely non-mechanized, and its agriculture labor intensity is one of the highest in Southeast Asia. Accordingly, the high labor supply in agriculture, particularly in rural areas, also fuels high rates of underemployment, unpaid or voluntary employment (including family farming), and employment in subsistence farming.

The agriculture sector has the potential to play a more important role in expanding Myanmar's jobs opportunities. As Myanmar continues its structural transformation, following the trajectory of many of its regional peers, the agriculture sector in the medium to long term should be expected to shed jobs as workers move to other sectors with more productive and higher-paying jobs. However, if we expand how we define “agricultural jobs,” it is possible to think of a strategy wherein this sectoral job loss is slowed through the development of rural value chains around the production and processing of higher value agriculturally-based commodities. One option would be to develop agro-value chain jobs that feed into (creating backward linkages with) or emanate out from (creating forward linkages with) primary agricultural production. A second option would be to shift current agricultural production toward higher-value products for internal or external consumption. Both these options are attractive for Myanmar, where there is a growing consumer demand for prepared foods and other agricultural products (see the discussion in Note 5).

Global experience has shown that the food industry can offered good jobs and income opportunities for both rural and urban populations as countries develop. In India, for example, the number of jobs in agriculture increased from around 237 million jobs in 1999-2000 to 243 million in 2009-2010 during a time when overall economic growth was above 6 percent per year. Other countries had similar experiences, with agricultural jobs increasing along with economic growth. Therefore, if countries take advantage of opportunities to increase commercialization of on-farm and agribusiness products while enhancing the productivity of agricultural production (especially labor productivity), agriculture can grow into a key sector that supports rural economic growth and generates more, better, and more inclusive jobs for farmers and the rural poor working in food-system value-chains. Finally, improvements in agricultural value-chain and food processing can generate employment for farmers in the lean seasons when they are currently underemployed, as well as generate employment for the rural poor throughout the year.

Therefore, the ability of the agriculture sector to provide better and more sustainable jobs will be crucial for Myanmar's development. The sector will be an important enabler of the economic growth and development, and will undeniably be a key to reducing poverty and ensuring long-term food security for the people of Myanmar.

In order to understand how the agricultural sector can be a source of better jobs in Myanmar, it is necessary to first understand the panorama of agricultural jobs and workers that already exist in the country, as well as the constraints to policies designed to improve them. This Note will focus on explaining the implications of the lagging performance of the agriculture sector on its jobs, while exploring

opportunities for better and inclusive jobs using agriculture value-chains and food systems. The Note starts with a discussion of the characteristics of jobs that people currently pursue in rural areas, and continues by looking at past trends of agriculture labor returns and productivity. The Note then reviews emerging opportunities and challenges for the agriculture sector moving forwards, and concludes by providing policy recommendations to creating more, better, and more inclusive agriculture jobs.

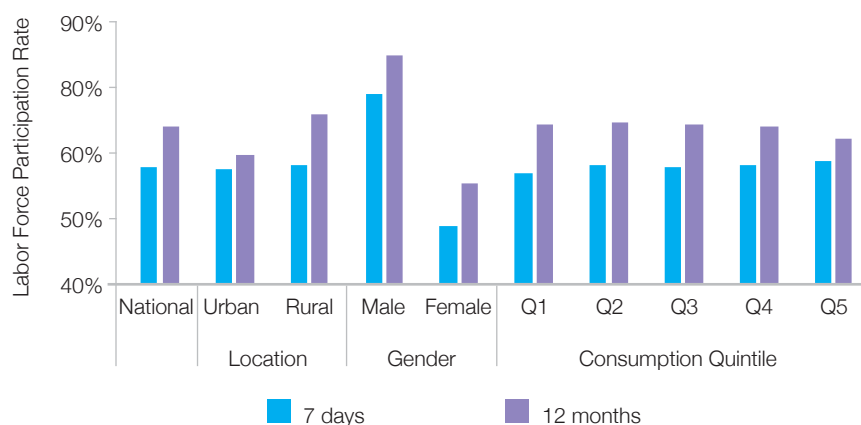
The Nature of Jobs in Rural Areas

Myanmar is still a country with predominantly rural labor force. Labor force participation (on a 12-month basis) in Myanmar’s rural areas is higher (73.2 percent) than that of urban areas (65.3 percent). However, this disappears when only labor force participation in last 7 days is surveyed, implying a high seasonality in labor force participation in rural areas (Figure 3.1). Female annual labor force participation is 60 percent, lagging only slightly behind the generally high rates of other Southeast Asian countries such as Vietnam (63 percent) (WDI 2017). However, this figure drops by about 9 percentage points when looking at labor force participation in last 7 days—whereas the rate for men only drops 7 percentage points—implying that women’s workforce participation is more seasonal than that of men.

High labor force participation is often a feature of an economy dependent on an under-developed and non-mechanized primary sector. About 70 percent of the rural labor force, or 53 percent of the total labor force, is employed in the agriculture, forestry and fishing sectors (Table 3.1). Men are slightly more likely than women—at 55 percent compared to 50 percent—to identify “agriculture, forestry, or fisheries” as their main sector of employment. The high share of agricultural employment explains the high seasonality pattern we observe in the labor force participation rates in rural areas. Many agricultural workers leave the labor force in the lean season and join the work force during the monsoon season. About one-third of rural employment is in a non-agriculture sector, namely the whole sale and retail trade, manufacturing, and construction services sectors (Table 3.1). Since Myanmar is in a pre-transition phase of agricultural development, many of those employed in rural trade and manufacturing sectors are likely mainly involved in primary processing and in the trade of agricultural products.

Figure 3.1

Labor Force Participation in Myanmar, over a 7-day and 12-month period



Source: Badiani-Magnusson et al., 2017

Table 3.1

Distribution of Employment in Myanmar

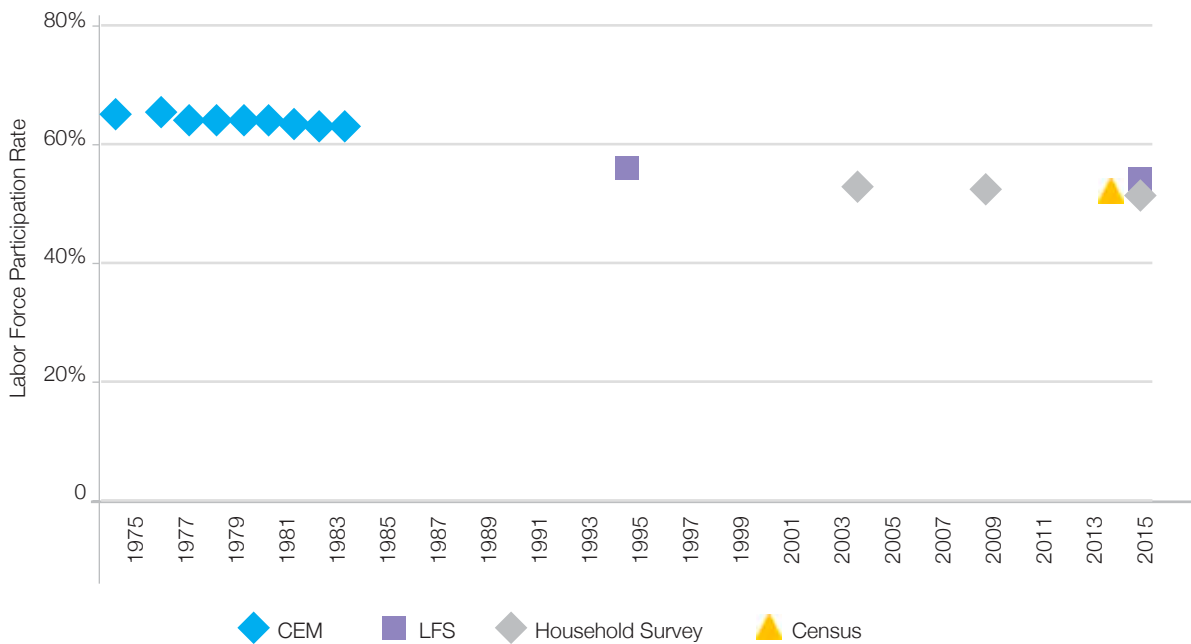
	Male	Female	Rural	Urban	All
Agriculture, forestry, fishing	55.0%	50.7%	69.9%	8.1%	53.1%
Mining, quarrying	2.8%	0.5%	1.9%	1.3%	1.7%
Manufacturing, public utilities	5.4%	8.5%	5.0%	11.5%	6.8%
Construction	8.7%	1.2%	4.3%	7.9%	5.2%
Wholesale and retail trade	10.7%	24.3%	10.7%	33.6%	16.9%
Transportation and storage	8.0%	0.6%	2.6%	9.8%	4.6%
Hospitality, communication, finance, real estate	2.3%	4.0%	1.1%	8.3%	3.1%
Other	7.1%	10.2%	4.4%	19.3%	8.5%

Source: Badiani-Magnusson et al., 2017

Myanmar’s agricultural sector remains a fundamentally stable source of jobs. Unlike that of most countries in the region, Myanmar’s structural transformation has not been accompanied by a relocation of jobs from rural to urban areas. The share of jobs in the agriculture sector was 56 percent in 1995, and, where data was available, had dropped by a little over 1 percentage point per decade between 1995 and 2015 (Figure 3.2). The persistence of this high share of agricultural employment, despite the presence of large gaps in rural-urban wage rates, implies that the rural non-farm sector has not been improving, and that the potential to migrate from rural to urban areas is not being realized.

Figure 3.2

Share of Agricultural Employment in Myanmar, 1975-2015



Source: Badiani-Magnusson et al., 2017

Rural-to-urban migration is lower than would be expected in Myanmar. While pressures on living standards in rural areas have prompted migration to neighboring countries, such as Malaysia and Thailand, domestic rural-to-urban migration is still low. A recent study on migration in Myanmar finds that most migration is urban-to-urban, followed by rural-to-rural, followed only then by rural-to-urban (MOLIP and UNFPA 2016). The lack of sufficient jobs, poor connectivity, and limited access to information about opportunities in urban areas may hinder more significant rural-to-urban migration. Pressures on living standards has led to increased rural indebtedness, which in turn has driven job-search-related migration to neighboring countries in the last decade (Dapice et al. 2010, 11). Low labor demand may also stem from Myanmar workers lacking skills that suit the labor market, or from the seasonal nature of labor demand in the primary agriculture sectors in neighboring countries.

Rural workers engage in a variety of income earning activities carried out by the household, which vary according to agricultural cycles. The most prominent activities in rural areas are cultivation (working on one’s own or rented land), agricultural wage labor (being hired as labor on someone else’s land), and non-farm activities (engaging in activities that are not cultivation, though they may produce goods and services related to cultivation). According to survey data, more than two-thirds of the rural workforce is involved in only one of these three sectors sector (Figure 3.3). More than one-third of the rural workforce engages only in cultivation, another 16 percent is only involved in agricultural (wage) labor, and about 12 percent engages only in the non-farm sector. Meanwhile, about one-third of the rural workforce is engaged in multiple activities, potentially because a single task is insufficient to earn enough income to provide for their needs, or because they engage in different activities during different seasons (e.g. completing agricultural work during the wet season, and non-agricultural work in the dry season). The most profitable non-farm occupations in rural areas are construction, hospitality and retail, handicrafts, and mining. Though plant operators and drivers, food processors/woodwork or garments, and woodworkers earn more, the costs are also relatively high.² The most common combinations of income (or in-kind) earning activities are cultivation and agricultural wage labor, agriculture and non-farm business, and agricultural work and non-farm casual labor.

Figure 3.3

Employment Sector Share of All Jobs in Last Year by Consumption Quintile and Region



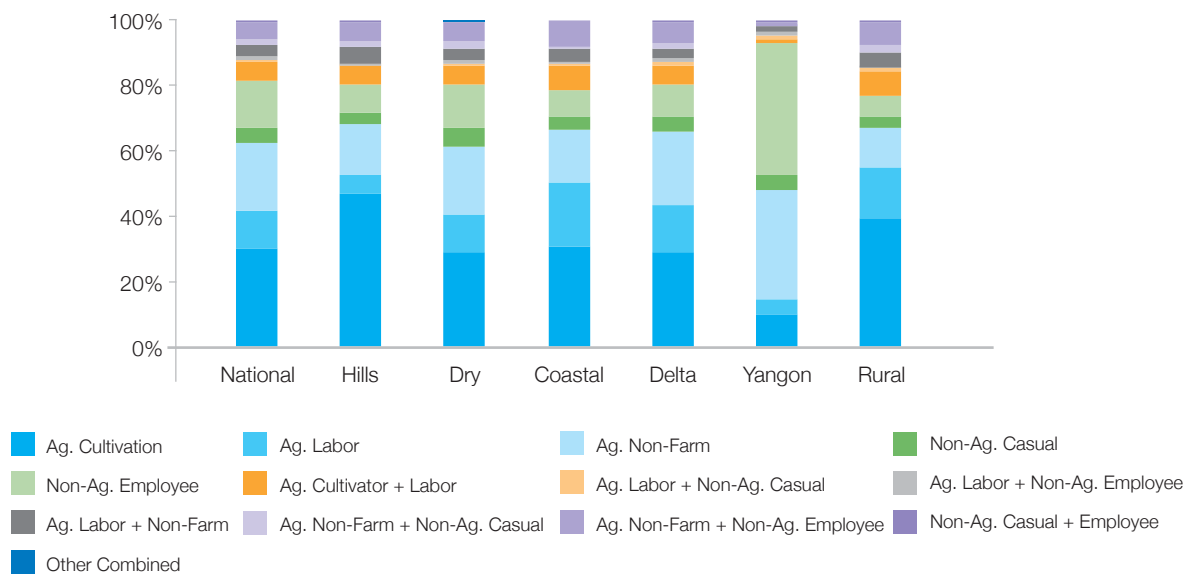
Source: Uochi & Badiani-Magnusson, 2017

² The revenues and profits of non-farm occupations are estimated for occupations at the 2-digit ISCO level that are held by the rural population and report revenues. Only 10 occupations had a sufficient number of observations to be included in the sample: hospitality and retail, teaching, personal services, market-oriented skilled farming, building and trade, handicrafts, food processing/woodworking/garments, drivers/plant operators, mining, and street sales/services. Profits are only reported for those observations that provide information on revenues and costs.

Significant variations exist in the types of rural jobs available across Myanmar. The diversity of the country’s agro-ecological environment, lack of access to cultivable land, and differences in available income-generating opportunities across markets contribute to this variation in rural jobs. While 47 percent of all jobs in the Hills are in cultivation, only 10 percent of jobs in Yangon are in this sector (Figure 3.4). Meanwhile, the share of agriculture labor jobs is low in the Hills, whereas it accounts for one-fifth of jobs in the Coastal region (since fisheries provide year-round employment),³ and is also high in the Delta and Dry regions. Significant variations also exist in the sectoral distribution of the workforce between poor and rich households.

Figure 3.4

Employment Sector Share of All Jobs in Last Year, by Agro-Zone



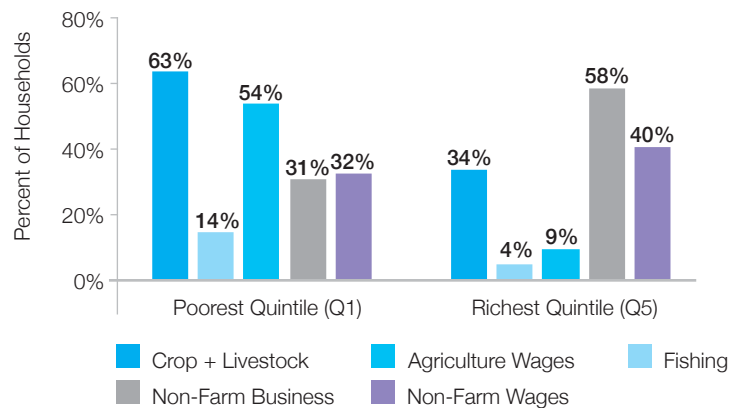
Source: MPLCS (2015)

Beyond allocating much of their time to different agriculture-related activities, the rural poor in Myanmar overwhelmingly rely on the agriculture sector for their income (cash or in-kind). Figure 3.5 presents the share of households in the poorest and richest income quintile whose earned income originates from different sources. Poor and rich households differ significantly in their income sources. Wages from crops, livestock, and agricultural wages are the major sources of income for the poorest households, whereas wages from business and from non-farm activities are the major sources of income for the richest. While about one-third of households in the poorest quintile earn income from non-agricultural activities, about one-third of households from the richest quintile earn income from the crop and livestock sector. Workers in the agriculture sector earn less (and also work less) than those in non-agriculture sector, as seen by the fact that agriculture and agricultural wage labor, which represent two thirds of rural agricultural employment, account for only around half of rural households’ income. The share of agricultural income varies widely by agro-ecological zone and location. While 38 percent of income comes from agriculture in the Hills, only around 8 percent does so in Yangon (Figure 3.6).

³ Fishermen often work as wage laborers since inshore and offshore fishing is generally capital intensive, and very few can afford to buy and maintain fishing boats and net.

Figure 3.5

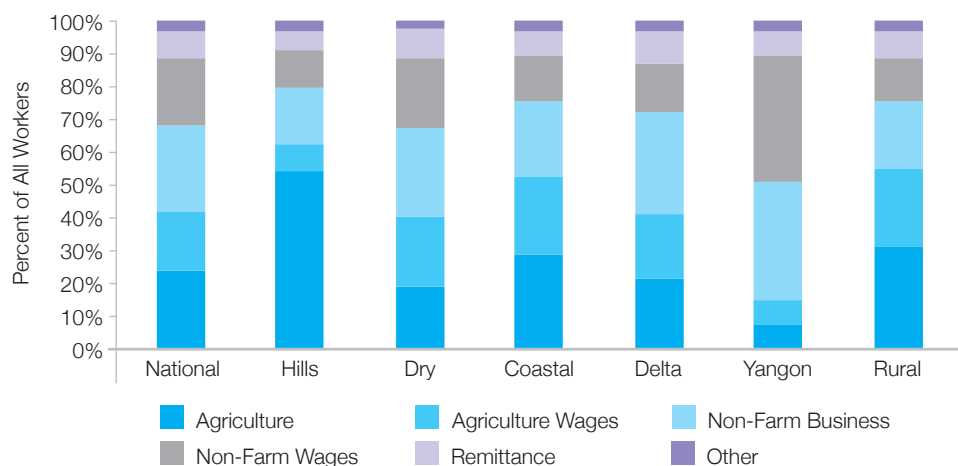
Sources of Household Income for Poorest and Richest Households



Source: Uochi & Badiani-Magnusson, 2017.

Figure 3.6

Sector Average Share of Annual Income, by Agro-zone



Source: Badiani-Magnusson et al., 2017

Workers from poorer households tend to gain their income (cash or in-kind) from a more diversified set of activities than the workers from richer households do. Figure 3.5 shows that the majority of the richest households receive income from three major sources: non-farm business (58 percent), non-farm wage labor (40 percent), and crops and livestock (34 percent). On the other hand, the poorest households tend to gain income from all sources: agriculture and livestock (63 percent), agricultural wages (54%), non-farm wages (32 percent), non-farm businesses (31 percent), and fishing (14 percent). The employment statistics in Figure 3.3 also show that, while 76.9 percent of workers from the poorest quintile engage in a single activity, 88.4 percent of workers from the richest quintile do so, namely paid employment, non-farm work, or cultivation. These statistics reflect how poorer households have adopted a strategy of pursuing multiple job types to assure sufficient cash or in-kind earnings throughout a year.

A range of skill-related factors drive rural work patterns. The level of education and the types of activities of workers engage in are strongly correlated around the world—and Myanmar is no exception. Workers with less schooling work mostly as cultivators on their own farm or as agricultural wage labor (Figure 3.7). On the other hand, workers with better education work in the non-farm sector, and many of them are salaried workers. More than half of the illiterate workforce is employed in the agricultural sector as cultivators or as agricultural wage labor, whereas only 10 percent of the workforce with any high school or greater education is. Even among people involved in agriculture, increased schooling discourages them from working as agricultural laborers (Figure 3.8). Around 28 percent of agricultural workers with no formal schooling, compared to 20 percent of those with a high school education, work as agricultural laborers. Thus, schooling may be an important factor encouraging workers in rural areas to move up in agriculture value-chain, or to engage in activities in the non-farm sector.

Figure 3.7

Employment Sector of Main Job, by Household Education Level



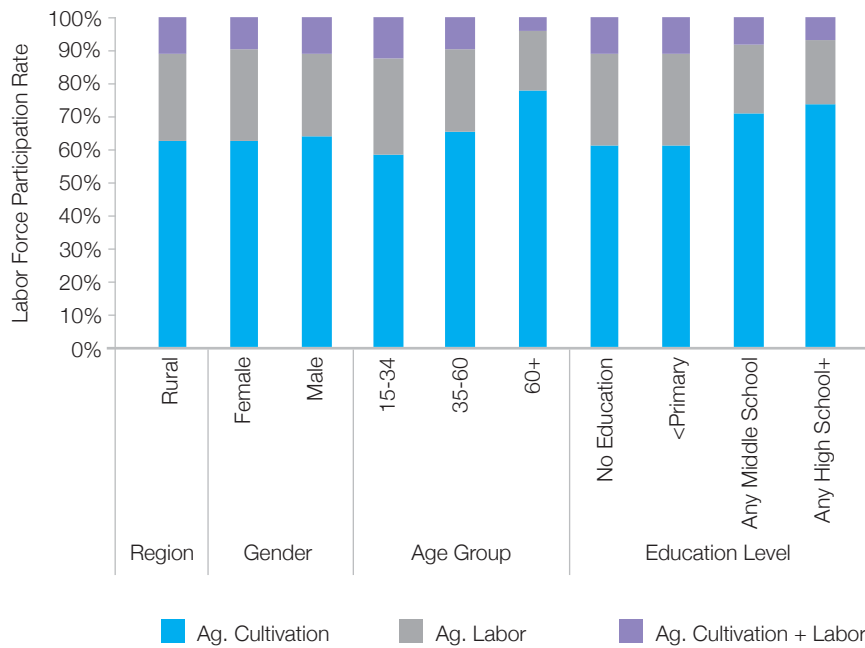
Source: Uochi and Badiani-Magnusson

The share of cultivator-only among agricultural workers increases with the age of the workforce. While 42 percent of young agricultural workers are agricultural laborers, only 34 percent of adult agricultural worker are so (Figure 3.8). Limited access to land could be an issue for young workers, since many of them must join the agriculture sector as wage labor after they fail to secure paid non-farm employment.

Overall, there is no significant variation in the sectoral employment distribution between men and women. About 25 percent of male and 28 percent of female agricultural workers report working as agricultural laborers (Figure 3.8), showing that the share of women working as agricultural laborers is only slightly higher than the share of men doing so. However, men and women tend to engage in different tasks within types of agricultural employment. Women, for example, are employed completing tasks that are largely production driven, and may include planting and transplanting, field maintenance, weeding, harvesting, threshing, postharvest operations, and small-scale marketing.

Figure 3.8

Agriculture Employment Sector by Region, Gender, Age, and Education

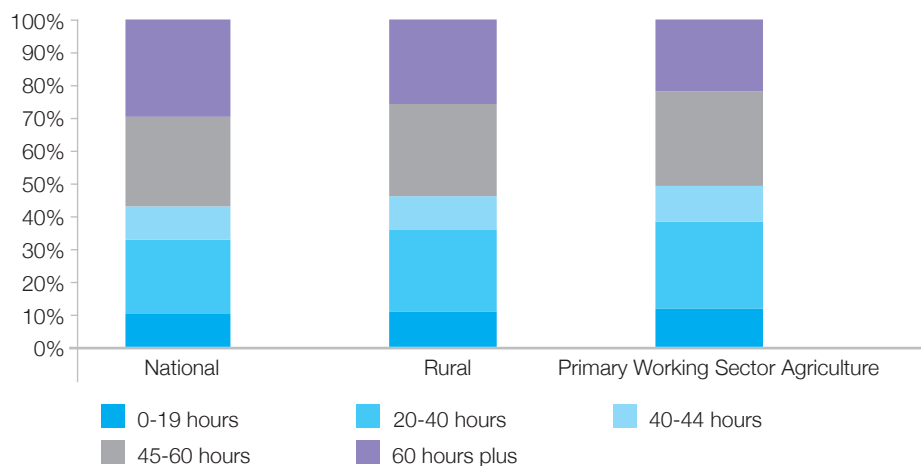


Source: Badiani-Magnusson, 2017

Seasonality and underemployment are two important features of Myanmar’s rural labor market, underscoring how agricultural work is not available consistently over the course of the year. Rural workers engage in highly seasonal work, and are often underemployed due to their reliance on agricultural primary activities for employment. Furthermore, their lack of skills, drives them towards vulnerable agricultural labor. About 39 percent of agricultural workers are employed for 40 hours or less a week, while the same is true for only 33 percent of the national workforce (Figure 3.9).

Figure 3.9

Hours Employed People Worked in Primary plus Secondary Jobs in last 7 days

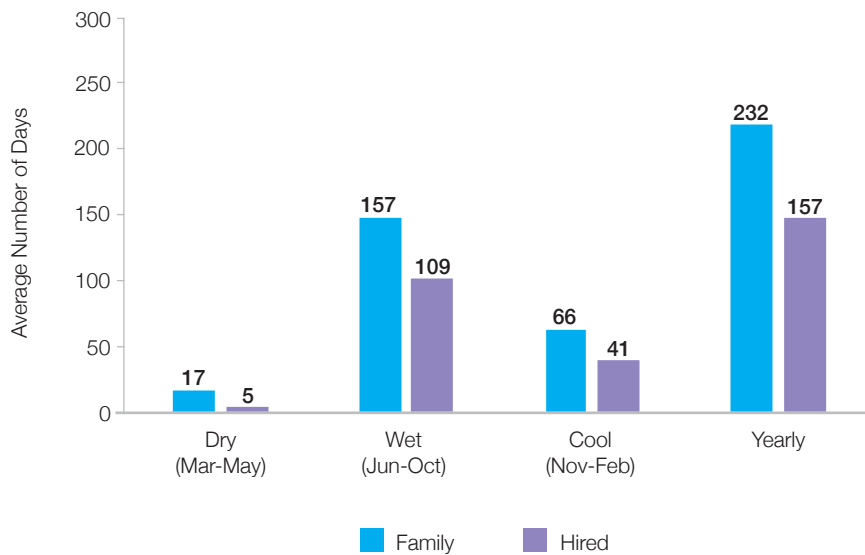


Source: Badiani-Magnusson et al. 2017

The amount time that households engaged in cultivation spent working on a family farm varies by a factor of 10 at different points in the year, leading to frequent underemployment. Figure 3.10 shows that all members of cultivating household work a combined total of 232 days annually. Given that multiple members of each household are part of the workforce (since rural households are, on average, comprised of five people, and since labor force participation rate among women remains high), many individual rural workers remain underemployed. About two-thirds of the days during which members of cultivating households work are in the Wet season (June-October), meaning that most rural agricultural workers remain inactive or underemployed throughout the remaining seven months of the year (Figure 3.10). This is exacerbated by the lack of crop varieties that workers cultivate during the Dry season. Therefore, expanding both farm and non-farm jobs during the Dry and Winter seasons would improve the cash or in-kind earnings of the rural workers in Myanmar.

Figure 3.10

Average Labor Days of Cultivating Household, by Season

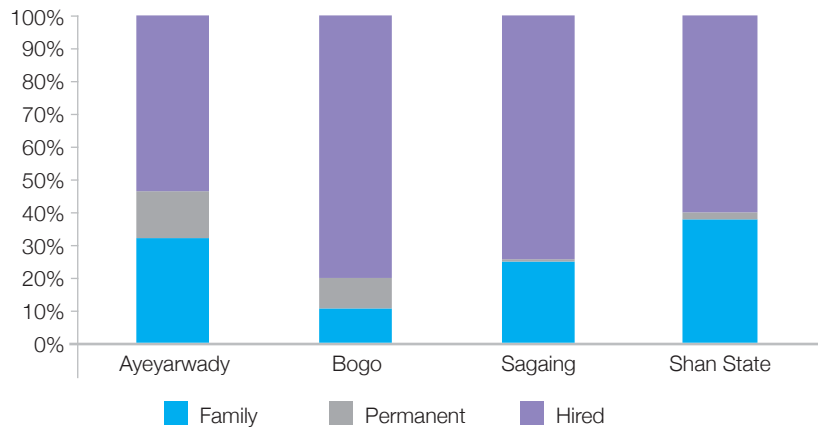


Source: World Bank 2016

Agricultural wage jobs are also very seasonal, changing widely between dry and wet seasons. Few wage labor jobs are available during the Dry and Winter seasons, and most farm households create wage labor jobs (by hiring laborers) during the Wet season (Figure 3.11). Thus, rural wage labor employment is high in the Wet season and low in the Dry season. Due to limited agricultural mechanization, farmers rely heavily on hired labors during the Wet season to complete labor-intensive activities (e.g. harvesting or land preparation). While agricultural mechanization might decrease the need to create jobs (which often go unfilled) in the Wet season, the process would improve non-farm opportunities in rural areas by linking farmers to markets, or facilitating rural-to-urban migration, and thus benefitting both farmers and rural agricultural laborers looking for jobs in the Dry and Winter seasons.

Figure 3.11

Types of Agriculture Labor used during Wet Season, by Administrative Region



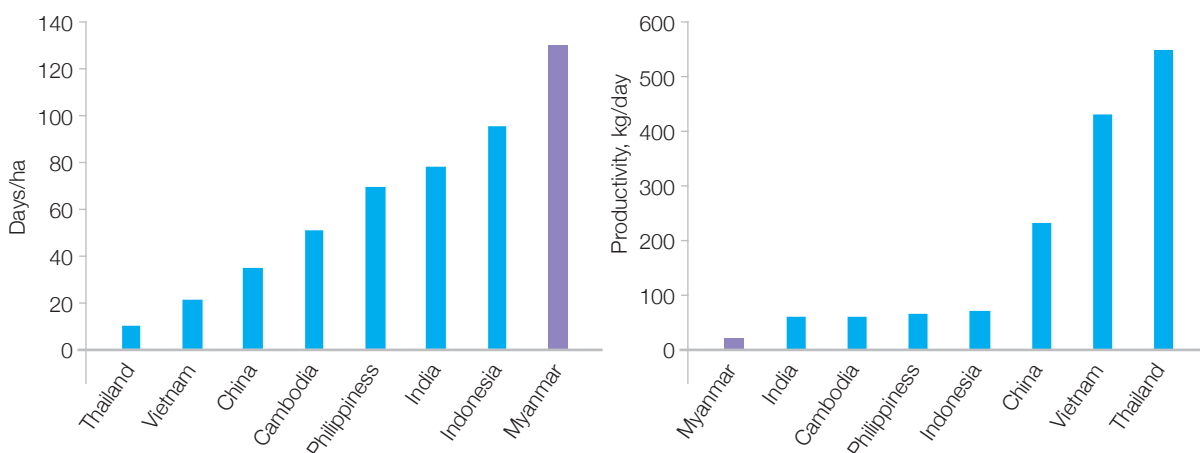
Source: World Bank 2016

Agricultural Labor Productivity in Rural Areas

Myanmar’s agricultural labor productivity is low compared to that of neighboring countries in Southeast Asia (Figure 3.12). The cultivation of a hectare of paddy during the monsoon season requires 131 days in Ayeyarwady region whereas this task takes only 11 days in Thailand, 22 days in Vietnam, and 52 days in Cambodia. Other regions in Myanmar fare slightly better, managing to cultivate a hectare of paddy within 80 days, but this remains uncompetitive. In other words, a Myanmar paddy farmer is engaged full time attending to a crop, showing clear inefficiencies of labor usage and lack of mechanization. Similarly, in the same season, one day of agricultural work generated only 23 kg of paddy in Myanmar, compared to 547 kg in Thailand (Figure 3.12).

Figure 3.12

Labor Intensity and Labor Productivity in Myanmar’s Monsoon Paddy Production



Source: World Bank 2016

One major contributor to Myanmar’s low agriculture productivity is the prevalence of monocropping and the overwhelming dependence on rice production. Rice paddy cultivation in Myanmar uses 70 percent of total arable land and accounts for 30 percent of agricultural output and 95 percent of total cereal output (World Bank 2017a). The country’s policy of rice self-sufficiency has led farmers to make rice one of the cultivated crops in all irrigated area, even when conditions are not appropriate for this task. This has been done to such an extent that rice is the only crop produced in many areas of Myanmar. Other important crops include corns, pulses, onions, and peas, which are grown largely during the second season of rice-based farming systems. Livestock is a relatively small sector, and contributes only to about 7.5 percent of the agriculture GDP, while the contribution from fisheries is even lower. Rice is a low productivity, low-value crop, and an important component of developing Myanmar’s agriculture sector will be encouraging increased crop diversification.

A second contributor to low productivity is the fact that the Myanmar agriculture sector is far less mechanized than those of other countries in the region. Mechanization is important for modernizing agricultural production techniques and for increasing farm labor intensity and productivity. Myanmar’s low mechanization rate is not surprising given the country’s low wages and the surplus labor found in rural areas. Furthermore, poor infrastructure and electricity distribution make powering machines difficult, and raise the initial investment costs of mechanization.

While mechanization is important for increasing agriculture labor productivity, its greatest benefits come from the indirect effect it has in freeing up labor to engage in other, more productive forms of employment. Table 3.2 shows that, while the mechanization of rice farms reduces their demand for labor by 10 percent, the fact that labor costs are already so low that profitability does not increase by much when less labor is hired. Mechanized farms, hiring fewer people, saw net profit margins of \$121 per hectare whereas non-mechanized farms earned \$94 per hectare. Nevertheless, the labor that mechanization frees can be dedicated to more lucrative off-farm activities, particularly if nascent agro-value chains develop enough to generate more jobs. Since mechanization reduces demand for labor, this process must be complemented with an expansion in the number of non-farm rural job opportunities that will absorb the labor that will leave farming.

Table 3.2

Distribution of Employment in Myanmar

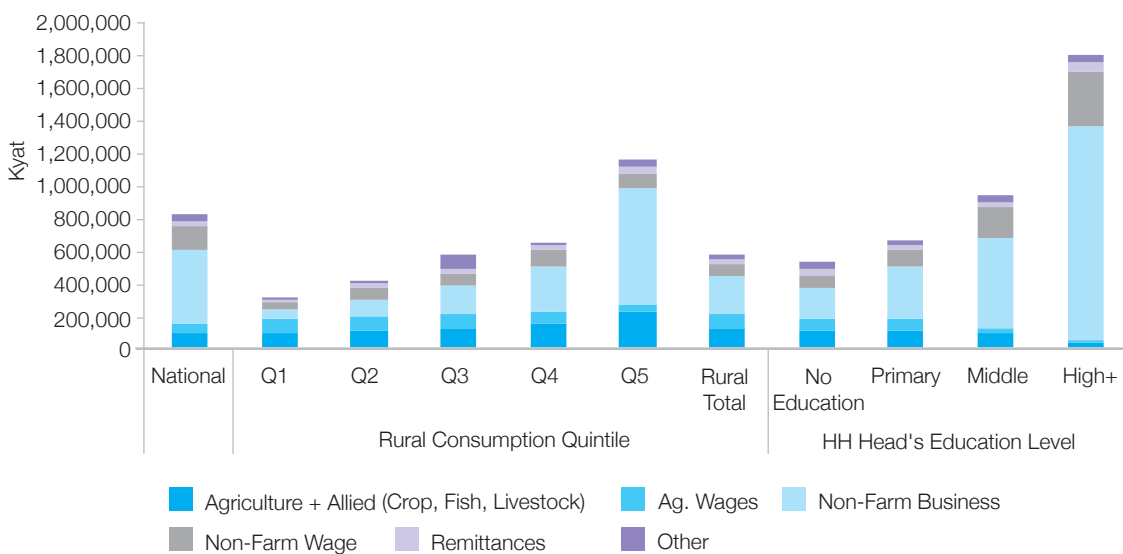
	Mechanized Farms	Non-mechanized Farms
Number of farms	856	517
Revenues, \$/ha	599	554
Yield, wet paddy, tons/ha	2.44	2.35
Total costs, \$/ha	478	460
Labor use, days/ha	101	112
Gross margin, \$/ha	198	188
Net margin, \$/ha	121	94
Labor productivity, \$/day	4.45	3.95

Source: World Bank 2016

The low productivity of farming jobs translates into low incomes for rural workers. Even though more than half of rural households derive their income from on-farm activities, non-farm activities in rural areas are a more lucrative source of income and contribute, on average, two-thirds of rural households' income. Differing levels of income from non-farm business activities are an important driver of the income disparity between rural households. Rural households among the poorest quintile earn only 8 percent of what the rural households in the richest quintile earn in non-farm business activities (61,483 kyat compared to 765,164 kyat), and the overall per-capita income of the poorest households is only 25 percent that of the richest (Figure 3.13).

Figure 3.13

Mean Per-capita Income and Sources of Income, by Consumption Quintile and Education



Source: Badiani-Magnusson 2017

Improving agriculture productivity is key to accelerating poverty reduction. Workers from poorer households tend to do more agriculture and agricultural wage labor jobs compared to those from the less poor households. The poor often lack any physical or land endowments, making labor the only endowment at their disposal. Thus, improving the productivity of agriculture labor would improve these households' wellbeing. Policymakers and development practitioners need to pay more attention to the regions with concentrated agriculture-based jobs to speed up poverty reduction. Increasing agricultural productivity by adopting technology, linking farmers to markets, and improving connectivity in the rural areas would significantly benefit farm households and agricultural wage laborers.

Emerging Policy Developments

While it has recognized the clear role of agriculture for food security, increasing income, and job creation, the Government of Myanmar's agriculture sector policies lack a clear strategy to drive the creation of more and better rural jobs (MOALI 2015, 2016). Regional and country level public policy considerations on agricultural employment are similarly not explicitly defined. The latest Agriculture Development Strategy (ADS 2017) has changed policy directions in response to increased consumer demand, and aims to raise agricultural productivity and diversify crop production from low-value to high-value produce (MOALI 2017). It further aims to ensure a process of agricultural transformation based on

a solid policy that promotes increased rural incomes and savings, generates jobs, stimulates investments in farms, develops small and medium enterprises (SMEs) in rural areas, spurs growth through support for farmers, and helps develop a sector that can lift thousands of people out of poverty. This agenda, however, is very broad and, given budget constraints, may require more time to achieve its intended objectives.

The ADS 2017 does not explicitly detail how jobs are to be created in the agriculture sector, nor whether the institutional infrastructure exists to make labor productivity more competitive. Several broad policy areas sit outside the mandate of the Ministry of Agriculture and Irrigation (MOALI) making the ADS difficult to implement. Furthermore, it remains important to directly engage the private sector, create public-private partnerships, and decentralize decision-making and institutional coordination to promote job growth.

Policy Priorities for More and Better Agricultural Jobs

Enhance Agricultural Productivity Among Smallholder Farmers

Support should be provided at the household-level to increase the efficiency, productivity and modernization of small-farm production. In the ADS 2017, the government has argued that on-farm and off-farm activities require different productivity policy approaches, with the former targeting landless and marginalized farm households, and the latter prioritizing more advanced, informed, and commercial farm households (such as youth or those with assets). For both sets of policies, however, the primary goal remains to increase productivity.

One policy option is to provide input support for crop diversification, and to promote farmers' choice where farmers are free to choose which crops they want to grow, when they want to grow them, and which markets they want to sell them to. Farmers should be encouraged to transition towards more high-valued production activities, namely through multi-cropping and the production of higher-value and modern high-yield crops, as well as of horticulture, livestock, poultry, and fisheries. The government can support this transition by revising the Rice Self-Sufficiency Policy and amending the 2012 Farm Law to increase farmers' choices and support the adoption of modern agricultural practices in the farming sector.

Farmers also need support to access to credit that would allow them to invest in new machinery and higher-value inputs. The Myanmar Agriculture Development Bank (MADB) must be allocated a sufficiently large budget so that it can issue loans to farmers to make such investments. The MADB is currently so capital constrained that it is only able to lend to smallholder farmers who own no more than 10 acres of land. Furthermore, the 2012 Farm Law, which first allowed farmers to use their land as collateral for loans, should be amended to allow them to borrow money from a wider range of finance institutions other than the MADB. Agriculture extension services should be enhanced, and specifically target vulnerable groups such as women or farmers in post-conflict zones.

Given the importance of land rights in accessing credit for investment, strong institutions to systematically register and enforce land rights is crucial—especially in post-conflict zones. Data on these areas in Myanmar is limited, yet experience from other countries has shown that most post-conflict zones have high agricultural potential, although this potential is limited by an absence of institutions enforcing land rights and mediating the land right disputes that result from population movements. These regions also suffer from a scarcity of access to capital and inputs, as well as an absence of the physical infrastructure needed to boost agricultural production. Markets in these areas are unlikely to emerge unaided, making it imperative that governments provide support to agricultural production by protecting land rights and otherwise help link producers to markets and financial institutions (World Bank 2012).

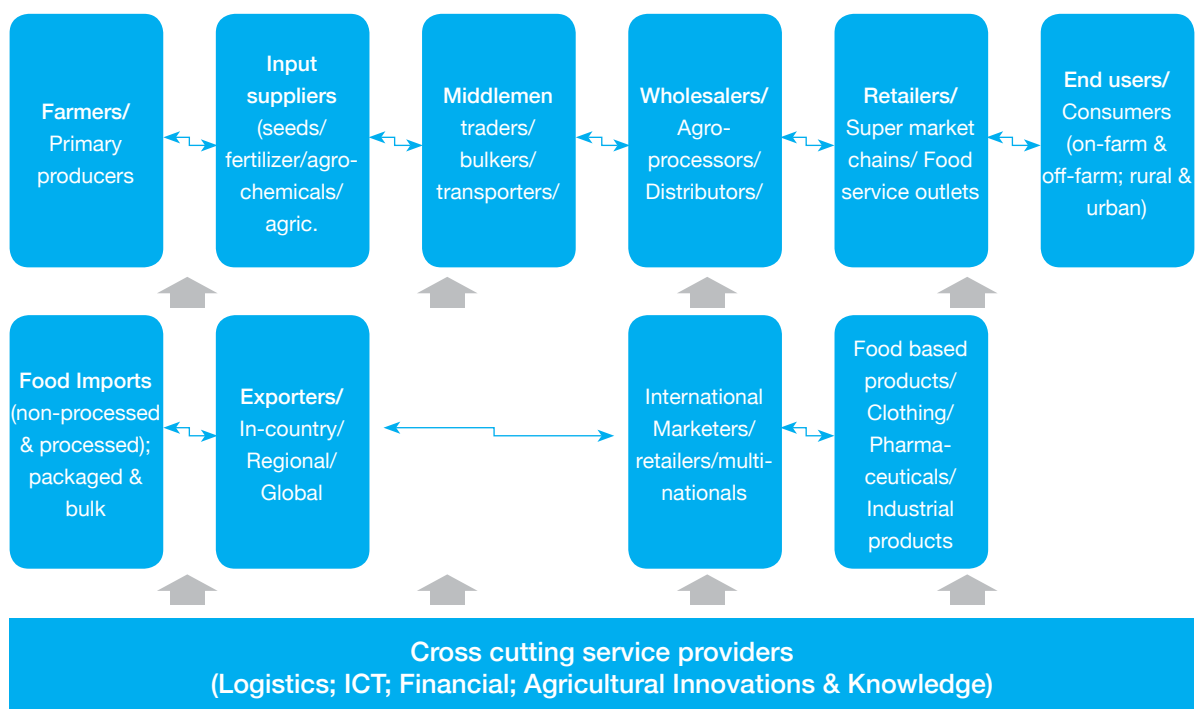
Finally, support is needed to expand the use of irrigation and water management systems. Skills training in irrigation systems—including their maintenance, operation, and construction, as well as the rehabilitation of canals—should be prioritized. The government should also support investments in irrigation, both for small-scale projects to make water management more efficient, as well as for large-scale irrigation delivery systems (such as lining irrigation, drainage canals, and the associated structures of each). These projects will not only help increasing production yields, but will also create wage jobs in rural areas.

Develop Agriculture Value-Chains

The development of a dynamic rural sector that ties together on-and off-job activities is vital for job growth in Myanmar. Agro-value chains consist of interdependent enterprises that generate value-added throughout a food system, and have the potential to create many rural jobs tied to agriculture both on and off-farms (Figure 3.14). Beyond farming and other agriculture production, agro-value chains include upstream jobs—such as seed and fertilizer input suppliers—and downstream jobs—such as in wholesale, retail, food processing, and food services. Agro-value chains, if exploited properly, can support economic growth across the rural economy, thus developing the rural micro and small enterprises sector. Interventions that improve the productivity and income of people engaged in agriculture would complement job creations in rural non-agriculture sectors.

Figure 3.14

Jobs in Agro-Value Chains



To support the integration of rural jobs into agricultural value chains, policies are needed to improve the skills and ease the financial constraints of the rural workforce.

People without formal schooling are employed largely in on-farm jobs, while workers with at least a tertiary education work primarily in non-farm jobs. Training support should be given to small business owners through extension services to increase their knowledge of markets, sustainable business practices, international production standards, facilitating client decisions, best practices implementation, and vertical integration opportunities. This training is especially important for agro-industries which will need to adopt good practices and standards to increase their competitiveness and productivity. Community-based rural enterprises, namely farming cooperatives, are ideal recipients for this training support, as they are well equipped to distribute learning material. Farming cooperatives can also act as intermediaries to increase access to financial services, meaning that these organizations must also be able to access loans from a wider range of financial institutions. Evidence from agricultural and rural development interventions shows that rural populations engage in non-farm activities more when given access to finance and links to markets.

Policy support is also needed to increase the use of vertical integration to mitigate risk in the supply chain.

This would create forward and backward linkages between small enterprises, farms and larger firms in the value chains. Interventions to improve cross-sectoral linkages in the supply chain may offer agro-processing firms of varying sizes better prospects to exploit market opportunities through flexible business models and lower capital requirements. Financial support should be given to firms in the services and manufacturing sectors that support agro-business with the on-the-job training of their rural workforce.

Finally, policymakers must underpin this support for the agriculture sector with policies that create a national business, institutional, and regulatory environment that enables agro-value chain growth.

Legal institutions that can enforce land rights and contract law, as well as facilitate dispute resolution, are required to build the trust needed to link firms and farms together into functioning value chains. Furthermore, policymakers must establish a regulatory and institutional system that sets, enforces, and certifies food standards, ideally enabling businesses along agro-value chains to meet international standards and export to foreign markets where profits are highest. Testing, certification, and labeling facilities will need to be established near cultivation zones, and be complemented with improved infrastructure. Farmers will need to be provided with technical support to improve their farming practices and adopt techniques to meet international standards. The government will further need to implement a communications campaign to ensure that all farmers are aware of and comply with new standards.

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NOTE 4:

MICRO ENTERPRISES IN MYANMAR¹

¹ This note was prepared by Mohammed Amin.

Micro enterprises have enormous potential to create jobs in developing countries. This Note focuses on the role of micro enterprises in providing employment and incomes in Myanmar. While the precise definition of micro enterprise varies across countries, in this Note, we define a micro enterprise as being a non-farm enterprise that employs fewer than 10 workers, including the owners. Micro enterprises can be either formal (registered) or informal, although anecdotal evidence suggests many are the latter,² just as it suggests that many micro enterprises only employ the owners who can be considered own account workers or self-employed. In this chapter, therefore, we draw freely from existing insights from studies on the informal sector and the self-employed.

The international experience suggests that micro enterprises can be the source of a large number of jobs outside of the agriculture sector.³ Non-farm micro enterprises (with 1-9 employees) have provided 97 percent of all manufacturing and services sector jobs in Ethiopia, about 45 percent of manufacturing jobs and over 55 percent of services jobs in Mexico, over 35 percent of manufacturing jobs and 25 percent of services jobs in Vietnam, close to 65 percent of manufacturing jobs and over 80 percent of the services jobs in India, and, on average, 15 percent of manufacturing jobs and 35 percent of services jobs in 15 other industrialized countries (World Bank 2012).⁴

Despite the quantity of jobs this sector can produce, the quality of these micro enterprise jobs is of serious concern. Micro enterprises make a large contribution to increasing employment in Myanmar, yet jobs provided by micro enterprises are extremely low productivity and low paying. Most of the enterprises are very small, being operated by the owner alone, and are unable to make a significant contribution to the overall growth and dynamism of Myanmar's economy. These findings are not specific to Myanmar but are common to micro enterprises across the developing world (Box 4.1).

Box 4.1: Evidence of the Poor Quality of Micro Enterprise Jobs

While micro enterprises provide a large proportion of jobs across the globe, concern exist about the quality of these jobs as well as about the contribution of micro enterprises to the overall growth and dynamism of the economy. Earnings and productivity levels among micro and informal enterprises tend to be much lower than those of the larger firms (World Bank 2012, La Porta and Shleifer 2012, ILO 2002, Montenegro and Patrinos 2012, Li and Rama 2013). Using firm-level survey data for a large cross-section of developing countries, La Porta and Shleifer (2012) show that value added per worker for large firms is about 500 percent higher than that of micro and informal enterprises.

Other studies show that micro enterprises suffer from lack of capital; from being too small to engage in R&D or to create new markets; from being too poorly connected from the formal economy to benefit from its growth; and from being unable to take advantage of public utilities and publicly provided support programs due to being informal. Thus, it is no surprise that most micro enterprises remain small even after many years in operation. A study of own-account firms in Mexico from 1987-2001 revealed that about 52 percent of the firms did not experience any increase in their scale of operation, and that only 0.7 percent expanded to having five or more employees (Fajnzlber et al. 2006). Similar results are reported for Sub-Saharan African countries, where few micro enterprises expand beyond employing household members, even after many years in existence (Li and Rama 2013).

² The overlap between micro enterprises and informal firms is referred to in several studies, although hard evidence on the issues is rare. See for example, World bank (2012) and Li and Rama (2013).

³ The large contribution of micro enterprises to total employment is confirmed in a number of other studies. See, for example, Banerjee and Dufo (2011), Fox and Sohnesen (2012), and Grimm et al. (2011).

⁴ The year for which data are available varies across countries between 1999 to 2007.

The micro enterprise sector nonetheless produces its success stories, although the challenge lies in identifying them.

While micro enterprises have lackluster performance on average, they are also very diverse in terms of productivity, investment, and growth potential. The literature suggests that, even in developing countries, a small section of micro enterprises, called gazelles, are highly productive and experience rapid growth (World Bank 2012, Grimm et al. 2012, de Mel et al. 2010). Some studies also identify “constrained gazelles,” which offer high returns to capital and show potential to grow, but which do not do so due to constraints in their business environment (de Mel et al. 2010, Grimm et al. 2012, Maloney 2004). The challenge for policymakers is to identify those enterprises that have a greater potential to grow.

Box 4.2: Sampling Methodology for MPLCS and ES data

The data used in this Note come from two main sources. The first is the Myanmar Poverty and Living Conditions Survey (MPLCS)—a 2015 survey using a nationally representative sample of 3,648 households which was conducted jointly by the World Bank and Myanmar’s Ministry of National Planning and Economic Development.⁵ The main objectives for the survey were to measure socio-economic characteristics of Myanmar households, including household consumption, and to estimate the poverty rate for different population groups. Household surveys such as MPLCS are frequently used to study micro enterprises since they provide a comprehensive overview of employment trends, even among small firms, that firm-level surveys are unable to track.

The units of analysis for the MPLCS were the individual households and persons who are usual residents of households. A stratified multi-stage sample design was used, based on the master sampling frame developed by the Department of Population for the Myanmar national household survey program using the 2014 Census. The primary sampling units (PSUs) for the master sample were the census enumeration areas (EAs), which have an average of about 135 households each. The sample was stratified at the regional (state) and urban vs. rural level. In the first step, about 4,000 EAs were selected from the master sample. The master sample EAs were divided into four nationally-representative zones of 1,000 sample EAs each. 304 EAs were randomly selected within each region—64 from Yangon, and 60 EAs from each of the remaining four zones. In the final step, a total of 12 households were randomly selected for each of the 304 sample EA, implying that a total of 3,648 households were selected for the MPLCS.

The MPLCS contains a special module on household or micro enterprises run by the households. The survey defines a household non-farm enterprise as an organized commercial activity and/or a commercial establishment that is owned and managed by household members. It can be very informal and have no hired labor or formal registration. The main criterion for an enterprise to be covered in the survey is that it operated at some point over the past 12 months, including those that operated over the past 12 months but are closed temporarily or permanently as of the interview date, and those that may not have operated full-time every month over the past 12 months. Household non-agricultural income-generating enterprises include those that produce or trade goods or services, or that own a shop or operate a trading business, no matter how small. Enterprises might include, for example, people making mats, bricks, or charcoal, working as a mason or carpenter, selling firewood, metalwork, or tailoring, completing repair work, engaged in food processing, fish marketing, or petty trading, etc. More precisely, the survey provides a list of nine activities to check if the business activity is indeed a non-farm household business. About 98 percent of the non-farm enterprises surveyed have less than 10 workers (paid or unpaid, and

⁵ Implemented by Myanmar Survey Research (MSR) on behalf of the World Bank.

including family members as well as owners). Throughout the Note, the analysis is restricted to the non-farm enterprises with fewer than 10 workers (henceforth, micro enterprises).

There exists a downside to the use of household surveys since they focus more on individuals and their living conditions and provide limited information on enterprises. Hence, we complement the MPLCS with another data source: a random sample of 300 informal firms in the main urban areas of Myanmar, conducted using the World Bank's Enterprise Surveys (ES) in 2014. For benchmarking purposes, similar surveys of informal firms in 16 other developing countries in Africa and LAC are used.

For the ES data collected by the World Bank, a block enumeration of all businesses was first conducted in 2013 in Myanmar. During this block enumeration, information was collected on the registration status of the businesses. Businesses were considered as informal if they were not registered with either the Directorate of Industrial Supervision and Inspection of the Ministry of Industry (DICA), the City Development Committees, or the Department of Development Affairs. The exercise revealed the presence of 1,535 informal businesses in the main industrial regions, of which 300 were randomly selected and interviewed. The regions covered include Yangon (127 firms), Mandalay (72 firms), Bago (30 firms), Taunggyi (41 firms), and Monywa (30 firms). The actual sample used is somewhat smaller (263 firms), since firms with 10 or more workers are excluded. Since the sample of firms was randomly selected, it is not necessarily representative of the informal sector in the surveyed regions. Thus, results based on ES data should be treated with caution since their findings pertain to the sample of firms surveyed rather than to the informal sector population at large.

Even though the micro enterprise sector employs a large share of the Myanmar workforce, and though it is likely to grow as the country develops economically, micro enterprises are often overlooked in official policies and development plans. This Note is intended to describe the activities of this sector, highlighting the challenges faced by micro entrepreneurs and the opportunities that exist to improve the outcomes of this sector. The Note starts with an overview of the micro enterprise sector and the challenges it faces. It then continues with a discussion of the types of employment generated by this sector, followed by a set of policy recommendations for the creation of better and more inclusive micro enterprise jobs in the future.

Micro Enterprises in Myanmar

Micro enterprises abound in Myanmar. According to MPLCS, there are over 5.4 million such enterprises in the country—or almost 1 micro enterprise for every 2 households. The distribution of micro enterprises varies substantially across regions, with Yangon accounting for the largest proportion (18 percent), followed by Ayeyarwa (14 percent) and Mandalay (14 percent). The regional distribution is largely due to differences in the population size of the regions. There are some differences in the number of micro enterprises per person (or household) across states, but these differences do not seem to significantly explain differences in the total number of micro enterprises across states.

There are 73 micro enterprises for every 100 households in urban areas of Myanmar, compared with only 41 such enterprises per 100 rural households. Currently, the level of urbanization in Myanmar is low, with the MPLCS showing that about 73 percent of all households reside in rural areas. Hence, it is

no surprise that about 60 percent of the micro enterprises in Myanmar are located in rural areas, whereas only 40 percent are in urban areas (Figure 4.1). However, consistent with the findings in other parts of the world (discussed below), a typical urban household is more likely to have a micro enterprise than a rural household is (Figure 4.2). Thus, we can expect the role of micro enterprises in Myanmar to increase with urbanization in the near future.

Figure 4.1
Urban-Rural Distribution of Micro Enterprises

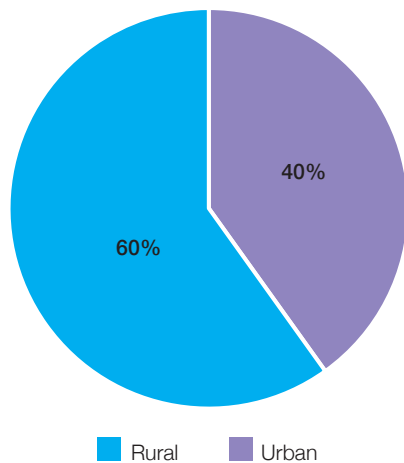
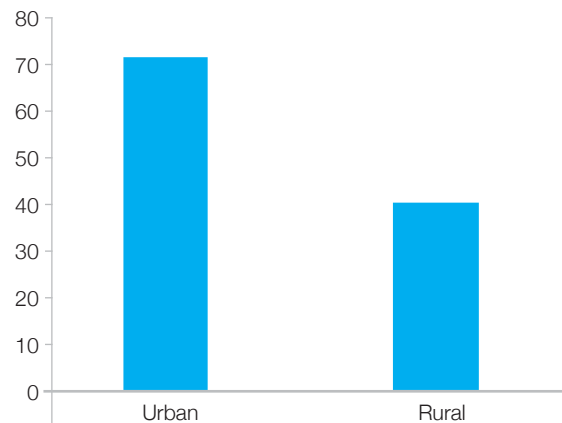


Figure 4.2
Number of Micro Enterprises per 100 Households



Source: MPLCS (2015)

A majority of micro enterprises are established businesses and are found in the services sector. The average age of a micro enterprise in Myanmar is about 8.7 years, but enterprises in urban areas are older on average (9.2 years) than those in rural areas (8.3 years). Thus, micro enterprises on average survive long enough to learn and grow over time. A typical surveyed micro enterprise operated for about 9.6 months in the last year – with urban enterprises operating a bit longer (10.7 months) and rural enterprises operating a bit less (8.8 months). Monthly sales average about 461,000 kyat for all micro enterprises in Myanmar, but are much higher for enterprises in urban areas (618,000 kyat) than in rural areas (353,000 kyat). In terms of activities, about a quarter of all firms are involved in street and related sales services, about 20 percent are engaged in food processing, woodworking and garments; and 20 percent are in hospitality, retail and other services. The services sector accounts for 60 percent of all micro enterprises, followed by the manufacturing sector which accounts for 26 percent. The large concentration of micro enterprises in the services sector is common to other countries as well. There is not much difference in the distribution of economic activity and industrial sector between rural and urban areas in Myanmar except for the fact that services sectors account for a higher percentage of micro enterprises in urban areas (63 percent) than in rural areas (56 percent), while a smaller share of urban micro enterprises is outside of either manufacturing or services (10 percent, compared to 18 percent in rural areas).

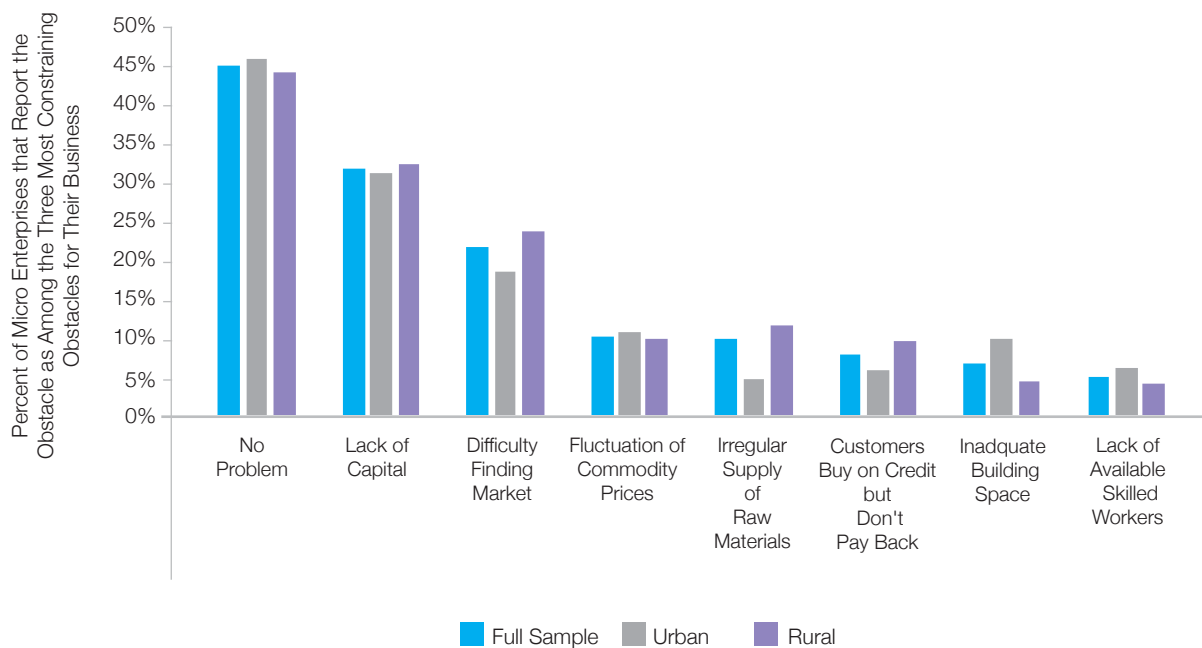
Micro enterprises operate at the street-level, with few links with the formal sector or organized traders. Close to 50 percent of all micro enterprises operate from inside a home, with this percentage being higher in rural areas (53 percent) and lower in urban areas (43 percent). Only 14 percent of all firms (20 percent in urban areas and 10 percent in rural areas) operate in traditional markets or from a shop in a commercial area. Most micro enterprises (about 90 percent) primarily serve local consumers or the passersby, and very few have traders and formal sector firms as their main customer. Thus, linkages between the large formal sector firms and micro enterprises are rare.

Limited access to finance is the most commonly factor cited by micro enterprises in Myanmar as being among the greatest obstacles to their operations. In the MPLCS, micro enterprises were asked to rank the top three obstacles for their operations from a list of 18 obstacles that included electricity, lack of capital, and finding markets. Firms were also allowed to supply any other obstacle not included in the list, as well as state that they face no problem. About 45 percent of the firms chose to say that they faced no problem— more than any other single obstacle. The second most common chosen obstacle was lack of capital, chosen by 32 percent of the enterprises, followed by difficulty in finding markets (22 percent), and fluctuations in commodity prices (10 percent) (Figure 4.3). There is no noticeable difference in the proportion of the responses from urban and rural areas, except that finding a market is somewhat more commonly chosen by rural firms (24 percent) than by urban firms (19 percent). Similarly, in the ES, 39 percent of micro enterprises identified access to finance as one of their greatest obstacles—a greater share than selected access to land (19 percent) or inadequate power supply (14 percent) (Figure 4.3).

The limited access to finance and lack of adequate capital for Myanmar’s micro enterprises may be driven by the same constraints as have been shown to be a severe problem for small and medium firms. Lack of access to capital can come from, among other reasons, lacking proper collateral, having limited or no credit history, informational asymmetry about credit worthiness, and the requirement to have informal connections and or make payments to obtain a loan. Arguably, these factors are likely to be of a bigger concern for micro enterprises, many of which are not even registered, than they are for small and medium enterprises (Levy 1993, Beck et al. 2002). Nevertheless, micro enterprises can be profitable investments, with some studies estimating returns to capital can be higher than the market interest rate (McKenzie and Woodruff 2008). Thus, poor access to credit seems to be a constraining factor for the growth of micro enterprises.

Figure 4.3

Top Obstacles Faced by Micro Enterprises in Myanmar



Source: MPLCS (2015)

Objective indicators also reveal that micro enterprises in Myanmar face poor access to financial services. Less than 4 percent of micro enterprises have a bank account for business purposes—much lower than in other countries for which this information is available such as Guatemala (21 percent), Argentina (31 percent), Peru (33 percent), and Rwanda (78 percent). Furthermore, between 43 to 50 percent of micro enterprises in Myanmar appear to be credit constrained, which is a comparable share than in other countries.⁶

Having access to finance does not necessarily lead to capital accumulation, which itself is necessary for micro enterprises to grow over time, improve productivity, and create more jobs and higher incomes. According to the MPLCS, about 13 percent of micro enterprises in Myanmar received a loan in the last year, of which 47 percent used the loan mainly to buy inventories, 34 percent used it for operational capital, and only 12 percent used it to buy land, building, and machinery and equipment likely to boost productivity in the medium and long term.⁷ The share of firms using loans to invest in capital accumulation is particularly low in urban areas (5 percent) compared to in rural areas (17 percent). These figures echo findings from other countries that show that micro enterprises tend to spend the credit they do receive on working capital rather than on capital accumulation. For instance, in the case of women entrepreneurs, studies have shown that finance in the form of cash is often spent on non-business related and unproductive activities (Fafchamps et al. 2011, Arrairz et al. 2012, Grimm and Paffhausen 2014).

Formalization, the process of bringing the unregistered sector within the folds of the formal economy, is often considered another important step in improving the productivity of unregistered micro enterprises and increasing their contribution to the overall growth and development of the country. In Myanmar, 61 percent of micro enterprises cited the fact that there were no substantial benefits to be gained from registering as a reason for their not doing so, indicating that the formal sector needs to be made more attractive if more firms are to formalize. Over 50 percent of firms stated that high registration costs and cumbersome registration procedures also dissuade them from registering. Some of these high registration costs and cumbersome procedures might be the product of both the Ministry of Industry and DICA sharing responsibility for micro enterprise registration, causing many duplicate registrations. Another cost of registration is the taxes that registered firms must pay—a factor that 57 percent of micro enterprises claimed disincentivized registration. On the other hand, a limited, though not negligible, share of firms reported that formalization brought benefits through better access to finance (24 percent), having fewer bribes to pay (23 percent), and being able to issue receipts to attract customers (20 percent).

⁶ Credit constrained firms are those that did not apply for a loan in the last year because of complex application procedures, high interest rates, high collateral requirement, insufficient loan amount or maturity, or because they did not think it would be approved. Credit unconstrained firms are those that did not apply for the loan because they have no need for one. The remaining firms are the ones that applied for a loan, but for whom it is not clear if they received what they wanted. Classifying these remaining firms as either credit constrained or credit unconstrained provides the upper and lower limits for the share of credit constrained firms in the country.

⁷ Although micro finance institutions can lend up to US\$5000, the average lending size of these institutions in Myanmar is around US\$400-US\$500. A loan of this size can only serve the need of supplying working capital.

Box 4.3: Capital-Centric Support to Household Enterprises in Post-Conflict Zones

Post-conflict zones are often impoverished, lack markets, have weak institutions, and are poorly connected to the economy at large. Individuals in these areas are often more asset poor than those who live elsewhere, both due to the loss of assets during the conflict, and to a failure to invest in or acquire human and physical assets given uncertainty about the permanence of peace limits and reliance on short-term survival solutions.

At the same time, small services and manufacturing providers are important for areas depleted of markets. A challenge for these areas is to jumpstart small business activity when capital and assets are scarce and risks are high. Stimulating self-employment programs and targeting the most vulnerable groups (the poorest, women, and high-risk men) could be the path to increase their employability and reduce poverty.

Capital-centric interventions to support household enterprises are perhaps the most effective means of getting people to work and sustainably earn income in post-conflict settings. These interventions provide start-up grants, cash infusions, or in-kind capital transfers, coupled with training or supervision. Capital injections are not consumed, but are instead used to add a new income stream to impoverished households, particularly after political crisis or natural disaster. They empower people rather than creating a dependency, particularly when earnings are extremely low. Examples of such programs include:

- The “Targeting the Ultra Poor” (or TUP) program, which provides livestock to the poorest households along with basic training on health and livestock care, short-term income support, and other services. Results from seven countries show that consumption or earnings increased from 10 to 40 percent among the beneficiaries, and that there they shifted from casual labor to farm self-employment.
- Uganda’s WINGS program targeted 15 ultra-poor households in the most war-affected districts, offering a 5-day business skills training, a cash grant (\$150), and support and supervisions to become (micro) traders. A randomized evaluation showed that these households almost doubled their earnings when they started small trading enterprises.

Taking into account the prevalence and success of micro enterprises in Myanmar, along with the pressing need to act quickly to promote peace and show government support in post-conflict zones, this type of program holds great promise.

Sources: Blattman et al. 2015, Banerjee et al. 2015

Micro Enterprise Jobs

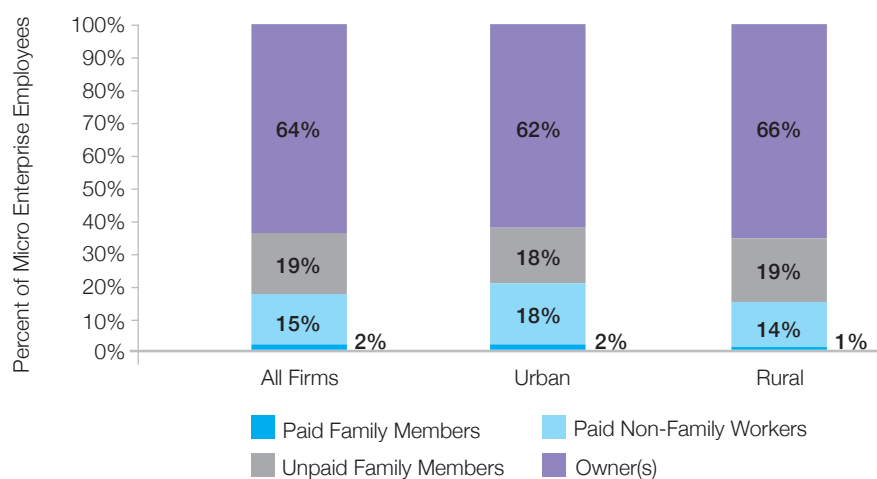
Micro Enterprise Employment Trends

About 9.6 million people identify work in a micro enterprise as their primary job.⁸ About 62 percent of the micro enterprises in Myanmar are operated by the owners with no other workers. Another 18 percent of firms employ an additional worker, 9 percent employ 2 additional workers, and only about 5 percent employ more than 2 workers. The large size of micro enterprise sector in terms of employment and unpaid labor is consistent with the international experience.

Wage employment is low in Myanmar’s micro enterprise sector. About 64 percent of all workers in micro enterprises in Myanmar are owners of enterprises, while 19 percent of these workers are unpaid family workers, 2 percent are paid family members, and the remaining 15 percent are paid, non-family workers (Figure 4.4).

Figure 4.4

Distribution of Workers in Household Enterprises, by location



Source: MPLCS (2015)

Employment patterns vary according to the education level of the main enterprise owner. Of the workers employed by enterprises whose owner completed secondary school, 54 percent are the enterprise owners (compared to 66 percent for enterprises whose owner completed high school or less education), and 34 percent are paid, non-family workers (compared to 14 percent in enterprises with less educated owners). This implies that as the education level in Myanmar increases, the structure of employment in the micro enterprise sector will shift increasingly from self-employment to wage employment. This is important since wage employment requires that employers be aware of processes and laws for paying wages or for providing social security and other benefits, which are irrelevant to the self-employed.

⁸ This Note reports 9.6 million people working in micro enterprises while Figure 6 in the Overview document reports 8.7 million working in these small firms. The disparity is due to unpaid family workers, who are not included in the Overview document’s map of jobs but are included in this Note’s discussion.

The number of workers employed per micro enterprise is roughly same across rural and urban areas. Urban areas account for about 41 percent of the total employment in micro enterprises while rural areas account for the remaining 59 percent—a proportion that echoes the distribution of micro enterprises between urban and rural areas (Figure 4.5). This implies that, even as Myanmar urbanizes, increasing the number of people employed in the micro enterprise sector will require increasing the number of micro enterprises in the country. Since urban areas tend to have more micro enterprises per household than the rural areas, we can expect the number of micro enterprises in Myanmar to increase with urbanization, thus driving up micro enterprise employment. The results of the MPLCS suggests this is already happening, since about 80 percent of the urban workforce is employed in micro enterprises compared with 49 percent of the rural workforce (Figure 4.6).

Figure 4.5
Rural-Urban Micro Enterprise Worker Distribution

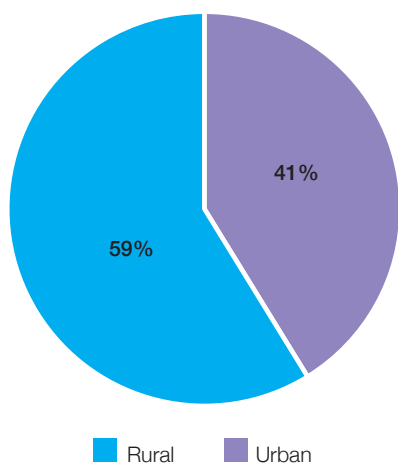
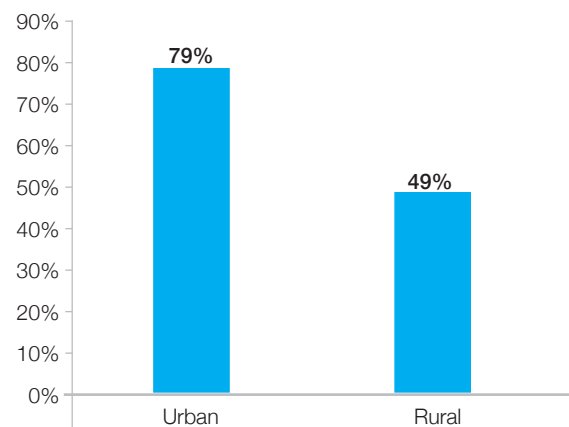


Figure 4.6
Share of Workforce Employed in Micro Enterprises



Source: MPLCS (2015)

Most micro enterprise workers are employed in the services sector. Even though micro enterprises in the manufacturing sector employ more workers per firm (2.5 workers compared to 2 workers in the services sector), the services sector accounts for a larger share of employment given the higher concentration of micro enterprises in this sector. About 55 percent of micro enterprise workers are employed in the services sector, while only 30 percent are employed in manufacturing. There is less variation in the types of activities that micro enterprise workers engage in, with 22 percent of workers employed in each of the top three activities: food processing, woodworking and garments; street and related services; and hospitality, retail and other services.

About 59 percent of micro enterprises have a female owner, and these firms account for two-thirds of employment in the micro enterprise sector (Figures 4.7 and 4.8). Enterprises with a female owner employ more workers on average than those with a male owner (2.5 workers compared to 1.8 workers). This holds for both the urban as well as rural areas. Global trends show that, as women enter the labor force, limited wage employment opportunities, coupled with responsibilities of providing care to the family, force many women to start a micro enterprise. Therefore, addressing the specific concerns of women entrepreneurs in the micro enterprise sector would help increase the number and quality of jobs in Myanmar’s micro enterprise sector.

Figure 4.7

Share of Employment in Micro Enterprises (%), by Firm Owner's Gender

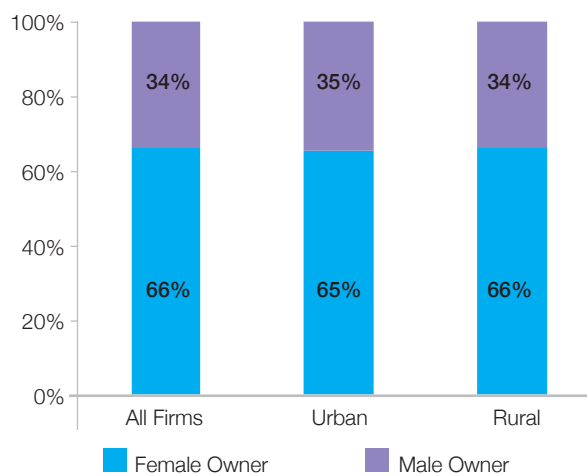
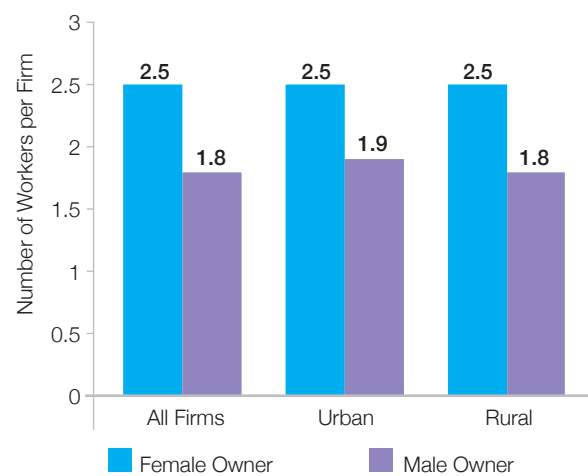


Figure 4.8

Average Workers per Micro Enterprise Firm, by Firm Owner's Gender



Source: MPLCS (2015)

About 85 percent of micro enterprise workers are employed in enterprises whose owners have no higher education (greater than grade 11). Only 8 percent of micro enterprise owners have completed secondary school, and their firms account a comparably small 9 percent of the sector's employment. The low share of secondary school graduates in the micro enterprise sector is in line with their small share in total adult population in the country. However, enterprises whose owner completed secondary school employ more people per firm (2.4 workers) than enterprises whose owner have not done so (2.2 workers). Thus, as education levels increase in Myanmar, employment by micro enterprises can be expected to rise. Similar expectations can be made regarding enterprise owners that have undertaken vocational training.

The physical location of micro enterprises also influences how many people they employ. While half of all micro enterprises in Myanmar operate out of a home, such enterprises account for a somewhat higher share (54 percent) of the sector's employment. About 85 percent of the sector's employment is provided by firms whose main customers is passersby or local consumers—proportional to the fact that these firms account for 90 percent of all micro enterprises. Micro enterprise employment also varies by region. Four states account for about 55 percent of the micro enterprises employment: 16 percent are employed in Yangon, 15 percent in Ayeyarwaddy, 14 percent in Mandalay, and 11 percent in Saging. Meanwhile, the 5 states with the fewest micro enterprises account for only 10 percent of the sector's employment.

Micro enterprises do not add workers as they age. The share of workers employed in micro enterprises firms that are 5 years old or younger (54 percent) is proportional to the prevalence of these firms. Similarly, the number of workers per enterprise does not vary much age. This suggests that, in terms of employment, micro enterprises in Myanmar do not grow into small or medium enterprises over time, indicating an important limitation to how much this sector can contribute to the overall growth and dynamism of Myanmar's economy in the long term.

Micro Enterprise Owners: Women, Migrants, and Vocational Training Graduates

Close to 60 percent of micro enterprises have a woman owner. There is a substantial presence of women as owners of micro enterprises in Myanmar: about 59 percent of the primary owner of micro enterprises is a woman, while 64 percent of micro enterprises have at least one female owner. Furthermore, in urban areas specifically, women are more likely than men to own micro enterprises, as 26.5 percent of urban women are micro enterprise owners compared to 23 percent of urban men.

The large presence of women in the micro enterprise sector in Myanmar is consistent with the broader finding in the literature that suggests that micro enterprises may be particularly attractive to women due to their low capital requirement and the ease of combining family work with business activity that they offer. However, it is also possible that women face additional problems in obtaining formal employment compared to men due to being less educated, and due to social attitudes towards women's work and gender specific discrimination. Regardless of the reason, the substantial presence of women as owners implies that the problems specific to female entrepreneurs identified in the literature—such as limited access to finance, the need to balance work with family responsibility, social attitudes towards women's work—need to be addressed through appropriate policy measures (see for example, Carter and Shaw 2006, Shelton 2006, Taylor and Newcomer 2005, Chagnati and Parasuraman 1996).

Individuals who migrated from another town or country (immigrants) are more likely to be involved in micro enterprises than urban natives are. That is, about 25 percent of immigrants own a micro enterprise compared with 17 percent of the non-immigrants. Consequently, while immigrants comprise about 20 percent of the total population in Myanmar, they are the primary owners of 28 percent of the micro enterprises in the country, and at least one of the owners for 37 percent of the micro enterprises.

There is a small but growing body of work that highlights both the greater tendency among immigrants to become entrepreneurs as well as various problems that immigrant entrepreneurs face—including poor knowledge about existing markets, limited access to finance and connections with the local population (Fairlie and Woodruff 2010, OECD 2010, Marchand and Spiegel 2014). The poor assimilation of immigrants into labor markets could be one factor that pushes immigrants into becoming entrepreneurs. Some of the problems that immigrants face can be tackled through appropriate assimilation policies, thus strengthening the contribution of immigrants as entrepreneurs.

Individuals with vocational training are twice as likely to be an owner of a micro enterprise than those with no such training. The MPLCS reveals that micro enterprises are more common among individuals who have received vocational training. About 34 percent of individuals with vocational training own a micro enterprise (as first or second owner) compared with just 17 percent of individuals with no vocational training. The difference holds in the urban and rural areas, although the gap is much larger in rural areas (39 compared to 15 percent) than in urban areas (30 compared to 24 percent). However, having a formal education does not significantly impact one's chances of owning a micro enterprise either in the full sample or in urban and rural sub-samples.

A large body of work highlights the importance of education or human capital for economic development, although the topic of the importance of education or vocational training for micro enterprises is relatively unexplored. The relationship between education and owning a micro enterprise can be complex. On the one hand, better education increases the chances of finding wage employment in the formal sector, lowering the need to work in a micro enterprise. On the other hand, better education increases the returns to self-employment and entrepreneurship, thereby increasing the gains from working in micro enterprises. This issue is particularly important as the government of Myanmar attempts an overhaul of the education system and increased budgetary allocation to the sector to about 5 percent in 2015/16.

Micro Enterprise Job Quality

The quality of jobs provided by micro enterprises as measured by the wage rate is a concern around the globe. Like other enterprises, micro enterprises generate income for the owners of the factors of production that they use. We restrict the analysis here to labor income, as data limitations do not allow a proper estimation of returns to capital and entrepreneurship (in the form of profits). For labor income, the MPLCS provides information on the total wage bill for non-family paid workers. However, information on the labor income of the self-employed and of the family members working in micro enterprises is not available. To overcome this, we compute the average monthly income for the paid non-family workers in Myanmar, and apply it to all the workers (paid or unpaid, family or non-family, and owners) to obtain an estimate of the total labor income of micro enterprises in Myanmar. This average wage is also computed separately for urban and rural areas.

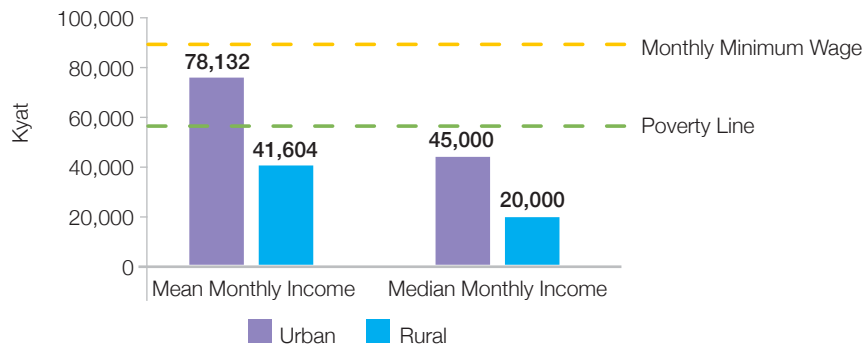
A majority of wage workers in Myanmar micro enterprises earn less than the stipulated minimum wage and poverty line. The mean monthly income of non-family paid workers equals 58,657 kyat. However, there is a concentration at the upper end of the scale, meaning that the median wage is much lower, at 30,000 kyat. The minimum daily wage in Myanmar is 3,600 kyat, equivalent to a 90,000 kyat monthly minimum wage if we assume there to be 25 working days per month. Thus, the mean monthly income of workers in micro enterprises is below the minimum wage level, but just above the poverty line of USD 1.90 per day.⁹ However, it should be noted that, even though the mean income is above the poverty line, the median income, which is that of a majority of workers, is below the poverty line (Figure 4.9).

As expected, the mean monthly income of workers is much higher in urban areas (78,132 kyat) compared to in rural areas (41,604 kyat)—although both lie below the monthly minimum income (Figure 4.9). Median monthly incomes for both rural and urban areas (45,000 kyat and 20,000 kyat respectively) fall below both the minimum wage and poverty line. The mean urban monthly income alone is above the poverty line. However, income varies by the type of activities the micro enterprises engage in, with street sellers earning the least, and laborers in mining, construction and manufacturing earning the most (Figure 4.10).

⁹ The exchange rate used is 1 USD = 948.3 kyat, creating a poverty line at 56,105 kyat per month. Data source is World Development Indicators, World Bank.

Figure 4.9

Micro Enterprise Sector Income, Compared to Minimum Wage and Poverty Line

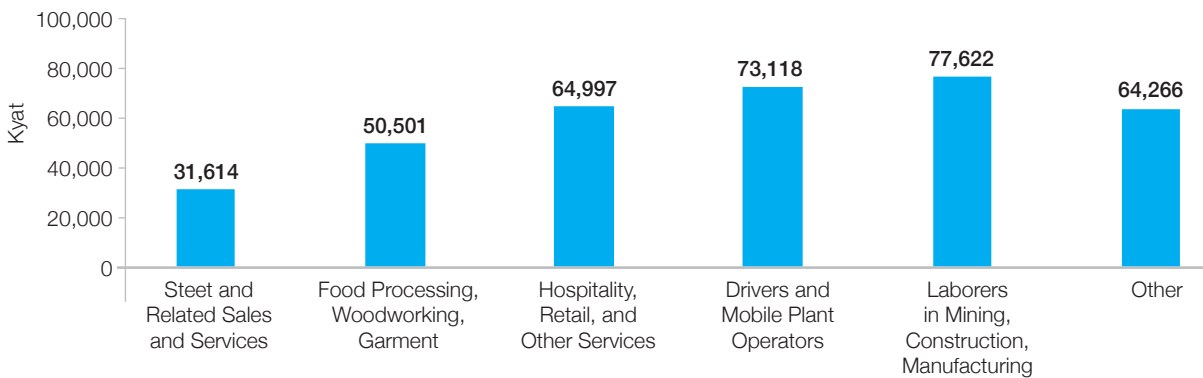


Source: MPLCS 2015

Note: i) Minimum monthly income equals 90,000 kyat based on the assumption of 25 working days in a month. The daily minimum wage equals 3,600 kyat. ii) The poverty line equals 56,105 kyat per month based on USD 1.9 per day poverty line of the World Bank and exchange rate of 1 USD= 984.3 kyat.

Figure 4.10

Average Monthly Income per Worker, by Activity



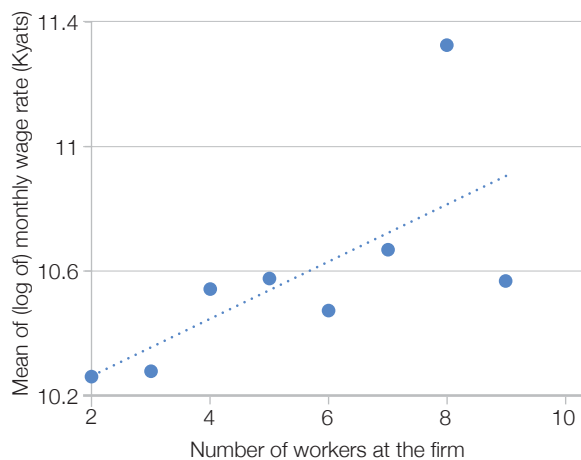
Source: MPLCS 2015

Larger micro enterprises pay higher wages than the smaller ones. The small size of micro enterprises makes them more inefficient, and is often regarded as a reason for their low productivity, low income, and lack of dynamism. The MPLCS shows that the average monthly income of a worker rises significantly as firm-size (by number of workers) increases, and that this holds even after accounting for differences across firms in their location (rural or urban, as well as by state) and business activity (Figure 4.11).

While micro enterprises provide employment to about half of all workers in the country, their contribution by way of labor income is much lower, equivalent to less than 10 percent of GDP. If we apply the mean monthly income to all micro enterprise workers (including family workers and owners) and adjust the annual figure for the number of months a business is in operation, we get total annual labor income of all micro enterprises in Myanmar equal to 6,779 billion kyat—equal to 9.3 percent of Myanmar’s 2015 GDP. Micro enterprises in urban areas contribute about 63 percent of the total labor income, while the remaining 37 percent comes from enterprises in rural areas. The finding is consistent with the literature that states that wages paid by micro enterprises are low, to the point of often being at subsistence levels.

Figure 4.11

Wage Rate with Employment (no controls)

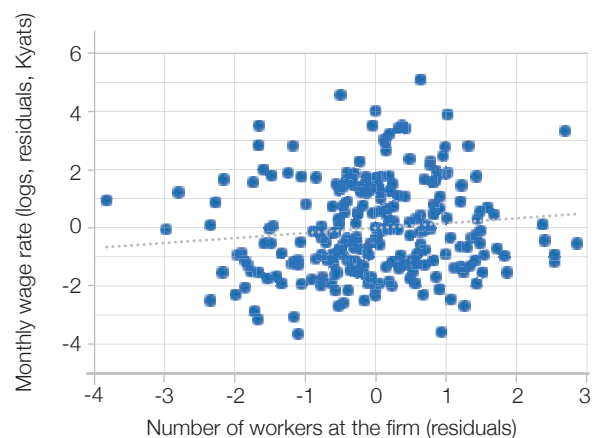


Source: MPLCS (2015)

Note: Figure 4.12 is a partial scatter plot obtained by plotting the residuals from the regressions. The Y-axis plots residuals from the regression of (log of) monthly wage rate of a non-family worker on rural vs. urban dummy, dummy variables indicating the state (15 states) where the firm is located and dummy variables indicating the business activity (6 activities). The X-axis plots residuals from the regression of number of workers at the firm that has one or more non-family paid worker on rural vs. urban dummy, dummy variables indicating the state (15 states) where the firm is located and dummy variables indicating the business activity (6 activities). The relationship shown in figure 4.12 is statistically significant at the 5 percent level.

Figure 4.12

Wage Rate with Employment (with controls)



coef= .09079528, (robust) se= .040907, t= 2

Thus, one task for policymakers is to provide support to improve micro enterprise labor productivity under the understanding that this would improve their labor income.

Micro enterprise labor productivity in Myanmar is comparable to that of other countries at similar income levels. Estimates of sales per worker or labor productivity are available from the ES data for Myanmar as well as for sixteen other countries in Africa and Latin America.¹⁰ However, due caution is needed in using these data as they are not representative of the micro sector at the national or even the city level in each country. Local information on the location of micro businesses was used in the sampling methodology, and the quality of local information varies across countries. Furthermore, the various surveys were conducted in different years, which complicates cross-country comparisons due to exchange rate fluctuations and other country-specific shocks. With these caveats in mind, we use labor productivity as the comparative performance measure of the firms. Labor productivity is defined as total (monthly) sales divided by the total number of workers at the firm during a normal month over the last year.

The ES shows that the median value of labor productivity in Myanmar equals USD 290. This is comparable to the median labor productivity value in the other surveyed countries, with Myanmar in fact performing slightly better than most. This is true even if we account for differences across countries in firm size, firm machinery use, GNI per capita, and age of the firm. Meanwhile, mean productivity in Myanmar was almost twice as high as median productivity elsewhere, reaching USD 673. This implies that there are some firms in Myanmar with very high productivity, while most firms have much lower productivity.

10 The sixteen other countries include: Angola, Argentina, Botswana, Burkina Faso, Cabo Verde, Cameroon, Dem. Rep. of Congo (DRC), Côte d'Ivoire, Ghana, Guatemala, Kenya, Madagascar, Mali, Mauritius, Peru, and Rwanda. As for Myanmar, the survey of informal firms in these countries were restricted to the main urban areas and simple random sampling methodology was followed. The surveys were done in various years between 2009 and 2013.

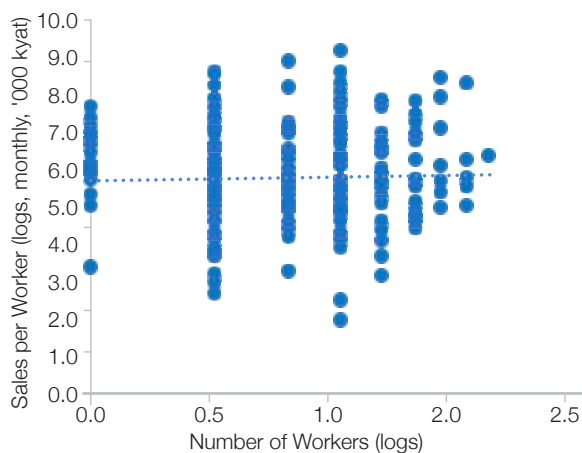
Labor productivity does not rise by firm size in Myanmar, unlike in other countries (Figure 4.13). Thus, increasing micro enterprise firm-size at the margin is unlikely to significantly bolster labor productivity levels. This is different from the findings in other countries, where large firms size is often associated with increasing returns to scale, and therefore higher productivity. However, some literature suggests that larger firm size may lower productivity by increasing the costs of evading government regulations (Amin and Islam, 2015). Regardless of the reason for this discrepancy, raising micro enterprise productivity in Myanmar will require looking elsewhere for policy solutions.

Labor productivity level is significantly higher for micro enterprises whose managers have completed higher education (secondary education, university degree or vocational training) compared to enterprises whose managers have either no education or only a primary education (Figure 4.14). This finding holds even after accounting for differences in firm characteristics, including firm size, age, sector of activity, gender of the primary owner, years of manager experience in the field, region (city), use of machinery, electricity access, losses due to crime, and access to finance as a major obstacle for its business. The role of education in improving labor productivity has been discussed in the literature, although much of this literature focuses on the formal sector (Echevin and Murin 2009, Bertrand and Schoar 2003). La Porta and Shleifer (2014) argue that the higher education levels of managers in the formal sector makes formal firms more productive than unregistered (or informal) micro enterprises. In short, providing better education to entrepreneurs in the micro enterprise sector could help address the low levels of productivity in the sector.

Labor productivity is lower for firms that report access to finance being a severe obstacle. Micro enterprises commonly suffer from lack of capital and poor access to finance. According to the MPLCS and the ES, lack of capital or poor access to finance is one of the most commonly cited top obstacles faced by micro enterprises in Myanmar. The low productivity and lack of proper credit worthiness of micro enterprises can result in banks and other financial institutions not extending credit to them. The ES data show that labor productivity is likely to be significantly adversely affected by poor access to finance. The labor productivity of the 29 percent of surveyed the firms who noted in the survey that access to finance is a severe obstacle to their operations is much lower than the labor productivity of other surveyed firms (Figure 4.15).

Figure 4.13

Labor Productivity by Firm-Size



Source: Enterprise Survey, 2014

Figure 4.14

Median Monthly Sales per Worker, by Owner Education

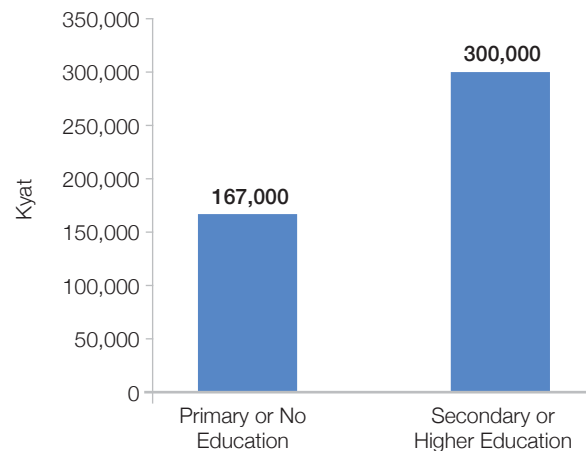
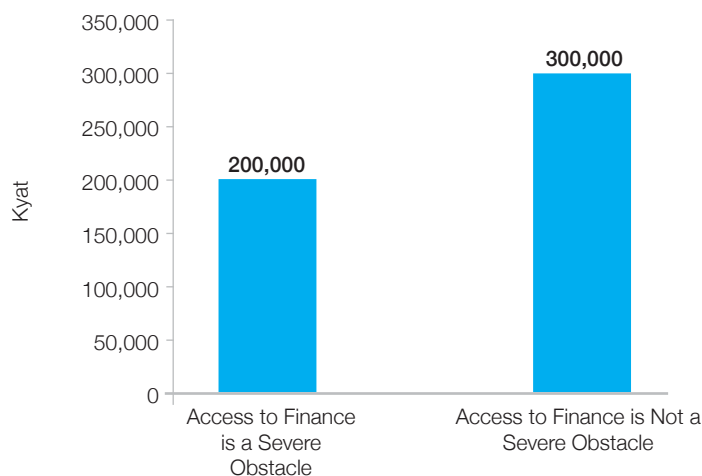


Figure 4.15

Median Monthly Sales per Worker, by Access to Finance



Source: Enterprise Survey, 2014

Frequent power outages affect almost 90 percent of micro enterprises, hurting their productivity. A well-functioning physical infrastructure system plays a key role in the development of the private sector. The ES data show about 83 percent of the surveyed micro enterprises report one or more incidents of power outage in the last month. In that month, total hours of power outages equaled an average 15 hours across all firms, and 19 hours on average for firms that reported facing at least one power outage. The more conservative former figure implies production loss of an average 2 working days (of 8 hours each) in the last month across all firms due to power outages. Lack of adequate power supply can severely constrain the functioning of private and public firms. This may be particularly important for micro enterprises who often operate outside the law and therefore do not have proper access to electricity and other public utilities.

Policy Priorities for More and Better Micro Enterprise Jobs

Given that the majority of micro-enterprises have very low productivity and contribute little to the overall growth and dynamism of the economy—despite the large share of workers they employ—they would benefit from targeted support to help them access finance, skills, and markets. Since a large share of micro enterprise owners are women, the design of these programs will need to take a gendered angle.

Expand Access to Finance

Access to finance for microenterprises in Myanmar is constrained by the limited size of the financial sector. The Myanmar financial sector is small, and by the end of 2016, there were only little more than 150 microfinance institutions (MFIs) in operation to serve over 2 million clients with a loan portfolio of about USD 300 million. While local and foreign-owned MFIs were able, early-on, to enter the Myanmar market and rapidly expand, current regulations based on the 2011 Microfinance Law constrain the growth of the financial industry. In particular, caps and ceilings on interest rates and limitations on funding—namely cumbersome approval procedures for borrowings by MFIs, and limits on microfinance loans size—are major obstacles to the continued sustainable operations and financial viability of many MFIs. Since banks in Myanmar currently do not serve the small business sector, a financing missing middle exists for small firms that have outgrown the products that MFIs are authorized to provide while remaining too small to be

of interest to banks. Regulatory and supervisory reforms in the financial sector are an important element of financial sector reform complemented with financial infrastructure including payment system, credit information, collateral registration, and risk mitigation instruments such as guarantee and credit insurance.

Rapid technological advancements offer a great opportunity for the development fintech in Myanmar, requiring a flexible regulatory system that allows for experimentation and innovation while ensuring consumer protection and financial stability. The development of mobile financial services would likely yield rich financial returns for Myanmar. Successfully providing credit to micro and small enterprises requires that financial service providers introduce dedicated products and adopt a distinct approach for serving this market. To do so, financial institutions in both the private and public sector will need substantial capacity building and will need to adopt new methodologies, such as risk based.

Improve Skills of Micro Enterprise Workers

Increasing the skills of micro enterprise workers, owners, and managers, be it through the education system or through vocational training, would raise the size and productivity of the micro enterprise sector. The four types of skills that should be targeted are: technical skills, business and management skills, financial literacy skills, and social skills.

Technical skills are those related to the production process, and are crucial for workers to become more efficient and productive in producing the good or service that they will sell.

Business and management skills include skills about marketing, pricing and costing, inventory management, and customer service. These also have a substantial impact on firm-performance, but are often neglected in traditional education and vocational training systems (Bloom and Reenan 2010, Aterido and Hallward-Driemeier 2011).

Financial literacy skills include standard financial literacy ability, knowledge on keeping track of expenses and revenues, appreciating the advantages and disadvantages of loan contracts, and evaluating interest rates and inflation effects. These are particularly important for household enterprises that often blend business and personal costs and revenues. These have been taught in programs like the International Labor Organization's Start and Improve your Business program, the GTZ/CEFE program, and the UNCTAD/EMPRETEC program, which focus on maintaining business records and encourage small business owners to separate households from business finances.

Socio-behavioral skills in self-confidence, leadership, creativity, risk propensity motivation, resilience, and self-efficacy are essential for entrepreneurs who need to manage relationships with suppliers and with clients, remain self-motivated, manage risk, and get complex jobs done (Boyd and Vozikis 1994; Luthje and Franke 2003; Rauch and Frese 2007; Cassar and Friedman 2009; Teixeira and Forte 2009; Hytti et al. 2010; Cloete and Ballard 2011, World Bank 2010). These have been taught in programs like the Personal Initiative Training program in Uganda, which aimed to make business owners more proactive and self-starting with respect to new ideas and opportunities, and more persistent in overcoming barriers. The program focused on developing socio emotional skills, such as problem resolution or communication. These skills are beneficial for customer satisfaction and business success, especially in the versatile world of services. Program evaluations found that this program successfully improved micro entrepreneurs' personal and socioemotional skills, and positively impacted their business growth (Glaub et al. 2012).

Skills that workers and entrepreneurs gain from working in the micro enterprise sector should also be more formally recognized. International experience shows that there are many benefits to the recognition,

validation and accreditation of skills gained through work in the informal economy. This recognition can help entrepreneurs further their learning and career opportunities. For skills to be recognized, they need to be evaluated and certified based on demonstrable competency. Certification can be particularly useful for specific sectors. For example, in the construction sector, the absence of skills certification forces workers to accept low skilled work even if they have sufficient experience to undertake skilled work—resulting in their being underutilized and less productive. Programs to certify skills from micro enterprise activities have successfully been implemented in countries such as Ghana through the National Vocational Training Institute (NVTI), and Cameroon through the Groupement Interprofessionnel des Artisans (GIPA).

Skills development programs must be designed to provide targeted support to disadvantaged groups such as the poor and women. To start, such programs must be financially accessible. While those enterprises and individuals who are able to pay for training should be required to do so, the government should ensure that there is adequate funding for skills development of groups for whom the attainment of education, skills development and, ultimately, decent work is often a considerable challenge. Training programs should also be designed with gender in mind. Policies to help female entrepreneurs can include: setting up a special service center for female entrepreneurs to provide support such as information about market opportunities and existing government programs; the provision of loans to female entrepreneurs and with minimum collateral requirements; and conducting of public awareness programs to change societal attitudes towards women’s involvement in economic activities.

Increase Access to Markets

Lack of access to product and input markets is one of the most commonly cited obstacles to micro enterprise activities in Myanmar.

A key role for policymakers is that of communicators and educators about new market developments, including changes in demand, regulations, standards, and certification requirements. Marketing support and market information can be provided through micro enterprise service centers such as trade fairs, online facilities, or short courses on such topics as accessing markets and forging long-term buyer-supplier links. Such centers are particularly important to industries, such as tourism and hospitality, that are growing quickly and offer a number of forward and backward linkages. Particular care must be given to widely disseminating information on government policies and opportunities to get public support in exploring and accessing new markets. Micro enterprises should be further provided with grants, subsidies, tax credits or low-interest commercial loans for new product development and to support their participation in trade fairs and exhibitions. This support should cover various stages of development, including identification, design, prototype development, modification, production and assembly.

Links between micro enterprises and the formal economy, as well as between micro enterprises themselves, must be developed and strengthened. Business matching services linking micro enterprises to the rest of the economy can be created through many channels, including online portals that match buyers and sellers. To help micro enterprises learn from each other, local-level business associations should be set up to allow the owners of micro enterprises to come together and share their experiences.

Legal institutions should also be designed to take into account the needs of the micro enterprise sector. First, cost effective and easily accessible mechanisms for resolving business and contractual disputes concerning the micro enterprise sector should be developed. Second, since close to 20 percent of micro enterprises are in foodstuff and another 10 percent in small restaurants, food safety and quality standards and certification mechanisms should incur relatively low compliance cost for micro and small enterprises. Third, cost effective and easily accessible mechanisms for resolving business and contractual disputes concerning micro enterprise sector should be set up.

Encouraging the development of, and facilitating access to, information technology can close existing information gaps and open linkages to broader supplier and customer markets. Micro-enterprises are already using information technology for business. For example, anecdotal evidence finds that customers place orders on Facebook pages of their favorite suppliers. Alibaba, China's e-commerce website, has transformed a number of small micro enterprise owners into wealthy entrepreneurs. However, social media tools and mass e-commerce sites are not always the most effective platform for many business processes. Instead, a range of web-based apps that are accessed on cellular phones have been developed, such as those that aggregate orders for the bulk buying of inputs, those that facilitate accounting and recordkeeping, or those that customers can use to place orders. Furthermore, the gig economy is creating new opportunities that will need to be populated by micro enterprises. For example, around the world, Grab and Uber have opened opportunities in the transport sector, TaskRabbit provides short jobs for the service industry, and Airbnb makes anyone a provider of lodging services. Importantly, these job opportunities are technology based, operating through apps. Developing such technology can unleash market demand for the types of goods and services best provided by micro entrepreneurs. For this to be effective, government will need to develop appropriate e-commerce laws and ensure access to electricity and communications networks. The government can also play a role in subsidizing start-ups offering promising apps for micro enterprise use, and in sponsoring clinics or marketing to micro enterprises to inform them about the technology and teach them to use it.

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NOTE 5:

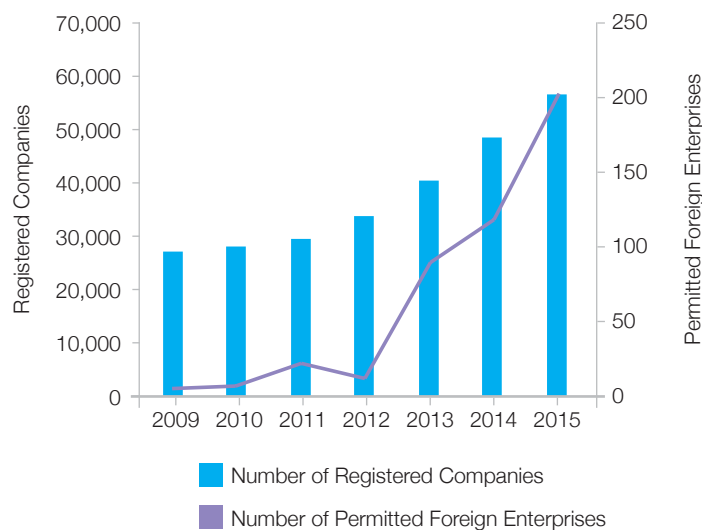
PRIVATE SECTOR JOBS IN MYANMAR¹

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The opening of Myanmar’s economy to trade and investment in 2010 marked a new beginning for private sector development.² In the early 1990s, after two decades of failed economic development using a controlled economic system and import substitution policies, Myanmar started transitioning towards a market economic system. Nevertheless, the state maintained control over various aspects of private sector activity, such as trade licenses and foreign exchange, while state-owned enterprises (SOEs) continued to be granted preferential control over lucrative sectors of the economy. However, in 2010, the pace of change began to accelerate. The Myanmar government fully dismantled its control over the exchange rate, privatized network industries (i.e. transportation and telecom), and reduced import licenses. Those changes caused real GDP and investment to grow by an annual average of 7.3 percent and 19.6 percent respectively between 2010 and 2015. More importantly, during that 5-year span, the number of registered private companies almost doubled, and the number of foreign enterprises permitted under Foreign Investment Law increased 30-fold (Figure 5.1)³

Figure 5.1

Number of Private Businesses in Myanmar



Source: CEIC

These changes are important for Myanmar’s jobs agenda because the expansion of Myanmar’s private sector has been, and will continue to be, a driver of job creation. The more pressing questions, however, are whether this market reform and growth will lead to a private sector development that maximizes job growth in Myanmar, and whether there is a role for government to support such a jobs-friendly private sector development. Answering these questions requires knowing which firms, industries, and business models create more jobs, which create better jobs, and what kinds of public sector interventions can support their growth. To this end, this Note identifies the types of firms that have been the drivers of job creation and destruction over the past few years in Myanmar. Since most firms only supply the domestic market, we consider what this growing domestic market could mean for jobs in the private sector. The Note next explores the potential of foreign direct investment (FDI) and integration into global value chains (GVCs) to create more and better jobs. Services exports, specifically travel and tourism, have been a labor-intensive export sector and a growing source of jobs in Myanmar, and thus merit a separate analysis.

² This Note explores the private domestic sector, excluding small-scale family farming and household enterprises. These small-scale family enterprises are explored in the Agriculture and the Micro-Enterprise Notes.

³ These are foreign firms established through 2012 Foreign Investment Law (FIL). In 2017, Myanmar will use a unified Investment Law to facilitate new investments, domestic and foreign.

Finally, the Note proposes policies to support those firms that are most likely to be the source of future good jobs in Myanmar.

Job Creation and Job Destruction

Net job creation in the private sector has been positive and strong, averaging 13% per annum between 2012 and 2014. The increase in private sector activities in Myanmar following the further opening of Myanmar's economy to trade and investment has been accompanied by growth in the number of private sector jobs. Though the total number of jobs in the private sector is low relative to the size of the labor market—only 1.7 million jobs in a potential labor force of 35.4 million—the rate of job growth in the private sector has been high due to its low initial base. This growth reflects how more jobs are being created through the entrance of new firms and expansion of existing firms than are being lost as existing firms contract or exit the market.

New firms contributed the greatest share of employment growth. Data from the updated 2014 and 2016 Enterprise Surveys revealed that most of the growth in job creation between these years was driven by entrants (new firms) rather than the expansion of existing firms. Between 2014 and 2016, job creation from entrants grew at 18 percent per year, and from surviving firms at 7 percent a year (Figure 5.2).⁴ In terms of proportion, entrants contributed about 74 percent of job creation, while the rest came from surviving firms. The contribution of entrants to job creation is particularly large in the manufacturing, retail and other services sector. The rate of job creation from these expansions offset annual job losses caused by surviving firms that contracted (experiencing 4 percent job loss rate a year) and by firms exiting the market (experiencing a 10 percent job loss rate a year).

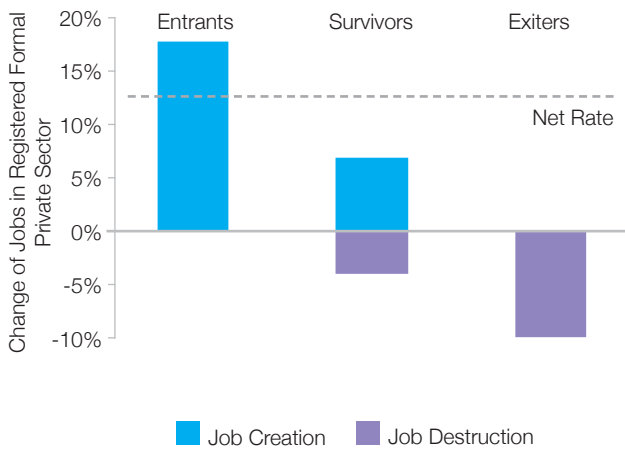
Both micro enterprises (having up to 4 employees)⁵ and large establishments (having at least 100 employees) are contributing significantly to job creation. While micro enterprises contributed nearly 40 percent of the jobs created through the entry of new firms, an additional 34 percent of job creation came from the entry of large firms (Figure 5.3). In other words, three quarters of the jobs created by new firms entering the market came from the entry of the very smallest and the very largest types of firms. The notion that young firms in Myanmar drive most of job creation is aligned with the findings of most other countries (Ayyagari et.al. 2011).

⁴ Surviving firms are those that appeared in both the 2014 and 2016 Enterprise Survey, and are referred to as “survivors.” “Entrants”, meanwhile, are those that appeared in the 2016 but not the 2014 survey, while “exiters” are those that appeared in the 2014 but not the 2016 survey.

⁵ In this Note, micro enterprises are defined as those who have four or fewer employees. This differs slightly from the definition used in Note 4 on micro enterprises, which described enterprises with ten or fewer employees. The chapters necessarily use different data sources, each of which defines micro-enterprise based on different firm sizes. However, most micro-enterprises employ only the owner, so the definitions capture similar firms, in practice.

Figure 5.2

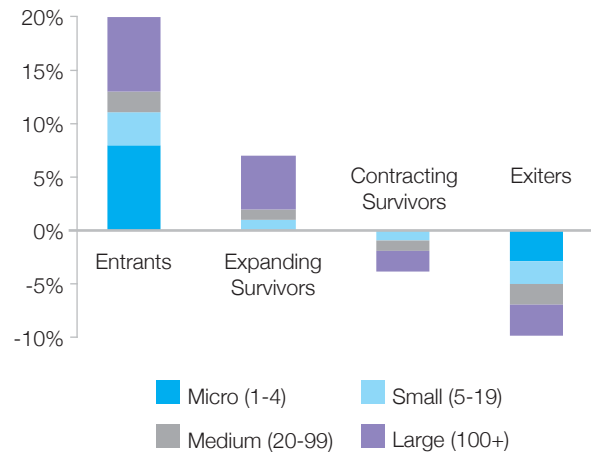
Job Turnover, by firm entry/exit status



Source: World Bank (2017)
 NOTE: This figure shows the break-down of the average annual economy-wide employment growth rate between 2014 and 2016.

Figure 5.3

Job Turnover, by firm size



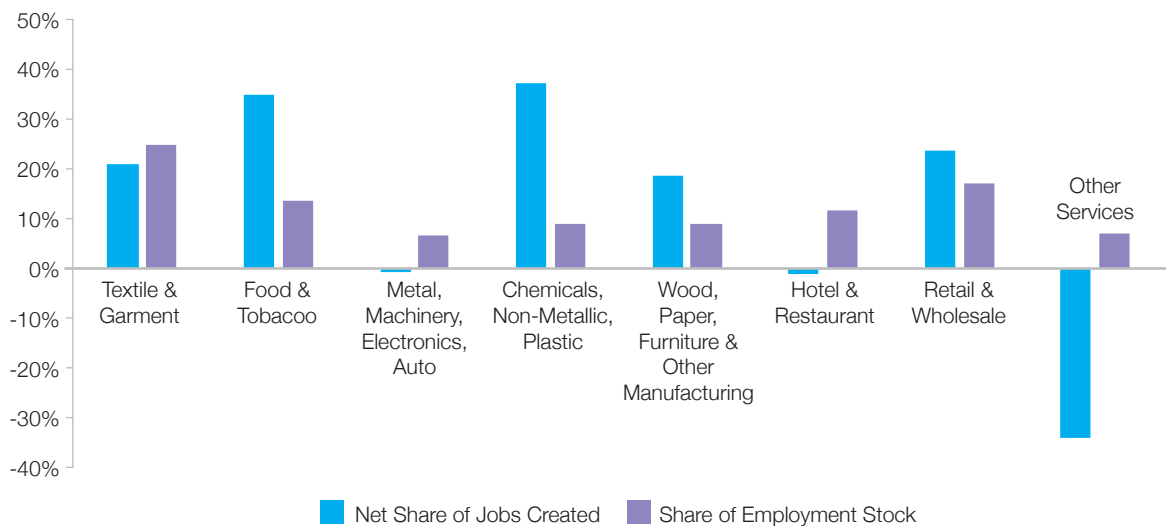
Source: World Bank (2017)
 NOTE: This figure shows the break-down of the average annual economy-wide employment growth rate between 2014 and 2016.

Despite the importance of new, large firms in creating jobs, large firms that did not exit the market were responsible for the largest share of job destruction, pointing to high job churning, wherein workers cycle into and out of firms. Among survivor firms, large firms both created and destroyed more jobs than firms of any other size (Figure 5.3). The high rate of hiring and firing could indicate that active hiring and lay-offs among large firms are part of their strategy for survival, improved efficiency, and adjustment to market changes. However, this churning may also reflect the fact that employers are facing difficulties in retaining workers since workers can move to other firms in search of slightly better wages. Anecdotal evidence from interviews with garment factories suggest that, indeed, the high turnover of workers is due to competition in hiring (Rahardja et al. 2016). Job churning can be very important for Myanmar since it can lead to workers getting higher wages or finding more suitable jobs in more productive and competitive firms—although it also requires that firms with little prospect of surviving exit the market and shed their jobs. Nonetheless, it is important for Myanmar to allow private firms to redeploy resources to respond to emerging opportunities and create better jobs, even if this entails an enterprise exiting a market and re-investing its resources into another, more competitive, venture. For workers, it is important that they can find new jobs that match their expectation and skills qualification.

Job creation in Myanmar has been particularly strong in sectors linked to the global economy and in sectors serving the growing domestic consumer class. Data from the 2016 Enterprise Survey suggests that firms in textile and garments industries employ the largest share of workers in Myanmar’s non-farm, non-government, non-micro enterprise private sector, and contributed the most to net job creation (Figure 5.4). This supports the notion that manufacturing and exporting activities responded significantly to the reintegration of Myanmar with the global economy. Meanwhile, the food, tobacco, and chemicals sectors contributed the most to net job creation, whereas other services sector (IT, construction, transport) destroyed the most net jobs (Figure 5.4).

Figure 5.4

Net Job Creation Among Surviving Firms, by Industry (2014-2016)



Source: WBG team estimate from 2016 Enterprise Survey. Data consists of firms with at least 5 employees in non-farm business.

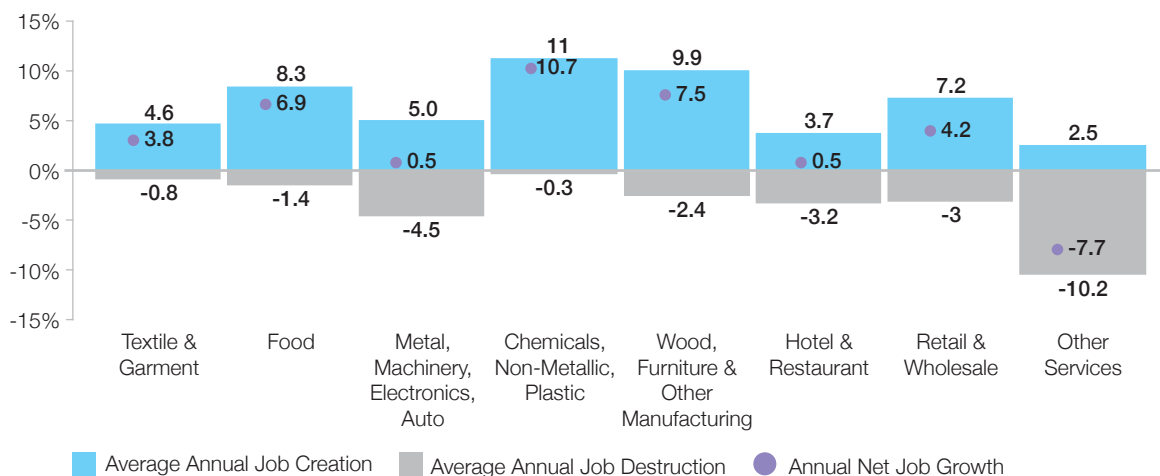
Strong job churning is also taking place in sectors where there are both firms expanding and firms contracting the number of jobs they offer. Despite positive net job creation across most sectors, job losses have been observed within firms in nearly all sectors. In some sectors, notably metal, machinery and electronics, hotels and restaurants, and a range of other services, the job losses outweigh the job gains (Figure 5.5). This implies that the job market in Myanmar’s manufacturing and services sectors is quite fluid.

Job creation and destruction are largely driven by domestic firms, while most foreign firms are net job creators.⁶ About 83 percent of workers in the formal private sector are employed by domestic firms, so it is not surprising that they contributed significantly to job creation and job destruction. However, a greater share of foreign firms added or dropped workers than of domestic firms. Only 43 percent of foreign firms, compared to 67 percent of domestic firms, neither created nor shed jobs—with 43 percent of them creating jobs and 14 percent shedding jobs. (Table 5.1). This higher rate of job churning among foreign firms could be driven by their expanding or adjusting to improve their productivity.

6 Foreign firms are defined here as those whose equity is at least 10 percent foreign-owned.

Figure 5.5

Net Job Creation Among Surviving Firms, by Industry (2014-2016) (%)



Source: WBG team estimate from 2014 and 2016 Enterprise Survey on firms with at least 5 employees in non-farm business. Notes: Average annual job creation is the annualized job growth rate for firms that created jobs. Average annual job destruction is the annualized job growth rate for firms that shed jobs. Average annual job growth rate includes all firms (whether firm created jobs, contracted jobs, or neither created nor contracted jobs). Job growth rates are annualized assuming a compound growth function and a delta of three periods.

Table 5.1

Contribution to Job Creation and Job Destruction (2010-2012), by ownership status

Ownership Status	% of total jobs created	% of total jobs destroyed	% of Firms that created jobs	% Firms that reduced jobs
Foreign (at least 10% foreign ownership)	5.5	15.7	42.9	14.3
Domestic	94.5	84.3	27.3	5.2

Source: World Bank staff estimates using 2014 Enterprise Survey data.

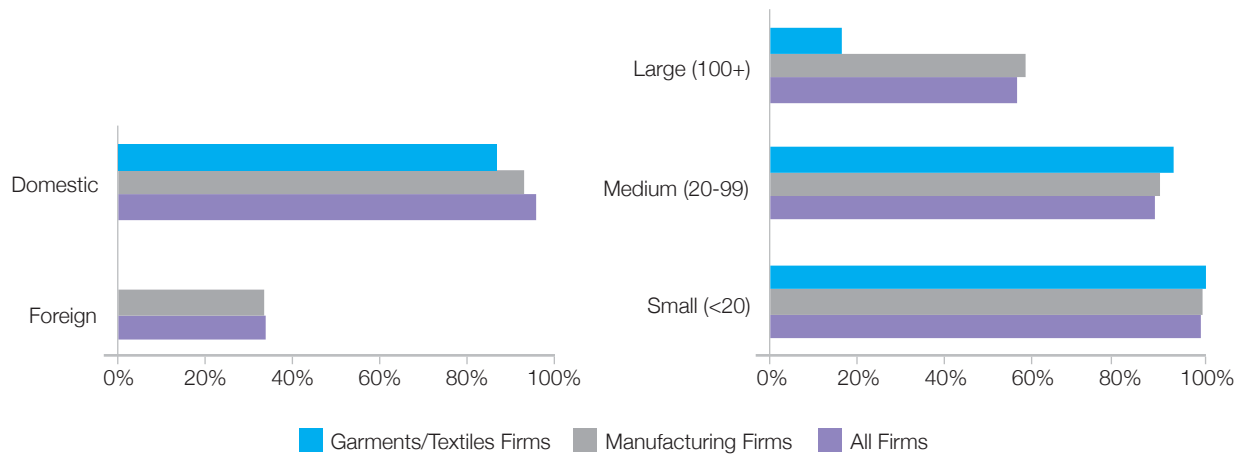
Leveraging Domestic Market Potential: Jobs from a Growing Internal Market

Like in most other countries, a large proportion of firms in Myanmar produce their goods and services solely for the domestic market. This is not unusual considering that becoming an exporter often requires considerable cost and a steep learning curve.⁷ Figure 5.6 shows that around 95 percent of firms in Myanmar only supply to the domestic market, and that this share tends to be greater for small and medium firms, for firms located outside of the main business cities (Yangon and Mandalay), and for firms outside the garment sector. According to a CSO and UNDP 2015 Myanmar Business Survey, 58 percent of small and medium firms are concentrated in food and beverage production, retailing, and services (as, for example, food vendors, cafeteria, and restaurants)—exactly those industries showing the greatest job growth (Figure 5.6).

⁷ See, for example, Roberts and Tybout (1997) showing how exporting involves significant sunk costs.

Figure 5.6

Firms Supplying Only the Domestic Market

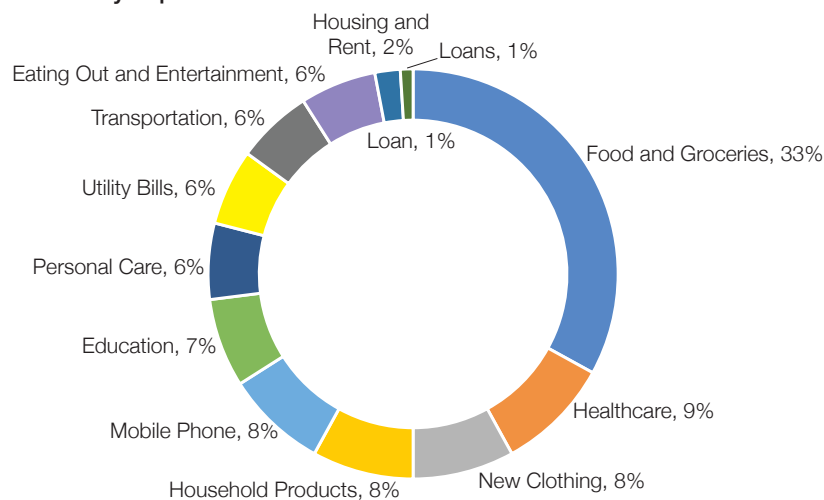


Source: WBG staff estimates from 2014 Enterprise Survey

The sizeable and growing Myanmar internal market offers non-exporting firms opportunities to expand business and create jobs. A first key driver making Myanmar’s domestic market attractive is its large, relatively young population. Myanmar, with a population of 53 million, is the 26th most populous country in the world, and 28 percent of this population is under the age of 14—compared to 20 percent for the rest of the East Asia Pacific (EAP) region. Second, Myanmar is relatively urbanized. About 13 percent of Myanmar’s population (over 1 million people) is already living in urban areas, whereas only 11 percent of the Cambodian population, and 10 percent of the Indonesian population, does so.⁸ Large concentrations of consumers in urban areas can offer reduced transport costs and economies of scale to producers, which implies greater productivity and the possibility of higher wages—which itself can have a spillover effect of increasing consumption spending. Third, as incomes per-capita increase, Myanmar consumers are likely to increase the share of their incomes used in discretionary spending. Between 2010 and 2015, imports of durable consumer goods grew by 32 percent in Myanmar, compared to 26 percent in Cambodia and 17 percent in Bangladesh.

Figure 5.7

Myanmar Consumer Monthly Expenditure



Source: adapted from Nielsen (2015)

8 World Development Indicators

Growing demand for consumption in durable goods, fresh and higher-quality products, and services can increase jobs opportunities in domestic-oriented firms. Results from marketing research suggest that, every month, Myanmar consumers spent 30 percent of their monthly income on durable and semi-durable goods such as clothing, household products, mobile phones, and personal care (Figure 5.7). Another 6 percent of their monthly expenditures is spent on eating out and entertainment, and 9 percent is spent on health care. The share of income spent on these goods is expected to increase, since they are the types of goods for which consumption increases faster than income does. As urbanization and income per-capita increase, the delivery of a greater number of goods and services will likely occur through the modern sector.

Experience elsewhere in EAP suggest that urbanization and growing per-capita income contributes significantly to a shift in consumers' shopping pattern from traditional markets to modern retailing systems such as supermarkets, chain specialized stores, or specialized services outlets (Reardon, et. al. 2010). The implications of this shift are starting to be seen in Myanmar. For example, the hotels and restaurants and wholesale and retail sectors provide 24 percent of all private sector jobs, and were the source of 29 percent of net job creation in the private sector between 2010 and 2012.

However, firms serving the domestic market, 97 percent of which are SMEs, face numerous constraints in tapping into opportunities in local markets, meaning that their potential for job growth is suppressed. According to the 2016 Myanmar Enterprise Survey, the constraints to their success that domestic-oriented SMEs most commonly cited are: access to credit, access to land, and access to reliable power. These challenges appear to be greater for Myanmar 's domestically-oriented SMEs than they are for similar SMEs across EAP. Only 25 percent of domestic-oriented SMEs in Myanmar had checking accounts, compared to 75 percent of these SMEs regionally. Access to land is a constraint for SMEs in many countries, but the proportion of domestic-oriented SMEs claiming that land is a major or severe constraint is higher in Myanmar than it is in the region on average. To manage risk against power outages, 74 percent of domestically-oriented SMEs invested in their own or shared power generators, compared to only 33 percent of such firms in the region. Beyond the constraints identified in the survey, other challenges faced by SMEs in Myanmar are difficulties in business licensing, and limited use of the internet to communicate with customers and suppliers (Box 5.1).⁹

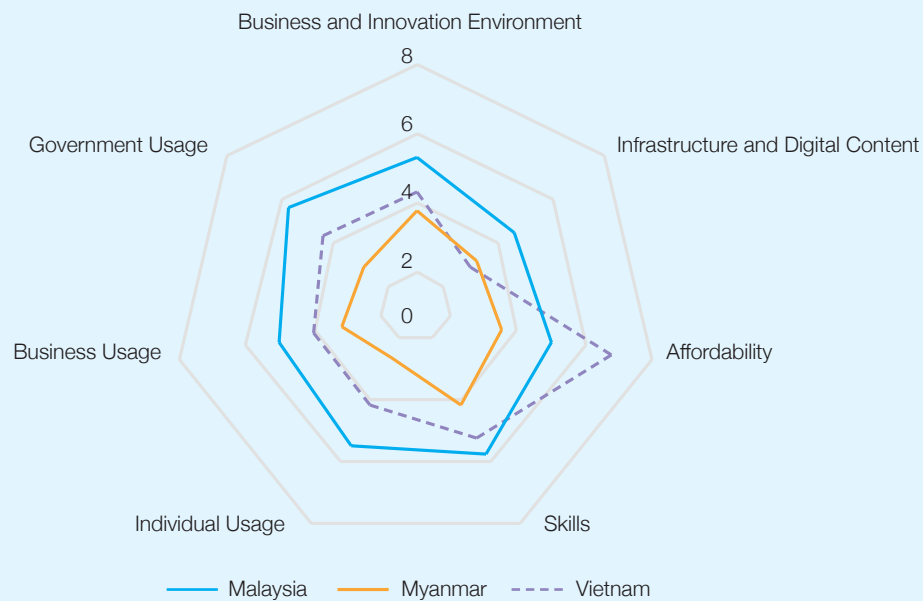
Box 5.1: E-Commerce for Job Creation in Myanmar

Unlike other countries in the region, Myanmar has yet to tap into the use of e-commerce to create jobs. Myanmar is experiencing an explosion in subscriptions for cellular phones, which enable citizens to exchange data through wireless networks. In 2010 cellular subscription per 100 people in Myanmar was 1.1 and in 2015 was 77 — a sixty-seven-fold increase during a time when subscriptions only increased 1.4 times across EAP. E-commerce has the potential to connect suppliers, including informal businesses and micro-enterprises, to customers through on-line trading platforms or cellular phone applications. Nevertheless, e-commerce in Myanmar remains constrained by a number of issues.

⁹ Business licensing does not yet appear to create major problems for domestic-oriented SMEs in Myanmar compared to elsewhere in East Asia. However, the proposal to establish an SME Agency responsible for registering SMEs—that would be separate from DICA, which registers non-SME businesses—has the potential create parallel company registration tracks that would increase the administrative burdens of registration. Meanwhile, SMEs in Myanmar have not yet adopted a culture of internet use to communicate with customers and. The share of domestically-oriented SMEs using emails to communicate with clients and suppliers in Myanmar is half the average share of such firms in East Asia.

Figure 5.8

Network Readiness



Source: <http://reports.weforum.org/global-information-technology-report-2016/networked-readiness-index/>

- Low levels of network readiness (Figure 8). Despite the rapid increase in the use of cellular phones, particularly among youth, Myanmar still scores relatively low in terms of readiness to use digital networks to promote jobs. In particular, Myanmar is behind Vietnam in terms of business and government usage of digital applications, affordability of digital services, and individual usage of digital application.
- Underdeveloped legal frameworks for domestic trade through on-line platforms. Myanmar enacted the Consumer Protection Law of 2014, but could introduce additional regulations to strengthen consumer confidence in purchasing goods and services on-line. Notably, the government could do more to strengthen cybersecurity and data protection to prevent the theft of sensitive consumer data. Myanmar could also strengthen regulations to facilitate on-line payments to reduce the need for cash-on-delivery arrangements.
- Underdeveloped domestic logistics services. Myanmar needs to facilitate growth of reliable domestic logistics services, particularly door-to-door parcel shipment services. Myanmar is ranked 119th out of 160 countries 2017 in terms of the competency of its domestic logistics providers using the World Bank Logistics Performance Indicator, placing Myanmar’s providers behind those of other countries in ASEAN. Relaxing restrictions on joint venture between foreign and domestic logistics services firms would help increase Myanmar capabilities.

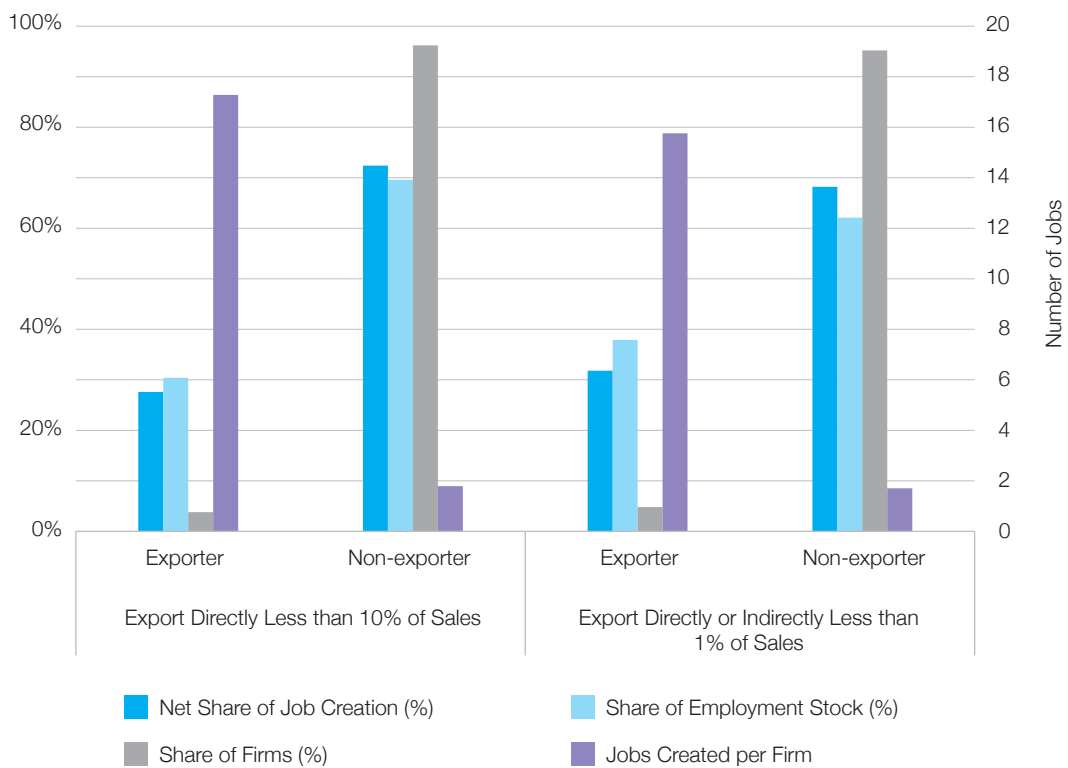
What and How Myanmar Exports Matters for Jobs

Exporting is important both for domestic firms, which can gain increased opportunities to grow by accessing consumers abroad, and for foreign firms, which can export through GVCs. In Myanmar, exporters accounted for 38 percent of private sector jobs in 2014, and they created about one third of new private sector jobs between 2012 and 2014 (Figure 5.9). Most exporting firms tend to be large (68 percent) and of a mature age (81 percent), and those in manufacturing sector are concentrated in the textiles (39 percent of exporters), food (25 percent), and wood and furniture (29 percent) industries.

Despite the importance of exporters to job creation, that less than 4 percent of private firms export directly, and only 1 percent export indirectly—compared to the 10 percent of firms that export on average in EAP, and the 4 percent that export indirectly. Notably, almost a quarter of firms in Bangladesh export, and nearly a fifth of those in Vietnam do so (Figure 5.10). Unsurprisingly, within the industries where exporting firms are concentrated, the share of firms that export is higher than the national average. About 36 percent of firms in the textile and garment industry export, along with 15 percent of firms in the food and beverages industry, and 28 percent of firms in the wood and furniture industry. Meanwhile, 83 percent of foreign-owned firms export, underscoring the importance of attracting FDI to increase the number of firms more likely to create jobs at faster rates.

Figure 5.9

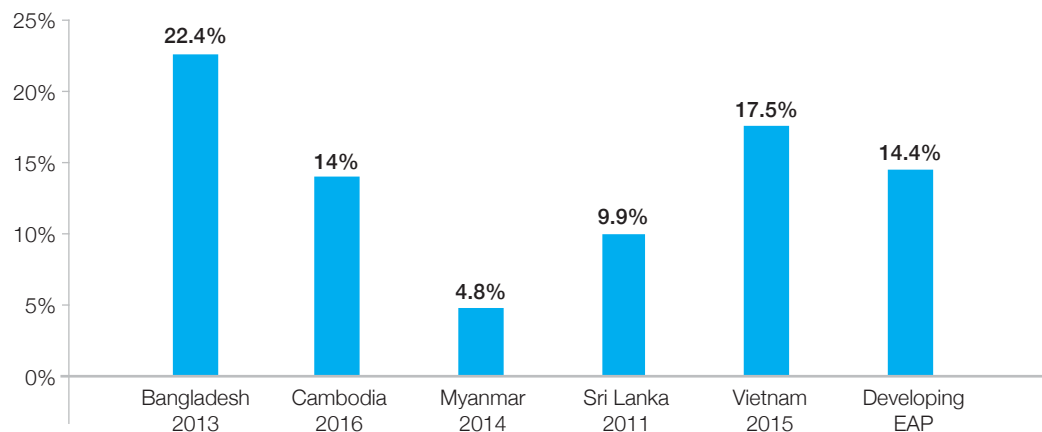
Exporter Job Creation and Share of Employment, 2010-2012



Source: World Bank staff estimates using 2014 Enterprise Survey data

Figure 5.10

Share of Exporting Firms, by Country



Source: WBG staff estimates based on Enterprise Survey data

Empirical studies show that both the content of what a country exports, as well as the market where it sends its exports, affect its economic growth performance and the composition of its labor demand. The structure of a country's exports (i.e. what types of products it exports) affects the types of labor needed to produce those exports. Export structure tends to vary by destination market. Exporting to high-income countries, where consumers have greater preference for goods with higher quality, stimulates the production of high-quality goods, and increases the demand for skilled labor (Brambilla et al. 2012). Evidence from other countries shows that the types of products countries export matter for economic growth (Hausmann et al. 2007), and that manufacturing plants that are more productive export higher-quality goods while paying higher wages to a higher-quality workforce (Verhoogen 2008).

An analysis of Myanmar's trade patterns can be used to better understand the impact of exports on jobs. More specifically, trends in export sophistication by export destination can be examined to infer their implications for labor market outcomes. Six indices or "EXPYs" were constructed to measure the following aspects of labor sophistication: (i) median wage; (ii) median value added per worker; (iii) ratio of skilled to total workers; (iv) output per employee; (v) years of schooling or human capital; and (vi) capital stock per worker. They are also benchmarked—over time, across destination markets, and relative to peer countries—to infer potential implications of export growth on labor market outcomes (Box 5.2). This analysis of the evolution of Myanmar's export basket allows for a better understanding of the potential policy channels that could support improved labor market outcomes in conjunction with improved export outcomes.

Box 5.2: Measuring the labor sophistication of Myanmar's exports

EXPYs reflect the trade-weighted average labor market outcome of the exports that appear in Myanmar's export basket. The logic behind these measures is that the labor market and other characteristics of the economies that intensively export a given product provide information about the implications of specializing in exports of certain products to certain markets, and will determine how export growth will contribute to job creation, wages, and skill mix. Based on these observations, it is possible to draw inferences about how product and regional trade patterns can impact employment, wages, and skill demand in Myanmar.

EXPYs are calculated for each of the six labor-market outcomes (wage, value-added, skill ratio, output per employee, human capital, and physical capital) in two-steps following the framework of Hausmann, Hwang, and Rodrick (2007). The first step in this framework calculates, for each product, a PRODY value, which represents the global trade-weighted average labor-market outcome for all countries that export the product. For example, a wage PRODY reflects the average international wage of countries that export a product, while a skill PRODY reflects the average share of skilled workers of countries that export a product. The second step in the framework calculates the EXPY value, which weights the PRODYs appearing in Myanmar's export basket according to the share of each product in Myanmar's total exports.

The formulas are:

$$\text{PRODY}_j = \sum_i \frac{x_{i,j}/X_i}{\sum_i x_{i,j}/X_i} Y_i$$

$$\text{EXPY}_i = \sum_j \frac{x_{i,j}}{X_i} \text{PRODY}_j$$

where $x(i,j)$ is exports from country i in sector j , X_i is total exports of i , and Y_i is the labor-market outcome of i .

EXPYs reflect the global average labor-market outcome of goods that appear in Myanmar's export basket. The PRODYs and EXPYs are calculated using mirror data from UN Comtrade, World Bank Business Environment and Enterprise Performance Surveys, and Shirotori, Tumurchudur, and Cadot (2010).

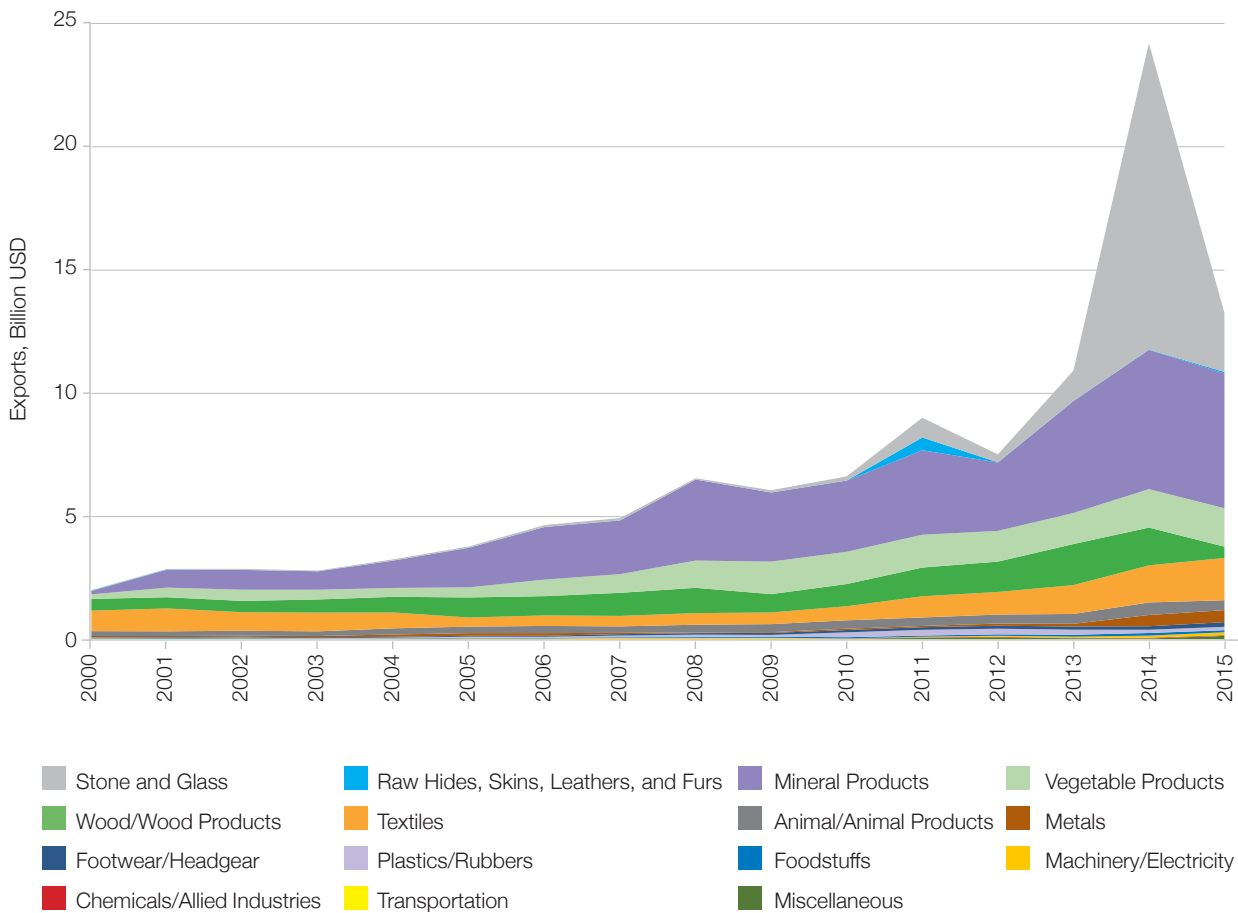
For each of these labor-related EXPYs for Myanmar, we: (i) look at how their levels have changed since 2000; (ii) consider variations in labor sophistication across different destination markets, comparing the average for all Myanmar exports (i.e. world exports) to those destined to the European Union (EU28), the United States, and South Asia; (iii) make bilateral comparisons of labor sophistication with a range of regional exporters, including Pakistan, Kazakhstan, Azerbaijan, Niger, Turkey and Russia; and (iv) repeat each of the above analyses across the entire distribution to see which products are driving the observed differences.

Garments, agriculture, minerals and precious stones dominate Myanmar's export basket, with implications for the number and quality of jobs that exports support. While this composition reflects Myanmar's factor endowments (low-wage labor, land and natural resources), it does not result in a particularly favorable jobs picture. For example, though important for jobs, jobs in garment and agricultural industries tend to be low-wage and low-skilled, while exports of minerals and precious stones support high-wages jobs, but only a small number of them. In addition, these sectors present concerns for worker health and safety. The uptick in outflows of precious stones in 2014 and 2015 is worrying, since jade mining is often associated with poor records in worker safety and with activities in contested areas.¹⁰

¹⁰ For a description of jade mining and trade, see the topic covered by Global Witness: <https://www.globalwitness.org/en/campaigns/oil-gas-and-mining/myanmarjade/>

Figure 5.11

Myanmar Export Basket, 2000-2015



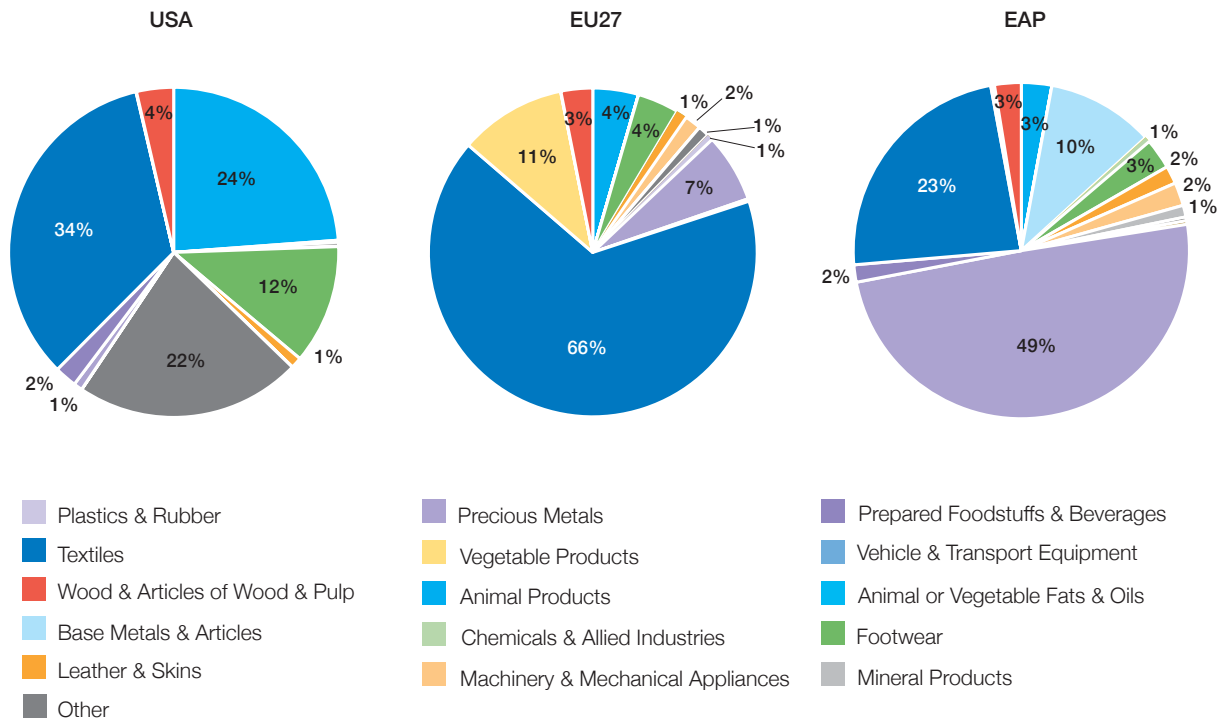
Source: WBG staff estimate using mirror data from UN-COMTRADE

Compared to that of its regional peers, Myanmar’s export basket is more concentrated, though export structure varies by destination market. The Herfindahl Index for export concentration suggests that, although export concentration has decreased since 2008 (after the lifting of economic sanctions by developed Western economies), Myanmar’s export basket is still three times more concentrated than that of Bangladesh. Because of the economic sanctions Western economies placed on Myanmar in the early 2000s, about half of all Myanmar’s exports, primarily of textiles and precious metals, have gone to other countries in EAP. Exports to the EU declined between 2004 and 2012 due to the sanctions, but have since been growing. Exports to the EU are highly concentrated in textiles, and since 2012, exports of vegetable products, precious metals, and, to a lesser extent, animal products and wood and pulp have also been increasing (Figure 5.12).¹¹

¹¹ No exports are reported to the USA between 2004 and 2012. In 2015, most exports to the USA were in other manufacturing. Foodstuffs and leather and skins contributed such small export values that the USA has been excluded from the analysis as a destination market.

Figure 5.12

Myanmar Exports to Key Regional Trade Partners, 2000-2015



Source: WBG staff estimate using mirror data from UN-COMTRADE

Myanmar’s export basket is associated with products that are produced with lower levels of human capital and physical capital per worker, employ fewer skilled workers than the export baskets of most of its peer countries. These trends imply that the jobs tied to Myanmar’s exports are also lower productivity and offer lower wages than those of other countries (Figure 5.13). Notably, compared to peer countries in the region, only Bangladesh has exports with lower human capital and physical capital content than Myanmar does (as measures by EXPYs) Meanwhile, Myanmar’s export based has the lowest skills content among these peer countries. Vietnam’s exports are the most sophisticated of this group, and they have seen an increased inputs content of these exports (except for output per employee). On the other hand, Myanmar’s export basket is about average in terms of wage, value added and output per employee. This suggests that efforts to upgrade quality of Myanmar export baskets through improvement in workers skills are needed.

The level of labor sophistication—measured by the wage, value-added, share of skilled workers, and human capital— embedded in Myanmar’s manufacturing exports to the world has changed little since 2000 (Figure 5.13). Comparing the weighted average values of these export-labor indicators, the EXPY for each of the labor market outcomes has been relatively stable in Myanmar, and there has been little variation in labor sophistication trends of exports to Myanmar’s major trading partners (Figure A1).

Figure 5.13

Labor Sophistication of Manufacturing Exports, 2000 and 2015

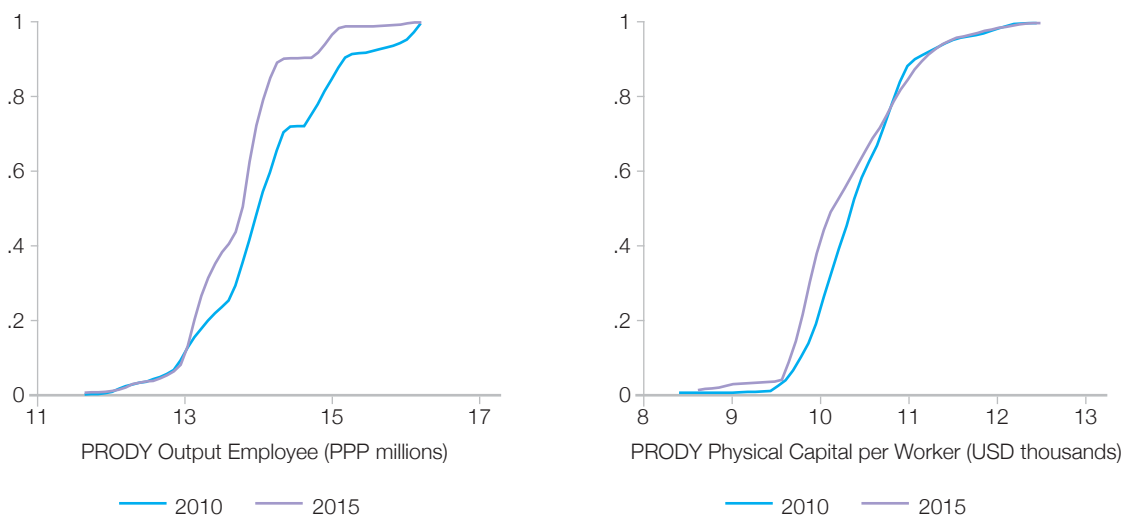


Source: World Bank staff calculations based on mirror data from UN Comtrade, World Bank Business Environment and Enterprise Performance Surveys, and Shirotori, Tumurchudur, and Cadot (2010).

Since 2010, Myanmar has been exporting a greater volume of products associated with lower levels of output per employee and lower levels of physical capital per worker. The product distribution for physical capital per worker and for output per employee have followed negative trends (Figure 5.14 and Figure A2).¹² Exports of products associated with lower levels of physical capital per worker are in line with the country’s comparative advantage. The declining trend in output per employee and physical capital appears to be driven by exports to EAP, given that factor content of exports to the EU remained constant. While exports to the EU have always been concentrated in textiles, exports to EAP have become more concentrated towards textiles and precious metals. Diversification into new, more competitive sectors be as critical for increasing and improving job opportunities.

Figure 5.14

Myanmar’s Manufacturing Export Basket to the World, 2010 and 2015



Source: World Bank staff calculations based on mirror data from UN Comtrade, World Bank Business Environment and Enterprise Performance Surveys, and Shirotori, Tumurchudur, and Cadot (2010)

Attracting FDI and Participating in Global Value Chains (GVCs)

One avenue for expanding opportunities to generate more and higher quality jobs through the private sector is to enhance export diversification by joining and participating in GVCs. The fundamental role of GVCs is in restructuring the location of economy activity. What used to be produced in one factory may now be unbundled and produced more efficiently across a number of different countries. Globally, GVCs are maturing as the pace of this production unbundling slows. Nevertheless, opportunities still exist for new entrants, such as Myanmar, to benefit from GVCs, since international firms continue to look for ways to more efficiently reposition the location of their production. For example, the global apparel industry, one of the few industries whose GVC Myanmar has joined, employed approximately 13.8 million people around the world in 2010/11—equivalent to 5-7 percent of global manufacturing employment (UNIDO). The decisions that firms within such industries make in terms of where to locate their production have large implications on where jobs go, who gets them, and what types of jobs they are (Farole 2015).

¹² Figure 5.14 and Figure A2 examine the distribution of the labor-market indicators across the range of products that Myanmar exports. The cumulative distributions plotted show the cumulative share of products (on the vertical axis) at each value of the PRODY on the horizontal axis.

Participation in GVCs impacts labor markets in a number of ways. For example, firms in GVCs often require higher product quality standards, which often encourages suppliers in GVCs to increased mechanization. With the economies of scale made possible from participation in GVCs and their ties to global markets, capital investments may be more viable. Production in GVCs often becomes less labor intensive, lowering the number of jobs created to produce a given volume of exports. This loss of jobs through decreased labor intensity is, however, often nullified by the increased demand for labor that comes as GVCs increase the total volume of exports. Furthermore, as has been seen in Myanmar (Box 5.3), participation in GVCs can increase job quality, since participating firms offer training to their workers and increase their demand for skilled labor. The benefits of this increased training spill over as workers move from firm to firm, transferring the knowledge embodied in the workforce of exporting firms to other local firms.

Box 5.3: Job Quality and Exporting in Global Value Chains

Does insertion into GVCs improve job quality for workers? The expansion of global production in labor-intensive industries has been an important source of employment generation around the world, and other positive impacts have been achieved through strengthened formal job opportunities. For example, migrant workers and women who previously had difficulty accessing this type of wage work have filled many of these jobs (Barrientos et al. 2010). However, the downward pricing pressure found in many GVCs can simultaneously lead to negative social impacts, and much of the employment in these industries can be insecure and unprotected. Significant challenges exist in ensuring decent work and pay for more vulnerable workers. Poor working conditions (due to ex-ante weak labor regulations) can be exacerbated by welfare-reducing management strategies implemented in low-income countries to meet the quantity and cost demands of trade partners from high-income countries (causing the close association between exports and ‘sweatshops’).

Empirical evidence on the link between participation in GVCs and job quality remains scarce. Harrison and Scorse (2010) found that campaigns aimed at improving working conditions through anti-sweatshop campaigns pushed firms in Indonesia in the 1990s to increase wages for workers in the targeted apparel firms. Looking at Myanmar, and employing various empirical strategies to draw causal evidence on this policy question, Tanaka (2017) found a positive impact of exporting on workplace conditions. That is, exporting firms in Myanmar (proxied by garments firms) were found to have better working conditions than non-exporting firms (proxied by food processing firms), particularly in the areas of occupational safety, employee healthcare, negotiation (between firm management and workers), and wages. Exporting firms were also found to have higher sales, higher employment rates, and higher adoption rates of developed country-recommended management practices. Exporting firms also have a higher likelihood of being audited for their labor standards than non-exporting firms (suggesting that exporting firms are ‘checked’ for their labor standards compliance). These findings are also robust when comparing firms within an exporting industry (garments). Firms producing woven products (which enjoy more lenient preferential tariffs in Japan, and thus are more likely to be exported) have better workplace conditions than firms producing knitted products (which have stricter tariffs in Japan, and thus are less likely to be export).

The findings from this paper can be explained given the various channels through which exports impact job quality positively. First, foreign buyers may pressure Myanmar firms to meet international labor standards as a mechanism to protect their ‘brands’. Another possible explanation is that exporting firms have more incentives to improve working conditions as a means to produce higher value-added quality products. Lastly, investments in progressive workplace conditions may provide increasing returns to exporters, which tend to employ more workers, especially under conditions where the costs of operating in a poor working environment are higher.

These findings underscore certain policy implications for developed and developing countries. First, the evidence in Myanmar supports the view that preferential tariffs in developed countries provided to low-income countries have positive impacts, particularly on improving working conditions. Second, as Myanmar pursues economic reforms and pushes trade liberalization further, market access policies can be sustained using proactive measures that encourage firms to improve working conditions and job quality in their factories.

Despite these opportunities, Myanmar exhibits limited participation in GVCs, thereby deriving limited job gains from exports.¹³ Myanmar's GVC participation indicators are below those of other developing countries in East Asia (Table 5.2).¹⁴ The most prominent GVC industry that Myanmar participates in is that of garments—but even here, participation is limited. As of 2014, only 12 percent of Myanmar manufacturers exported, compared to 26 percent of manufacturers across EAP.¹⁵ Myanmar participation in machinery and electronics GVCs is also limited, although this may change once firms in the Thilawa SEZ start fully operating (Table 5.3).

Linking domestic firms to GVCs so that they participate indirectly can also have an important positive impact on jobs. In addition to directly supporting labor employed in exporting firms, participation in GVC can support labor employed indirectly in firms producing intermediate products domestically, which are then sold to the exporting firms. This is particularly true in the services sector, which produces important domestic inputs to GVC exporters, while remaining a labor-intensive sector. However, the capacity for local firms to supply intermediate materials to exporting garment firms remains limited, and only 3 percent of Myanmar manufacturers supply exporters, compared to 10.5 percent of manufacturers in Vietnam, and 20 percent of manufacturers in EAP (Table 5.2).¹⁶ Similarly, even though many jobs in Myanmar are found in SMEs, the share of these firms linked to GVCs is relatively low compared to other developing countries in the region.

Joining GVCs for foodstuff would improve jobs, especially in rural areas. Myanmar's labor force primarily lives in rural areas, and is heavily engaged in agriculture and small-scale activities around agricultural production. Although the sector is still dominated by small-scale production and benefits from limited coordination, it is already an important exporter of rice in the region, and is the region's largest exporter of beans and pulses. As is common in the region, most exporters of foodstuff are large firms (Table 5.3). However, a large untapped labor force exists in rural areas which could be employed in agricultural production, just as SMES could expand by participating directly or indirectly in agribusiness GVCs, completing such activities as milling, packaging, processing, and logistics.

13 Different firm-level indicators can be used to assess countries participation in GVCs, including import and export intensity, as well as firm ownership type. Given data limitations, we rely on firm-level indicators of GVC participation for this analysis.

14 This observation holds true for all indicators, with the exception of total exported sales.

15 From 1996 to 2012, Myanmar was under economic sanctions that crippled the previously booming export-oriented garment sector. Importing inputs for export is one of the key characteristics of participating in GVCs. In Myanmar, this cycle still limited to the garment industry. Only 24.5 percent of firms across sectors imported their inputs in Myanmar, compared to 41 percent of firms in EAP.

16 Anecdotal evidence from interviews with garment manufacturers suggests that, other than packaging cartons, garment exporters imported almost all of intermediate inputs.

Table 5.2

Basic Indicators of Integration and Participation in GVCs

	Manufacturing firms		Garments/textiles firms	
	Myanmar	EAP	Myanmar	EAP
Share of private foreign ownership in a firm	2.4%	13.8%	11.2%	17.3%
Share of firms exporting directly	12.6%	25.9%	25.3%	25.9%
Share of firms exporting indirectly	3.1%	19.7%	11.0%	12.2%
Share of total sales that are exported	14.1%	15.6%	34.3%	23.2%
Share of firms using imported inputs	24.5%	40.8%	35.9%	50.5%
Share of total inputs that are imported	16.0%	25.4%	32.0%	37.9%

Source: World Bank staff estimates using 2014 Enterprise Survey data.

Table 5.3

Share of Manufacturers that Export Directly or Indirectly (%)

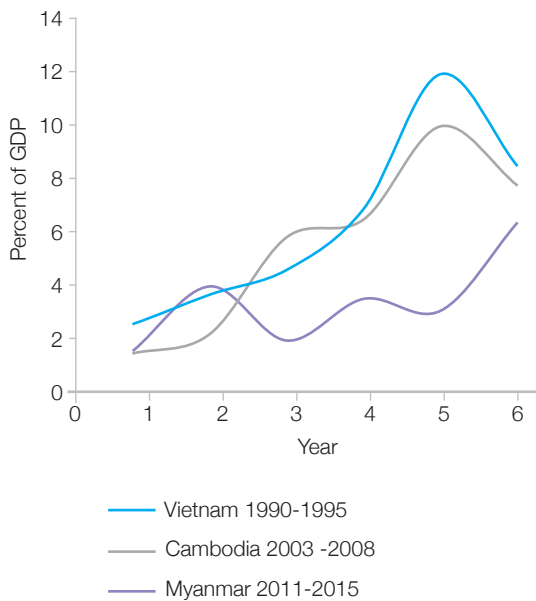
Manufacturing	Myanmar			Developing EAP		
	Small	Medium	Large	Small	Medium	Large
Garments	7.3%	12.1%	83.1%	18.4%	27.7%	66.3%
Foodstuff	15.6%	10.3%	36.0%	12.8%	21.9%	35.1%
Metals and machinery	0%	0%	0%	12.2%	24.7%	49.3%
Electronics	0%	0%	0%	13.5%	24.1%	40.6%
All manufacturing	4.2%	7.6%	62.7%	17.9%	26.5%	51.7%

Source: WBG staff estimate from WBG Enterprise Survey

Myanmar can still do more to attract FDI. FDI inflows have increased rapidly since Myanmar reintegrated with the global economy in 2011. Between 2010 and 2015, cumulative net FDI inflows grew to 3 times that of net FDI inflows from 2000 to 2009. However, Myanmar started from a relatively low base, and can do more to attract FDI since net FDI inflows as a percentage of GDP are low in Myanmar relative to other countries when they first began to liberalize—like Vietnam when it started introducing reforms in the early 1990s, or Cambodia after becoming WTO member in 2004 (Figure 5.15). Between 2011 and 2015, FDI inflows to Myanmar were equivalent to 3.5 percent of GDP on average, compared to 6.3 percent for Cambodia from 2003 to 2008. FDI inflows as a percent of GDP peaked in Myanmar in 2015, yet this peak remained lower than FDI inflows as a percentage of GDP were in Vietnam during Asian Financial Crisis and in Cambodia during Global Financial Crisis.

Figure 5.15

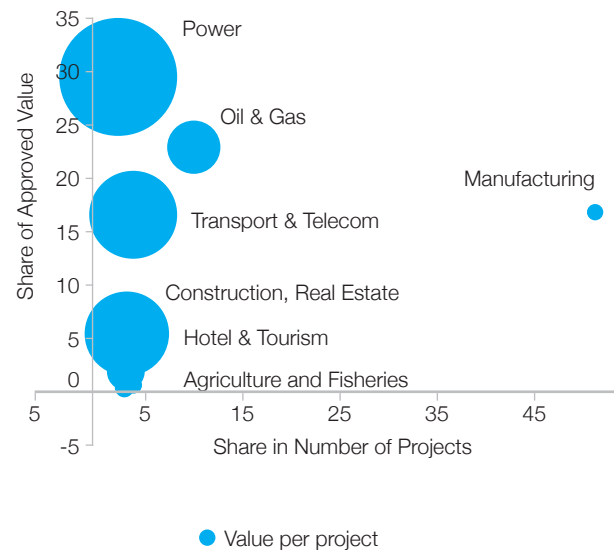
Net FDI Inflows After Liberalization



Source: WDI

Figure 5.16

Sector Distribution of Approved FDI Projects, 2011-2015



Source: WBG staff calculations from CIEC

Attracting and diversifying FDI will be key to enabling Myanmar private sector to join GVCs. The manufacturing sector has thus far attracted the largest share of FDI projects, and about 17 percent of total FDI inflows that entered Myanmar between 2011 and 2015 (Figure 5.16). Most of this FDI directed towards manufacturing went to garment factories. A more limited amount went to the agriculture and fishery sector—despite the large potential of this latter industry. The hotel and tourism industry, even while it has been booming, received less than 2 percent of approved FDI projects.

Attracting FDI requires countries to promote stability and consistency, create simplified investment policies, and establish a level playing field for all investors. Risk and uncertainty play an important role in determining investment decision. A survey by the Economist Corporate Network found that investors to ASEAN countries, and especially Myanmar, are concerned that the existence of gaps in laws and procedures as well as the weakness of courts systems may allow the government to alter important legal decisions with little warning to investors (OECD). A priority in Myanmar’s investment reform efforts should be to establish a new investment policy regime that increase certainty and protection for investors, and that streamlines the process of investment approval.

Leveraging the tourism boom

Myanmar’s tourism sector is an important participant in GVCs and recipient of FDI that stands to become an important source of new jobs. The World Travel and Tourism Council (WTTC) predicts that one in ten dollars invested in the global tourism industry between 2016 and 2026 will be invested in ASEAN, and that Myanmar’s travel and tourism sector will grow by 9.8 percent in this time—the fastest rate in the region (WTTC 2016). Myanmar can leverage its position as an ASEAN Member State to tap growing investment in global tourism and use this investment to create new jobs. Investment in the hotels and tourism industry is likely to continue to account for a large percentage of overall foreign investment in Myanmar. According to the Directorate of Investment and Company Administration (DICA), USD 2.687 billion in FDI has been invested in 67 businesses in the hotel and tourism sector as of January 2017.

Developing tourism has strong economic impact for Myanmar (Box 5.4). However, numerous factors constrain the sector's expansion and limit job-creation possibilities (Box 5.5).

The travel and tourism sector is a labor-intensive industry that is a growing source of jobs in

Box 5.4: WTTC Estimates of the Economic Impact of the Travel and Tourism Sector, 2015

Travel and tourism directly contributed 1,347 billion kyat to GDP (2.2 percent of GDP) in 2014. This was forecast to rise by 6.8 percent in 2015, and by an additional 8.4 percent per year between 2015 and 2025, to eventually contribute 212 billion kyat (2.7 percent of GDP) in 2025.

The total contribution of travel and tourism to GDP was 3,025 billion kyat (4.8 percent of GDP) in 2014. This was forecast to rise by 6.7 percent in 2015, and by an additional 8.4 percent per year between 2015 and 2025 to eventually contribute 7,219.3 billion kyat (6.1 percent of GDP) in 2025.

Visitor exports generated 1,163 billion kyat (9.5 percent of total exports) in 2014. This was forecast to grow by 8.1 percent in 2015, and by an additional 10.1 percent per year between 2015 and 2025, to eventually generate 3,298.6 billion kyat (14.4 percent of exports) in 2025.

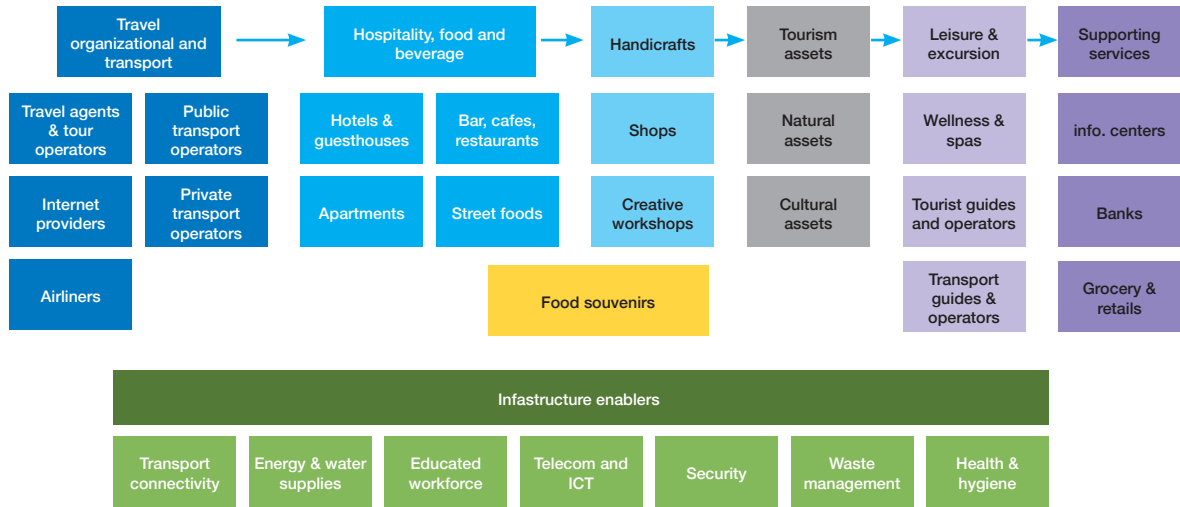
The value of investment in travel and tourism was 121 billion kyat in 2014 (0.7 percent of total investment). This was expected to rise by 3.2 percent in 2015, and by an additional 8.6 percent per year between 2015 and 2025 to eventually be equivalent to 284.2 billion kyat of investment (7 percent of total investment) by 2025.

Myanmar, and which would benefit, like other domestic services sectors, from policies to attract more FDI. The number of FDI projects in this sector, which has been booming in recent years, was less than 2 percent of approved FDI projects. Nonetheless, in 2014 the travel and tourism sector directly supported 505,000 jobs (1.8 percent of total employment). If both direct and indirect employment are taken together, this sector contributed to about 5 percent of employment during this time. The number of people employed in the sector was expected to rise by 6.2 percent in 2015, and by an additional 7.0 percent per year between 2015 and 2025 so that the sector would employ 1,057,000 people by 2025 (equivalent to 3.2 percent of total employment (Box 5.4).

The tourism value chain cluster consists of many activities, some of which include SMEs and micro-enterprises (Figure 5.17). Furthermore, beyond firms involved in travel organization and transport, almost all clusters in the tourism sector are provided by domestic businesses. More and better jobs can be created within tourism value chains in Myanmar in such areas as hospitality, food and beverage, creative workshops, leisure and excursion, and supporting services. The 2015 UNDP Business Survey suggests that hospitality and food and beverage clusters respectively employed 4 percent and 10 percent of the private sector workforce, and that about 45 percent of businesses in food and beverage is done by firms employing between 5 to 19 workers. These clusters are also important because they have strong backward linkages to supplying sectors such as in the agri-businesses, logistics, wood industry, and ICT sectors. Unlocking the potential of the tourism sector will require ensuring that adequate enabling infrastructure is put into place in the country.

Figure 5.17

Tourism Value Chain

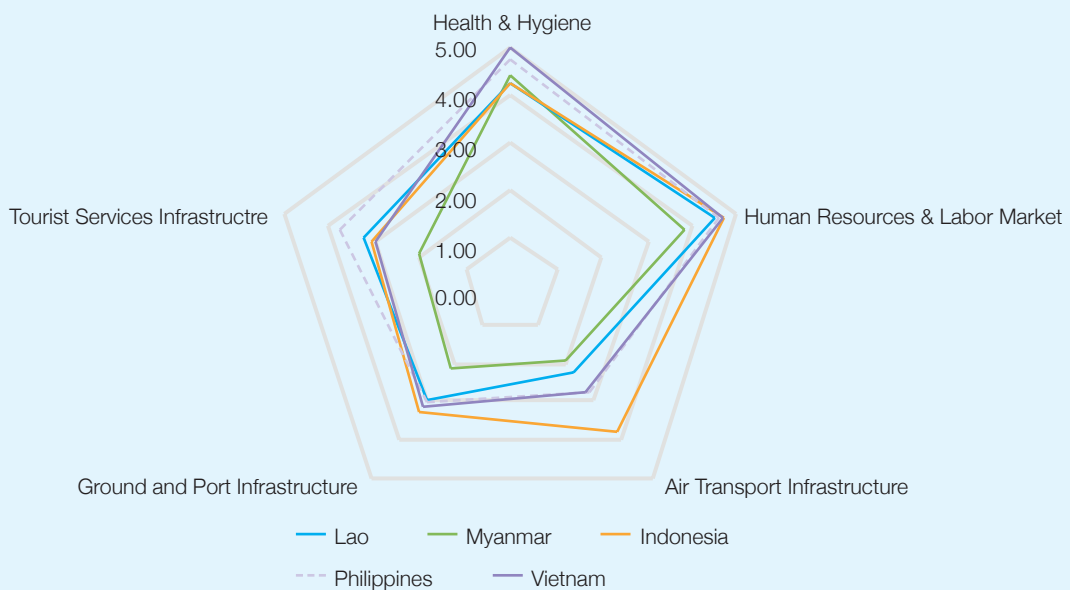


Box 5.5 Constraints to Travel and Tourism

The biggest challenge facing Myanmar’s travel and tourism sector is the lack of infrastructure (namely gateway ports and ground transportation), and of tourism services such as information and banking. Myanmar has the poorest tourism infrastructure in ASEAN. WTTC gave Myanmar a score of 2.5 out of 7 for its infrastructure, whereas Thailand, its neighbor, received a 4.4, and Lao PDR and Cambodia both received a score of 3.4 (Figure 5.18).

Figure 5.18

Selected Travel & Tourism Competitiveness Indicators



Source: WTTC (2016)

The Myanmar Tourism Master Plan has highlighted that a second challenge to the tourism sector is its lack of a skilled workforce. Industry players confirmed that they lack skilled staff and trained managers who can oversee the various parts of the tourism value chain. This scarcity of skilled talent leads to staff poaching within the industry, which in turn drives up costs and reduces Myanmar's competitiveness. Investments in human resource development is needed across the industry. Swiss Contact launched the Hotel Training Initiative to train 3,000 people in selected hospitality sectors, yet Myanmar faces a major challenge in conducting training for prospective personnel in the tourism sector due to lack of qualified trainers in the country.

A third challenge is poor access to land, including the time taken for land conversion and land zoning, which constrains tourism development. Land scarcity leads to higher land prices, which holds back some investors, and which can cause a chain reaction resulting in lack of investment in hotels. This limits the availability of rooms and drives up hotel room rates. Given these costs, many hotels are either built in selected locations where investors have access to land, or are built by those who own or can obtain land from the Government.

Fourth, Myanmar hotel value chains work in isolation from each other, and need to be better connected through new hotel bookings connections technology. Increasing hotel connectivity to allow for tourism bookings depends on the availability of the internet, which, given the poor infrastructure in the country, remains slow, unstable, and expensive for most of the population.

Finally, the Myanmar tourism sector has access to an inadequate power supply. Electricity outages are common, even in big cities like Nay Pyi Taw and Yangon. Despite the government's promises to improve access to electricity, about 70 percent of the population still has no access to grid electricity. Increasing rural electrification is also a major challenge, as electrification rates in some areas can be as low as 10 percent.

Improving Firm Level Productivity

Improving the productivity of the private sector in Myanmar is an important goal to further the jobs agenda. Increased productivity is associated with a sustained increase of income per-capita, which can increase demand for goods and services, and translate to more jobs in the long-run.¹⁷ Improving productivity is also important in the context of an increasingly connected and competitive global market. Exporters that are successful in penetrating the global market tend to be firms that are more productive than those that are not exporters. Productivity also matters if firms are to benefit from a growing domestic market since, in an open economy, the successful expansion in domestic market activity requires firms to be more productive to withstand competition.

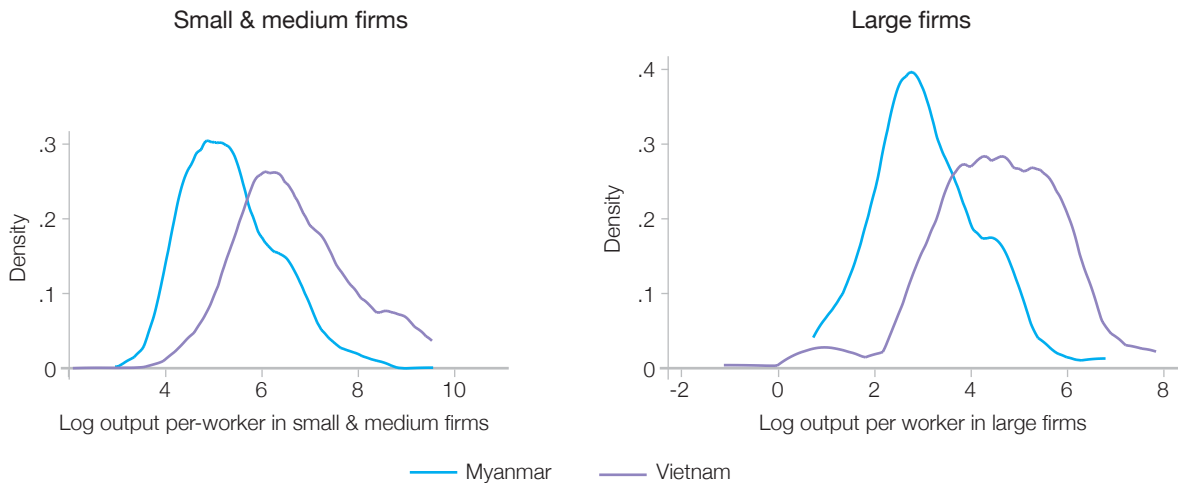
On average, productivity (measured by labor productivity) among firms in Myanmar is lower than it is in regional comparator countries (Figure 5.19).¹⁸ Median labor productivity among large manufacturers in Myanmar is about 30 percent less than that is in Vietnam. In addition, about three-quarters of Myanmar's large manufacturers have lower productivity than the bottom 30 percent of large Vietnamese manufacturers. This suggests that many large and unproductive firms are still operating in Myanmar despite being less likely to withstand international or regional competition. Policies that would allow resources to flow from these unproductive firms to more productive ones would help productive firms to expand, and thus help them in creating more jobs.

¹⁷ See Nordhaus (2005) for US experiences on productivity growth and manufacturing employment

¹⁸ Here output (measured by real value added) per worker is used as measure of productivity, and is also known as labor productivity.

Figure 5.19

Labor Productivity across Manufacturing Firms, Myanmar and Vietnam



Source: Staff estimate from Enterprise Survey

The availability of labor and lower wages in Myanmar do not always translate into an absolute cost advantage. To illustrate this issue, the unit labor cost (ULC) for manufacturing firms measures how much labor costs are required to produce one unit of output. Nominal wages in Myanmar in 2015 were around USD100 per month (ILO 2015), while in Vietnam manufacturing wages were approximately USD200 per month.¹⁹ However, the ULCs for the median small, medium and large manufacturing firms in Myanmar are higher than those in Vietnam (Figure 5.20). This corresponds with the previous finding that manufacturers in Myanmar are less productive than those in Vietnam. It also suggests that the absolute advantage from lower wages in Myanmar can be offset by higher operational costs due to other barriers such as unreliable electricity.²⁰

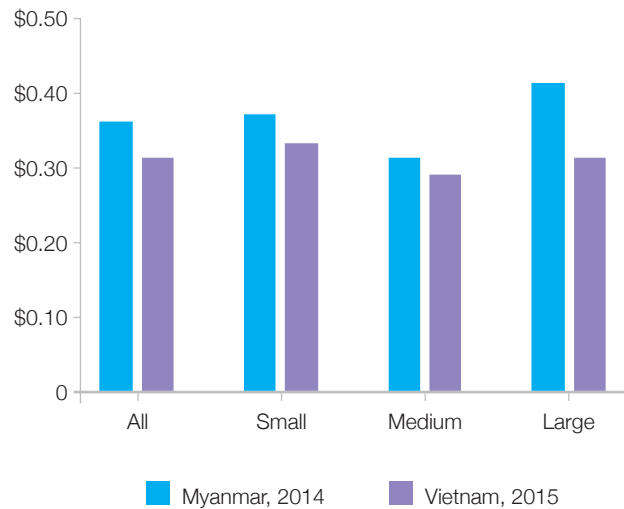
Cross-cutting reforms should be prioritized to raise the average productivity of Myanmar's private sector. Narrowing the gap between the average productivity of firms in Myanmar and that of firms in other countries would require addressing key operating constraints associated with establishing and registering a business, getting inputs (materials, labor, and services), and accessing markets. Myanmar still has a way to go, as seen by the fact that its scores on Doing Business and logistics performance indicators are still behind those of most countries in EAP. Progress could be achieved through cross-cutting reforms that reduce cost and save time for private enterprises, and that substantially improve access to energy and land. Further opening the domestic market to competition (product market competition) would also raise productivity by helping firms be better able to access inputs and make adjustment to compete and innovate. Meanwhile, targeted interventions are needed to address the specific constraints faced by certain types of firms in certain sectors (Box 5.7).

19 <http://www.economist.com/news/briefing/21646180-rising-chinese-wages-will-only-strengthen-asias-hold-manufacturing-tightening-grip>; In Cambodia, the government set 2014 minimum wage for garment workers for USD128/month. <http://learningenglish.voanews.com/a/cambodian-garment-workers-to-earn-140-a-month/2999107.html>

20 See, for example, World Bank (2015)

Figure 5.20

Manufacturing Firm Median Unit Labor Costs



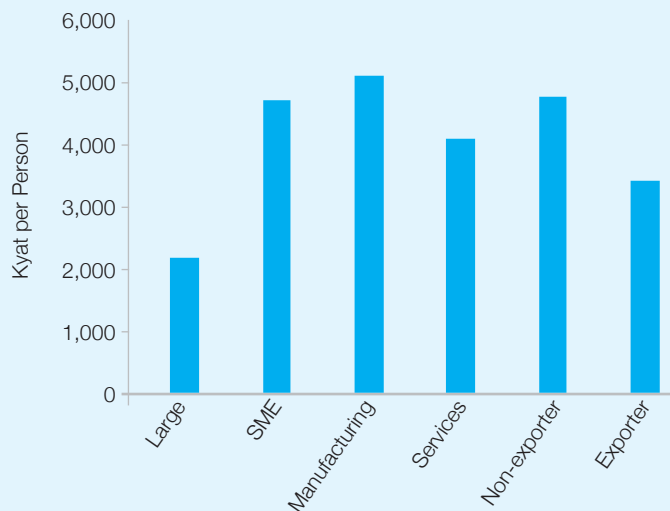
Source: Staff estimate from Enterprise Survey

Box 5.7: Designing Targeted Productivity Interventions

Better understanding the productivity issues within sectors is crucial to designing targeted interventions, be they to promote linkages to GVCs or to support high-growth entrepreneurs while preserving market-oriented incentives. Firms face unique problems that prevent them from becoming competitive through innovation or upgrading. To illustrate this, Figure 5.21 shows the difference between the median productivity and the productivity of the most productive firm (frontier firm) of various firm types. The productivity gap is narrowest among large firms, implying that these would be the firms best served with cross-cutting reform policies to increase their productivity.

Figure 5.21

Productivity Gap Within Firm Type between Median Firm and Frontier Firms



Source: WBG staff estimate from Enterprise Survey data

Meanwhile, it is important to understand whether SMEs, manufacturers and non-exporters, which face a larger productivity gap, face unique constraints, in addition to those that would be addressed under more general cross-cutting reform. For example, while SMEs face acute challenges from poor access to finance, this is not the most binding constraint for SMEs in specific sectors. Notably, SMEs operating guest houses and small hotels in the tourism sector are prohibited from accommodating foreign tourists, and are further constrained by a lack of skills and knowledge about how to provide hospitality services that meet international standards. Meanwhile, firms in jewelry, handicraft, and traditional garment industries are most challenged by limited skills, design, and managerial capacities. Finally, firms wishing to supply those linked to GVCs would benefit from specific interventions in such areas as capacity building to help them comply with international standards.

Policies to increase productivity must also be designed in a way that addresses the potential negative externalities of productivity growth. Allowing resources to move from unproductive firms to more productive firms is associated with helping unproductive firms exit the market—which in turn may lead to permanent or temporary job losses. Thus, policies to facilitate the entry of new businesses are needed to help generate demand for new hires. Automation and computerization are similarly important for productivity growth, while increasing demand for workers with certain, potentially more rare skills (Box 5.7). Myanmar should further explore policies to mitigate the impact of automation on jobs, focusing, at a minimum, on policies to increase the capacity of education institutions to produce graduates that have the computer and mechanical skills that will increasingly be in demand.

Box 5.7: The Tension Between Jobs and Automation

Two schools of thoughts exist concerning the impact of automation on jobs. The first focuses on the phenomenon of skills-biased technical change (SBTC), and argues that technical change increases demand for skilled labor at the expense of non-skilled labor. The second promotes the routinization hypothesis, which predicts that, for both skilled and non-skilled labor, technology will replace human labor in routine tasks (or tasks that can be easily described under a set of rules as a pattern) but not non-routine tasks (Autor et al. 2003). Under this hypothesis, professions that require cognitive skills (such as designers, skilled professionals, or managers), or non-routine tasks that require manual and dexterous skill, cannot easily be replaced. This model predicts that job polarization will emerge as mechanization increases, as mechanization will increase relative demand for labor to complete both high-income and low-income non-routine tasks.

Much of the literature on this topic found evidence for this latter theory. Goos and Manning (2007) found evidence supporting the routinization hypothesis while studying the United Kingdom from 1975-1999. Autor and Dorn (2013) studied the United States from 1980-2005 and found that mechanization decreased demand for middle-income routine manufacturing jobs and pushed down the price of labor, causing workers to leave manufacturing and compete for low-skilled, non-routine service job. This movement drove job polarization, as predicted under the routinization hypothesis. They also found that wages increased in both high-skilled and low-skilled jobs, resulting to wage polarization. Meanwhile, Frey and Osborne (2013) examined the susceptibility of existing jobs to automation, and estimated that 47 percent of all jobs in the United States are ‘at risk’ of being computerized within the next 20 years. Jobs at high-risk of computerization include those related to transportation, logistics, office and administrative support, production, and even services. The authors also predict that computerization will mainly affect low-skill and low-wage jobs, implying that low-skilled labor will have to move to tasks requiring creative and social skills. Brynjolfsson and McAfee (2011) called for improving the quality and rate of organizational innovation and increasing human capital as a way to cope with increasing computerization.

Policy Priorities for More and Better Private Sector Jobs

Myanmar can ride the momentum of expansion in the private sector to create more and better jobs.

If the evolution of Myanmar's private sector follows the same trajectory of that of other countries, this sector will be a small, but steadily increasing source of jobs that provide better pay and work conditions than most of those in the current jobs market. Targeted policies are needed to support the areas of the private sector that are likely to yield greater job growth.

Create a Conducive Environment for Firm Creation, Growth, and Diversification

Since new and growing firms (notably micro firms and large enterprises) contribute the most to job creation in Myanmar, job-friendly policies are needed to support firm entry and expansion. Such policies would complement the job churning process—which is an important process for enabling workers to find more suitable and better paid jobs—by allowing firms to redeploy labor resources to respond to emerging market opportunities. While policies should initially target firms by size, focusing on the micro and large firms that drive job creation, this focus on firm size may no longer be necessary once the SME sector matures.

A first set of policies will be needed to support the entry of new firms. The timely issuance of rules and mechanisms implementing the 2016 Investment Law (such as a negative list of restricted sectors, and rules for approving investment applications) would deliver a strong positive signal to potential investors. Policies are also needed to continuously improve market contestability and prevent incumbent firms, particularly state-owned enterprises (SOEs), from deterring the entry of new businesses. Currently SOEs are owned by the government Ministries that also act as market regulators. Evidence from other countries suggests that, while SOEs employ a large number of people, they do not hire many new workers (Aterido and Hallward-Driemeier 2017). Privatizing the SOEs would allow private firms to emerge and grow, while creating space for a dynamic jobs market and cutting fiscal costs. Of course, this process will lead to short-term job loss as SOEs shut down or restructure through privatization, but if workers can be supported through the transition, they will have access to more abundant and dynamic jobs. Myanmar could start this process by establishing an independent telecommunications regulatory body that would sustain competition and help liberalize the telecommunications market.

To help firms expand, Myanmar should go beyond reforming the financial sector, and should adopt and implement the new Companies Act that has been drafted to replace the 1914 Myanmar Companies Act (Box 5.8). This law will eliminate century-old regulations on business such as those requiring firms to obtain approval from the President to change their name or from the courts to change of nature of their business and reorganize share capital—as well as requirements that foreign companies hold a “Permit to Trade.” This new Act is expected to significantly impact firms' ability to raise capital, simplify requirements for small and family owned-businesses, and allow foreign investors to hold shares in Myanmar companies.

19 <http://www.economist.com/news/briefing/21646180-rising-chinese-wages-will-only-strengthen-asias-hold-manufacturing-tightening-grip>; In Cambodia, the government set 2014 minimum wage for garment workers for USD128/month. <http://learningenglish.voanews.com/a/cambodian-garment-workers-to-earn-140-a-month/2999107.html>

20 See, for example, World Bank (2015)

Box 5.8: The Myanmar New Companies Act

The proposed Companies Act will redefine how firms are structured in Myanmar. Under the new law, companies may be established with a single shareholder and a single director. The new law will also eliminate the need for a memorandum of association, and clarifies the definition and core principles of a firm (such as the role of directors, shares, or the definition of a “foreign company”).

The new law will raise companies’ standards of governance by defining a comprehensive set of duties for company directors and officers of companies, including the duty of care and diligence, duty to act in good faith, and duty not to misuse the position of directors. It will also contain rules on related party transactions, benefits to directors, and the rights and remedies for minority shareholders and investors. Under the new provision, minority shareholders will have the right to take direct action against any directors who abuse their powers.

The new law relaxes some of the rules relating to capital maintenance. This includes allowing companies to issue all types of shares and securities, and abolishing the requirements for authorized capital and par value of shares.

The new law will also retain some major provisions from the Companies Act of 1914. These include the procedures for winding-up and liquidating companies, and the requirements that public companies provide a prospectus and uphold financial reporting requirements in line with the Myanmar Accountancy Council Law. The new law also retains the old law’s fundamental principles, such as those concerning the types of companies to be registered and firms’ basic rights (such as rights to issue shares and design rules for internal management, rights to have a company name and registered office, and rights to share registers and company records), and requirements that firms notify DICA when they change their company details. Under the new law, companies are still required to conduct shareholders meeting, which can be called through electronic notices or be conducted using written resolutions in lieu of actual meetings.

A final set of policies are needed to facilitate the exit of non-productive firms to allow for healthy job turnover. Facilitating efficient exit can help entrepreneurs reinvent their businesses, giving them a second chance to lead a productive enterprise. Although the existing Rangoon Insolvency Act and Burma Insolvency Act facilitate bankruptcy, they are rarely used because the processes they delineate are quite long. In the 2017 Doing Business Report, Myanmar ranks 164 out of 190 countries in terms of ease of resolving bankruptcy. The report suggests that it can take up to 5 years for creditors to obtain full or partial payment from debtors who filed for bankruptcy. Firms that wish to voluntarily terminate their business also face long processes because, under current Companies Act, the Myanmar Investment Commission needs to grant firms the right to do so, thereby delaying their ability to liquidate their assets. Thus, Myanmar should reform and streamline procedures for bankruptcy and the voluntary termination of businesses.

Support Firms Serving the Domestic Market

Although most new jobs come from micro-enterprises and large firms, most of the workers in the private sector are employed by SMEs, which would benefit from support to help them tap into growing consumer interest in purchasing goods through modern retailing.

SMEs need help to learn how to become suppliers for modern retailers, and thus join retail supply chains. Modern retailers should be encouraged to work with and teach SMEs how to increase their capacity, how to comply with quality standards, and how to become suppliers. The inconsistency in the quality of SME products dims their chances to supply modern retailers,²¹ just as lack of access to working capital can deter them from attempting to do so. Amending the financial regulatory framework to expand the capacity of the financial sector to offer credits based on account receivables (such as factoring or working capital) and relevant insurances would help grow the retail supply chain.

A food safety regime with low compliance costs for the private sector should be established to encourage the domestic sales of food products. About 20 percent of businesses in Myanmar are in food products, absorbing 17 percent of total employment in non-farm enterprises (UNDP 2016). Fifty-seven percent of these businesses are enterprises with fewer than 20 employees. The Myanmar Food and Drug Administration (FDA), under the Ministry of Health, can reduce the time that it takes for private firms in food-related industries to certify new products. More importantly, the FDA and related departments (such as the Plant Protection Department in the Ministry of Agriculture, or the Consumers Protection department of the Ministry of Commerce) can coordinate to develop and implement reforms in food safety.

There increasingly are opportunities to franchise services or manufacturing products in Myanmar which should be taken advantage of. Franchising provides enterprises the right to replicate business models in services of an original company (e.g. products, retailing, restaurants, hospitality, and other services), and offers consumers product and services with the exact same standard across franchise outlets. The franchising of foreign services has been on the rise in Myanmar's largest cities, Yangon and Mandalay. However, growth in domestic franchising would depend on whether Myanmar can further develop a regulatory regime in franchising, laws to protect intellectual property right (to encourage trademarks), and mechanisms to enforce these laws.

A domestic e-commerce sector would create new opportunities for firms to create jobs by selling to domestic consumers. SMEs and other firms with limited access to capital and land (given their scarcity and cost), would benefit from being able to trade goods through the internet. Growth in this sector would be supported by the declining cost of mobile communication, dramatic increases in the penetration of mobile cellular service in Myanmar, and a growing young population adept at using social media. Myanmar can encourage e-commerce growth by raising network readiness (in government entities and private enterprises), narrowing gaps in regulation for on-line payment and transaction, and improving the quality of parcel logistics and shipping services.

Promote and Diversify Exports

Since exporting firms play a disproportionately large role in creating jobs in Myanmar, diversifying exports is an important component of the country's jobs agenda. Myanmar's exports are concentrated in industries that are not necessarily conducive to job growth or quality jobs—meaning that growth in exports has resulted in lower job quality and quantity improvements than have been experienced in other countries.

²¹ See UNIDO Sustainable Suppliers Program and its pilot program in Malaysia, which trained local suppliers to comply with international supermarket chain standards.

To support export diversification, the government should promote a competitive horizontal regulatory and business environment, and should provide sector-specific assistance to help firms overcome the unique challenges they face. Increased public-private dialogue, as well as collaboration through business dialogue forums, can help the government identify the nature of challenges that different firms face.

Firm capabilities need to be supported in order to develop Myanmar's export comparative advantage. Facilitating access to technology and increasing human capital can improve trade and labor market outcomes. For example, promoting enterprise innovation and technological adoption can encourage the development of more sophisticated products or of products with higher value added, and thus lead to the creation of higher paying jobs. Skills mismatches can be a significant constraint for firms, and increasing productivity and innovation requires enhancing the quality of the labor force. Policies that target education can also improve labor sophistication.

To expand the tourism industry, a strong inter-ministerial working group to coordinate the activities of regional and national government agencies is needed. The tourism industry would also benefit from an upgrading and expansion of the regional airports, such as Dawei or Myeik, to increase the number of direct international flights that enter the country. Regional governments could set up Destination Management programs to coordinate reforms of the tourism cluster through asset preservation, infrastructure development, and the maintenance of security, health and sanitation at the local level.

The financial sector should be further encouraged to provide trade finance instruments, particularly for domestic exporters. Allowing foreign banks to provide export financing and insurance to domestic firms is a quick win. Myanmar can explore ways to strengthen the capacity of the domestic banking sector to provide (trade) financing to exporters.

To widen the range of Myanmar's trading partners, Myanmar can support trade promotion and join preferential trade agreements, particularly those facilitated by ASEAN. Myanmar can also respond to issues in existing markets to accompany its strategy of securing new market access.

Encourage Integration into GVCs

Promoting participation in GVCs would support the diversification of exports. Myanmar has a comparative advantage in labor-intensive GVC industries such as food processing and the assembly of products like garments. Promoting Myanmar's entry and upgrading in GVCs would support more job-friendly exports.

The creation of world-class GVC links requires improving connectivity to international markets with high-quality infrastructure. Modernizing trade facilitation procedures and developing logistics infrastructure would improve lead-time in supply chains and logistics reliability, which is important for attracting investment to GVC sectors. Myanmar has started modernizing its customs procedures and can further reduce transaction costs in cargo clearance by implementing risk management and electronic platforms (National Single Window) for trade facilitation.²² Myanmar can also allow private firms to operate private bonded-warehouses to allow them to store duty-exempted intermediate materials for export.

²² Building on the current customs automation system, Myanmar can push further reforms by establishing a single window (SW) for trade facilitation. This would allow firms to submit relevant documents in a single location, and have them processed simultaneously by different agencies without the need to complete face-to-face interactions with each of them. The introduction of a SW would significantly reduce the time and costs of clearing goods across borders.

The government should also promote the absorptive capacity of workers employed in foreign firms to help maximize the benefits of spillovers from participation in GVCs. Dedicated large-scale training institutions can address entrepreneurial and management skills—as they have in Bangladesh—which will be necessary if the number of garment factories is to grow as projected. Such institutions could also help address the general scarcity of management skills available in Myanmar's private sector, and could provide training in foreign language and technical training. Establishing or extending start-up firm support schemes could also help new entrepreneurs who have left jobs at foreign firms gain access to capital, finance, labor and land. This support could be strengthened by attracting the country's diaspora back to Myanmar to set up businesses (Gelb et al. 2017).

Myanmar will have to be careful to attract the forms of FDI that best create positive spillovers. Not all FDI leads to positive spillovers, including FDI concentrated in low value-added activities, FDI that maintains external control of sourcing, and FDI that imports managers and technical experts (Staritz and Frederick 2014). Positive spillovers from FDI are less likely if a country has a weak domestic absorptive capacity (demonstrated through, for example, weak skills development), a poor domestic business environment, inefficient policies to support SMEs, or is missing a local entrepreneurial ecosystem. Box 5.9 gives an example of how Sri Lanka used joint ventures between FDI and local firms to upgrade and support forward linkages between firms—particularly SMEs and GVC-linked firms.

Box 5.9: Using Joint Ventures to Upgrade the Sri Lankan Apparel Sector

FDI and joint ventures (JVs) have played a central role in establishing and developing the apparel industry in Sri Lanka. In particular, JVs brought technology, knowledge, and skills to the largest firms in Sri Lanka, which had a crucial role in the upgrading of the industry. JVs were formed between local manufacturers and the buyers of their products (for example, between a global supplier of the textile product and a local firm in the textiles and sundries industry) Three-way JVs were also created to include buyers. These direct relationships permitted and furthered the process, product, and, most importantly, functional upgrading of local firms. Notably, in Sri Lanka's intimate apparel products industry, firms (with the support of foreign investors) invested in equipment and human resources for specialized products like lingerie and swimwear. Sri Lanka became a leading global supplier of these products in large part due to these investments.

Beyond introducing modern technology, JVs also played an important role in upgrading the technical and managerial skills of Sri Lankan workers. For example, Textured Jersey of the United Kingdom sent 10 managers to its affiliate, Textured Jersey Lanka, to train local managers over 3 to 5 years. When Textured Jersey's shares were bought by Pacific Textiles of Hong Kong SAR, China, full-time seconded personnel were based in Sri Lanka to transfer best practices and technical expertise to the local workforce. The result was a significant reduction in the employment of foreign (mainly Chinese) technical personnel, and the increased employment of locals in these positions.

Buyers also encouraged their textile and sundry suppliers to move to Sri Lanka. Due to the close relationship MAS Holdings has with Victoria's Secret, Victoria's Secret asked some of their input providers to relocate to Sri Lanka—including suppliers of various components that go into making bras and panties, like lace, pads, and warp knit fabric (Staritz and Frederick 2014).

Given the size of Myanmar’s agriculture sector, more firms should be encouraged to participate in agribusiness value chains. A number of factors can enable firms to enter agribusiness value chains. Setting and meeting international food quality standards and having the required testing, certification, and labeling facilities is very important for exporting in agribusiness GVCs. Responses from interviews with a small number of domestic firms also suggest that lack of managerial capacity and know-how in complying to international standards are major constraints for SMEs in Myanmar seeking to participate in GVCs. Linking domestic and foreign processing firms with farmers—by, for example, improving the connectivity of farmers to markets—could also support domestic firm participation. Boosting the efficiency and productivity of the agricultural sector—for example through consolidation, or by improving farming processes and techniques, input quality, and technologies (including through ICT adoption)—improves food quality and helps meet international standards.

Myanmar will also have to address a number of supply-side policy determinants which are important for creating an environment supportive to exports. Compared to countries such as Cambodia, Bangladesh, and Vietnam, Myanmar ranks low in terms of its Logistics Performance Index, investment freedom index, and measurements of political stability and rule of law, competitiveness, financial freedom, innovation, and financial development. Myanmar has an average score in its trade freedom index, and scores high on labor freedom given recent improvements in this area. Significant progress has also been made with respect to property rights and government integrity.

Attract Domestic and Foreign Investment

Although the *Pyidaungsu Hluttaw* (Parliament) passed a new Investment Law in 2016, the government should put in place the rules and mechanisms that will implement it in such a way as to attract the responsible investments that are necessary for creating more jobs.

Investment procedures should be streamlined, while government policies must be more coordinated across jurisdictions. A new negative list of restricted activities and sectors can be developed to minimize the potential adverse impact of proposed investments on the environment, social life, and security of Myanmar citizens (rather than protect certain interest groups). Mechanisms to screen investments, can also be made more efficient by clarifying the operating procedure that the Myanmar Investment Commission (MIC) uses in approving investment proposals that include restricted activities. Since Myanmar is delegating more authority for approving investment permits to regional governments, it is important that these local governments be provided with assistance in implementing their authority in the most effective manner

Policymakers should create mechanisms to increase cooperation with private actors, and respond to investor grievances. While full-scale mechanisms for investor-state dispute resolution and compensation may still need to be expanded down the line, DICA should start by establishing a system that tracks investors’ complaints and tries to address them before they become legal cases. More inclusive public-private dialogue (PPD) should also be promoted. If organized properly, PPD forums can be an effective platform in which the private sector can bring issues to the government in an inclusive and structured manner (as opposed to each actor representing certain groups and raising ad-hoc issues). PPD can also help investors discuss the challenges they face with their private sector peers so that they may formulate policy options to propose to the government. Draft regulations that affect investments should be debated in consultation with private actors.

Increase Private Sector Competitiveness

To underpin its policies to promote increased job creation in the private sector, the Myanmar government must address the cross-cutting issues that private actors cite as the greatest barriers to their competitiveness—namely access to energy and land, access to finance, and the low skills level of the workforce.

Increasing access to reliable energy and land will require facilitating investment into these two sectors. When implementing the new Myanmar Energy Masterplan, more private investment could be attracted to generate and distribute electricity to areas with high levels of non-energy private activity. Privatizing the Yangon Energy Supply Company would, for example, entice strategic private investors to increase generator power distribution capacities in the Yangon region, where most private companies are concentrated. To increase access to land, more should be done to streamline and reduce the costs of procedures to transfer land and property. Myanmar ranks 143 out of 190 countries in terms of ease of registering new property according to the 2017 Doing Business Report—the lowest ranking in ASEAN. Notably, the 3 percent stamp duty and 2 percent property tax implemented when new property is registered costs the private sector 5.1 percent of its property value when it is registered.

The financial sector must be reformed to increase access to finance for firms. Myanmar is modernizing its financial infrastructure (including its electronic payment system and settlement system) and is strengthening the regulatory and supervision capacity of the Central Bank. Myanmar should also gradually relax caps on interest rates and the banking fees for providing loans and competitive services to clients. To help banks make informed decision and price lending according to risks, Myanmar should establish a credit reporting system and allow a credit bureau to operate. Introducing regulations to use movable assets as collateral (through, for example, secured transactions) could help firms leverage their assets to access credit

Policies are needed to address the skills deficiencies of the workforce. Myanmar should prioritize improving access to basic education since the gap in access between urban and rural regions is quite severe. The country should also focus on reducing the rate of child-stunting, as this slows the ability of affected children to develop cognitive skills. Policies are also needed to increase the specific and practical skills of the workforce in areas such as ICT, craftsmanship, and language competency. Looking beyond vocational training, Myanmar could attract more private investment for training institutions, and could encourage individual firms to provide on-the-job training for workers. This training can be supported for small firms through programs like Mexico's integral Quality Modernization Program. Partnerships between large enterprises allow them to train their workers can be developed through programs like Malaysia's Penang Skills Development Center. Finally, the diffusion of skills would be increased if foreign workers in Myanmar were granted greater freedom to move within the country, and if the return of skilled Myanmar workers from abroad were to be facilitated.

Integrating Post-Conflict Zones into Trade Corridors

Integrating post-conflict zones into trade corridors would not only provide jobs but also contribute toward consolidating peace. Post-conflict zones may be cut-off from markets due to years of isolation, lack of investment in physical infrastructure, and exclusions from markets that may have grown in a manner that intentionally avoid these zones.

A longer-term agenda to bolster trade between Myanmar's post-conflict zones and the rest of the economy requires infrastructure, particularly in corridors that run through territory that was previously inaccessible.

Improving connectivity between Yangon's port terminal and the hinterland (using roads, railways and inland waterways), along with encouraging investments in logistics infrastructure, would improve Myanmar's position as a trade hub. This will also benefit the local communities afflicted by conflict, particularly those in the borders areas (World Bank 2016). It would be essential to identify key economic corridors and develop a strategy to develop transportation infrastructure and logistics services that links them with trade development projects. It is also important that these economic sectors and trade-related infrastructures be planned in consultation with local communities and ethnic groups in conflict areas, as described in the National Ceasefire Agreement (NCA). It is advisable to deploy these programs in a sequential order considering that not all the areas share the same level of conflict. Notably, policymakers should consider postponing trade-related activities and infrastructure development in areas that are close to ongoing conflicts, namely near Lashio-Muse, Lashio-Chin Shwe Haw, and throughout Kachin State.

Thinking in the longer term, more labor-intensive and land-scarce economic activities, such as tourism, manufacturing and agro-processing, could be promoted in post conflict areas.

Such development plans would need to foster a better functioning labor market through investment in technical and vocational education, as well as skills training for vulnerable men and women. Finally, the trade prospects of these areas would be improved if there were more connectivity between Myanmar's main urban centers and the country's peripheral ethnic enclaves.

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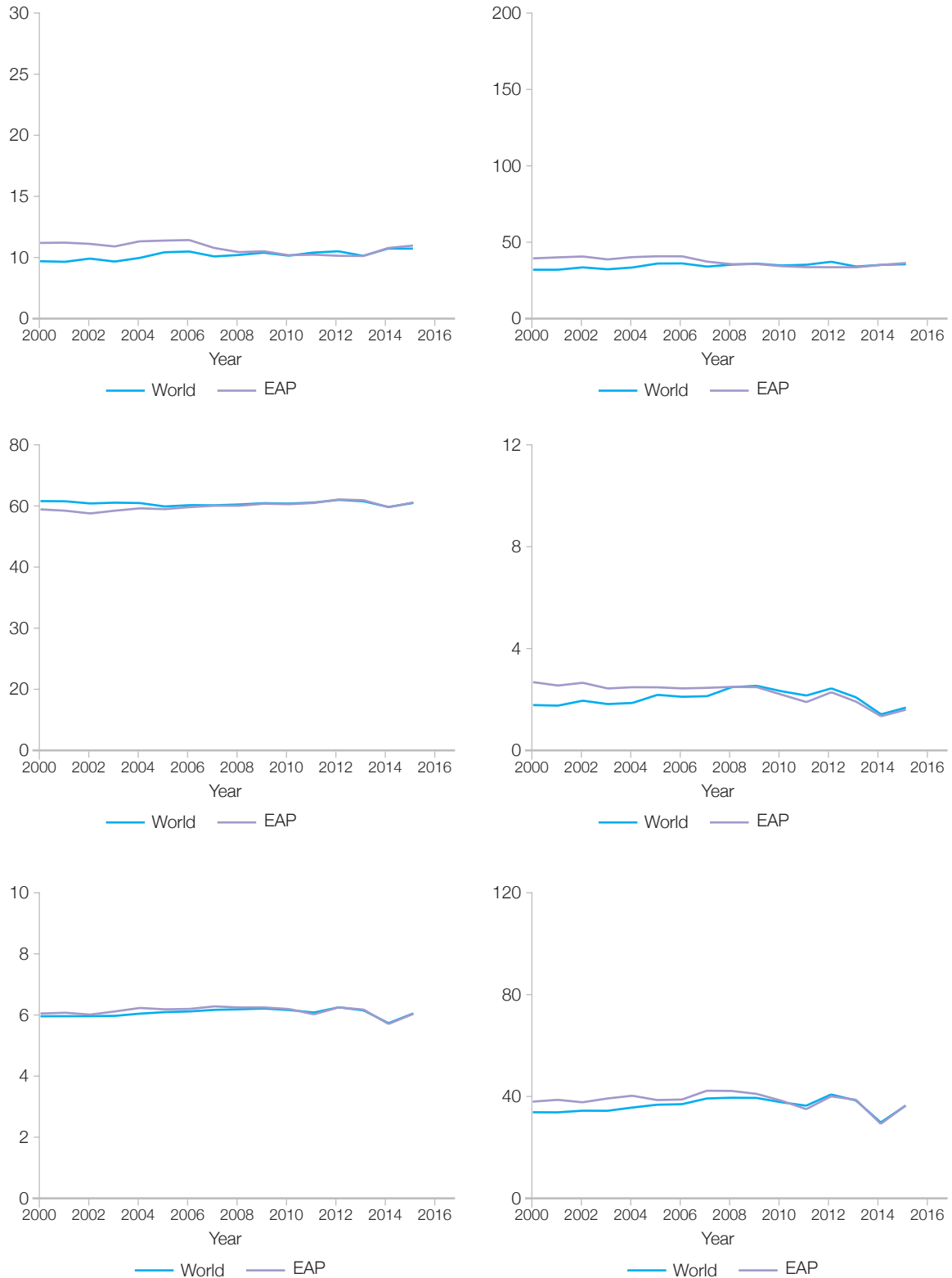
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Appendix

Figure A.1

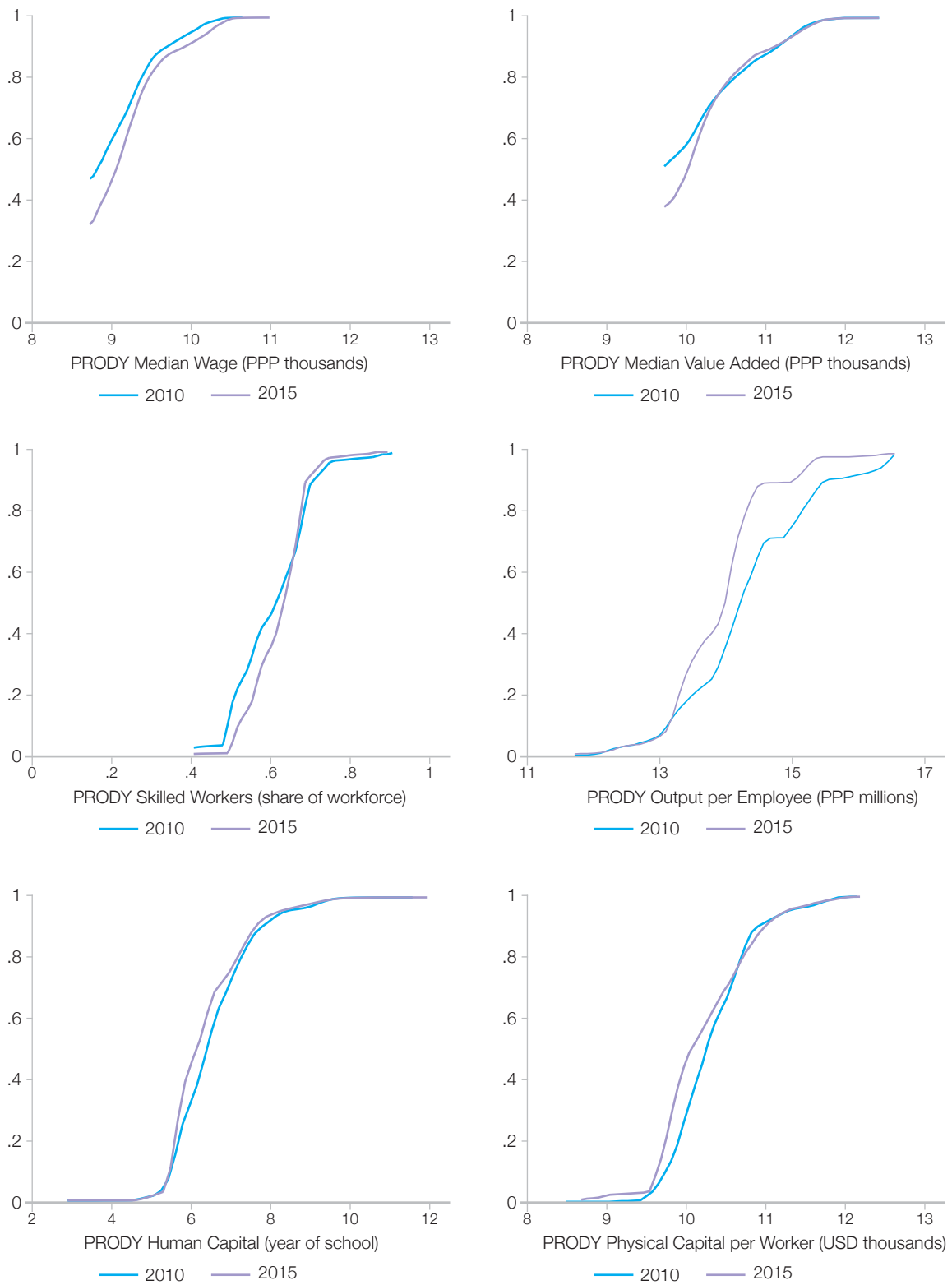
Myanmar Manufacturing Export Basket Labor Sophistication, by Destination Market (2000-2015)



Source: World Bank staff calculations based on mirror data from UN Comtrade, World Bank Business Environment and Enterprise Performance Surveys, and Shirotori, Tumurchudur, and Cadot (2010).

Figure A.2

Myanmar Manufacturing Export Basket Cumulative Distribution, 2010 and 2015



Source: World Bank staff calculations based on mirror data from UN Comtrade, World Bank Business Environment and Enterprise Performance Surveys, and Shirotori, Tumurchudur, and Cadot (2010).

NOTE 6:

MIGRATION AS A JOBS STRATEGY¹

¹ This chapter was prepared by Wendy Cunningham, Alejandro Huertas Harry Moroz, and Mauro Testaverde, with inputs from Soonhwa Yi.

Migration is part of Myanmar's jobs strategy. Jobs are the most important source of livelihoods in the country. However, jobs, particularly quality ones, are not easily accessible in all parts of Myanmar. Many people move internally and internationally in search of employment opportunities that offer higher wages, income after shocks, or sufficient income to survive. In fact, jobs are the primary drivers of both internal and international migration in Myanmar.

Migration for work brings benefits. Households benefit when they can seek out opportunities for wage labor in cities during seasonal lulls in agricultural production or in response to shocks like a sickness or death or a weather event. Households also benefit from remittances earned by migrant workers, which can ease financial constraints, move people out of poverty, reduce child labor, and even provide opportunities for entrepreneurship. Social networks and financial connections with expatriates and the return of migrants who have accumulated skills during their migration experience can spur the growth of domestic markets.

Barriers to migration mean that not all Myanmar households are able to access the jobs available through migration. In some cases, migrants who face significant costs may delay their return in order to recoup these high costs. In other cases, migrants seek out informal channels because legal migration paths are too costly. High costs for migration can be the most damaging for the poorest households who may be unable to afford to migrate even when there are few or no alternatives for work.

Policy changes can reduce the costs of migration so that migration becomes a strategy for economic development in Myanmar. When barriers to migration are low, poor households can plan for migration and use it as a tool to manage risk and drive development in both urban and rural areas. When barriers to migration are low, international migrants can minimize their time abroad, maximize their gains, and return to Myanmar with the skills, savings, and social networks obtained abroad. By minimizing the costs of migration, policymakers can maximize Myanmar's gains from migration.

Myanmar is a Mobile Country

Nearly 1 in 4 Myanmar people are migrants. The 2014 Census estimates more than 10 million Myanmar people are not living in the township where they were born, equal to 21.6 percent of the population (Table 6.1). The Census only surveys households located in Myanmar, thereby enumerating international migrants who are still connected to a household in Myanmar, but not counting members of Myanmar households that have migrated in their entirety. Using Census data from migrant-receiving countries that identify the birth country of non-citizens, the United Nations (2015) estimates that an additional 800,000 Myanmar people are living in other countries, raising the total number of migrants to 11.2 million, nearly 23 percent of the Myanmar population.

Table 6.1

Myanmar Migrant Population, Lifetime (as of 2014) and Recent (2009-2014)

	Lifetime migrant		Recent migrant
	Census data (2014)	Census data, adjusted by UN (2015)	Census data (2014)
Internal migration			
Between townships within district	2,687,677		890,808
Between districts within state/region	1,082,354		62,0681
Between states/regions	4,561,588		1,847,853
Total Internal	8,331,941		3,359,342
International	2,021,910	2,881,797	1,366,293
Total	10,353,851	11,213,738	4,725,635

Source: World Bank staff estimates using 2014 Enterprise Survey data.

Most Myanmar migration is internal. Three of every four Myanmar people who do not live in the townships where they were born – lifetime migrants – have relocated within Myanmar. A slightly higher proportion of all recent migrants – defined as those who relocated within the period 2009-2014 – is internal (Table 6.1).

Nearly 20 percent of the Myanmar population has migrated within Myanmar during their lifetime, most moving between states or regions. About 5.6 percent moved between townships within districts, 4.1 percent moved between districts within states/regions, and 9.5 percent moved between states/regions (MOLIP and UNFPA 2016) (Table 6.1). Movement between townships may be to a new community remote from one's origin, as in rural areas, or may simply be moving down the road, as often occurs in large urban zones.

Cross-country comparisons of lifetime internal migration rates suggest that Myanmar is moderately to highly mobile relative to its neighbors. Migration statistics derived from Census data find that internal migration rates range from 6.2 percent (China) to 32.7 percent (Bhutan). These cross-country numbers are not strictly comparable due to country-specific definitions for migration and the geographic size of administrative areas.² When defining migration as movements between the most aggregated administrative unit in Myanmar – states or regions – 9.5 percent of Myanmar people can be classified as internal migrants. This suggests that Myanmar is more mobile than China or India but less mobile than Indonesia, Cambodia, Nepal, Thailand, Malaysia, and Bhutan. However, when using the most disaggregated administrative unit to define migration – movement between townships – 19.3 percent of Myanmar people are classified as internal migrants, only exceeded by Bhutan and Malaysia (Table 6.2).

² For example, the Indonesian data are based on movements between its 33 provinces, some of which are the size of Myanmar.

Table 6.2

Percentage of People who are Lifetime Internal Migrants

Country	Census year	Internal Migration Rate
Bhutan	2000	32.7%
Cambodia	2010	13.6%
China	2000	6.2%
India	2000	7.5%
Indonesia	2010	12.9%
Malaysia	2000	20.7%
Myanmar	2014	
Change township		19.3%
Change district		13.6%
Change state/region		9.5%
Nepal	2000	14.0%
Thailand	2000	17.0%

Source: Adapted from MOLIP & UNFPA (2016)

Recent internal migration, defined as having changed administrative units within the five years of the 2014 Census, show similar trends to lifetime migration, with cross-state/region migration being the most prevalent pattern. More than seven percent of the population – equivalent to 3.4 million individuals – migrated within Myanmar in the period 2009-2014. Nearly two percent migrated between townships within district; another 1.3 percent moved between districts in states/regions, and 3.9 migrated between states (MOLIP & UNFPA 2016). The inter-state/region movements are dominated by a few receiving states/regions, namely Yangon, Mandalay, Shan, and Nay Pyi Taw. Recent migrants comprise more than five percent of the population in Kachin, Kayah, Kayin, Yangon, and Nay Pyi Taw.

The United Nations estimates that nearly three million Myanmar people are living outside of Myanmar.³ More than 2.2 million are living in other ASEAN countries, with 88 percent in Thailand and another 11 percent in Malaysia. Indeed, Myanmar people comprise more than half (53 percent) of all ASEAN migrants in Thailand and 16 percent of all ASEAN migrants in Malaysia. Even though Vietnam is a less frequent destination for Myanmar migrants, they comprise 28 percent of Vietnam’s ASEAN migrant population.

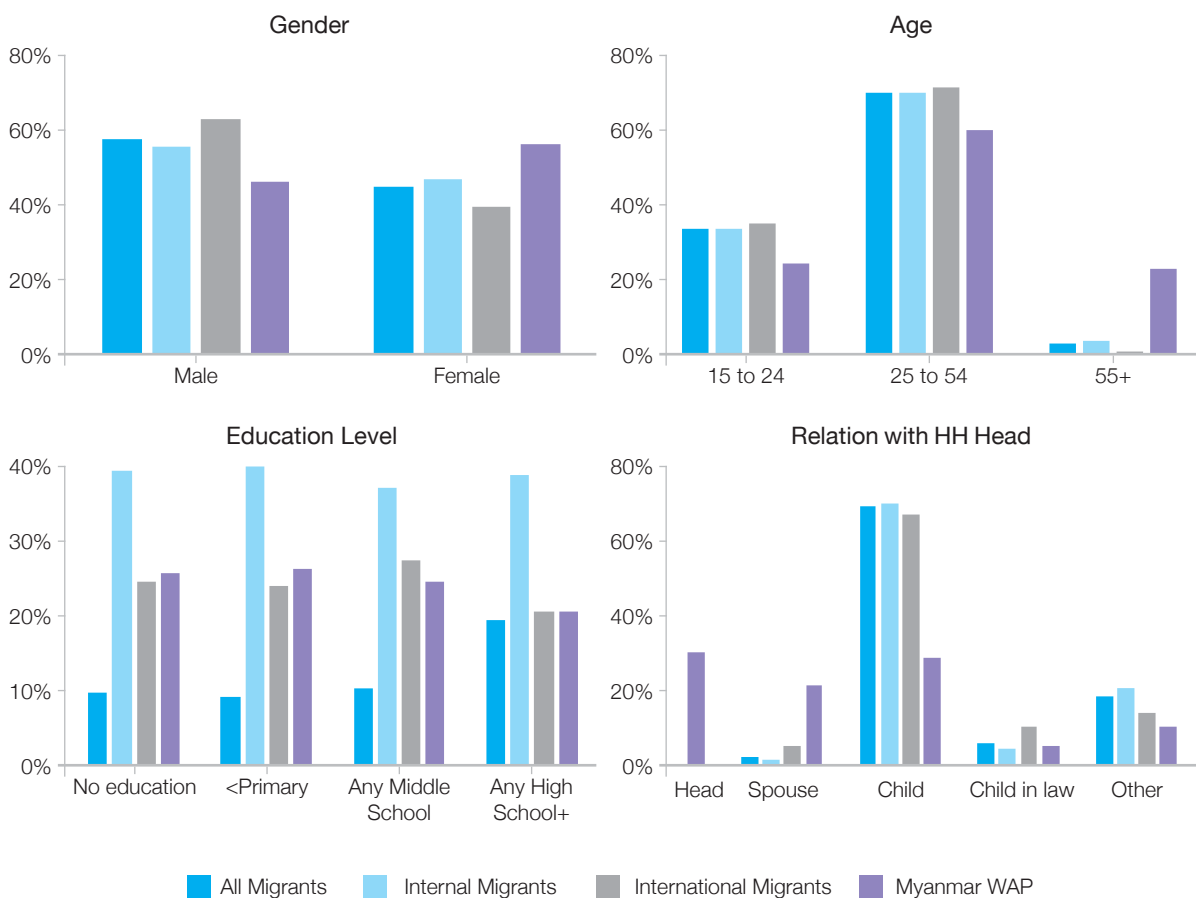
Myanmar’s migrants are marginally likely to be more educated, younger, male, semi- or un-skilled, and dependent children than the non-migrant working age population. Figures 6.1 shows the distribution of the total migrant population, internal migrants, and international migrants as compared to those who have not migrated. Nearly 56 percent of migrants are male, while only 45 percent of Myanmar adults are men. This gender imbalance is observed among internal and, especially, international migrants, though time series evidence shows an increase in female internal migration over the past few decades

³ We use United Nations data rather than 2014 Census in order to count international migrants who are connected to households still living in Myanmar and those who are no longer connected to a household in Myanmar.

(MoIP 2013). A larger share of young adults (15-24) and primary age adults (25-54) are migrants compared to non-migrants, while few migrants are older adults (age 55+). International and internal adult migrants have similar age profiles. Most migrants, as most Myanmar people, have a primary education, but the migrants are disproportionately likely to have middle high school or higher education as compared to non-migrants. Again, trends by international or internal migration are similar. Finally, most migrants are children of the household head.⁴

Figure 6.1

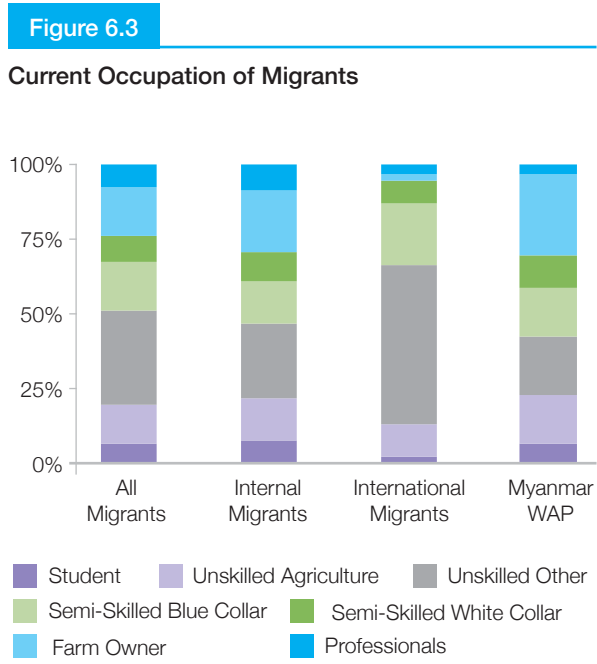
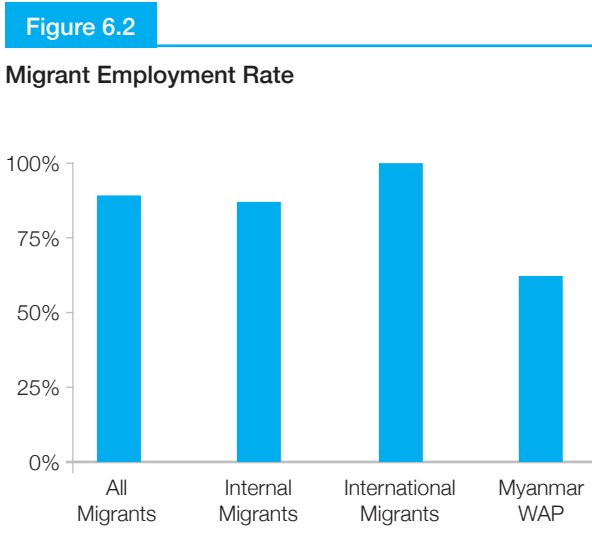
Distribution of Migrants, by Gender, Age, Education Level, and Relation to Household Head, 2015



Source: author calculations based on MPLCS 2015.

Migrants are more likely to work than non-migrants. Nearly all international migrants and nearly 90 percent of internal migrants work while only 62 percent of the non-migrant working age population works (Figure 6.2). International and internal migrants are more likely than non-migrants to work in unskilled jobs (Figure 6.3). Internal and non-migrants are about as likely to work as farm owners whereas very few international migrants are farm owners. International migrants are more likely to be semi-skilled blue collar workers than either internal migrants or non-migrants.

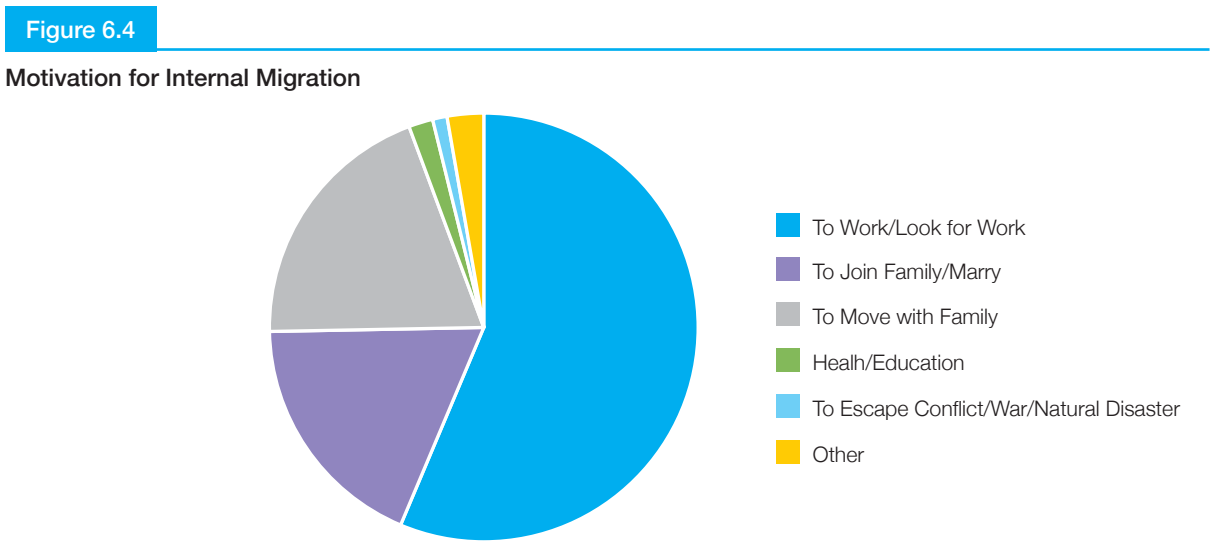
⁴ The original data analysis presented in this note is generated using the Myanmar Poverty and Living Conditions Survey (MPLCS) that was collected in early 2015. The MPLCS draws a national population sample of 3648 household, that is representative at the agro-region level. Thus, statistics cannot be presented at the state or region level. For a full description of the MPLCS (2015), see World Bank et al (2014).



Source: author calculations based on MPLCS 2015.

People migrate internally for jobs

The majority of internal migrants move in search of jobs or to accompany those who move for jobs. More than 56 percent of internal migration is undertaken to work or to accompany a family member who moved to work (Figure 6.4). This may be an underestimate of the work motivation for moving, since the 38 percent of the population who moved to join a family member may have been following a working migrant. For example, an adult who migrated as a child with a parent might say she “followed a family member” though the parent may have migrated for family reasons. A study of more than 7000 internal migrants in 14 states/regions of Myanmar reports that 84 percent of the interviewed households declared that they migrated for work (ILO 2015).



Source: author's calculations, MPLCS 2015.
 Notes: the category “to work/look for work” includes those who provided this response as well as their family members who reported “move with family”. The category “move with family” or “joining family/marry” do not indicate if the family member is elsewhere due to work or due to other reasons.

In line with the jobs motivation for migration, most internal migration is toward economic centers.

More than half of internal migrants moved to townships in the economic centers of Myanmar: forty-three percent ended up in Yangon in the period 2009-2014 and another 12.5 percent completed their migration in Mandalay (Table 6.3). Among the top 20 district-to-district migration corridors, 19 end in Yangon and of those, the largest share end in Northern Yangon, the district with the highest proportion of manufacturing jobs (MOLIP and UNFPA 2016). Notably, seven of these channels are movements within Yangon and another eight are from neighboring Ayeyarwady. Industrial zones in other parts of the country – Mandalay, Ayeyarwady, Bago, Magway, Mon, Sagaing, Shan and Tanintharyia – also attract workers (MOLIP and UNFPA 2016).

Similarly, there is high in-migration to states that share an economically dynamic international border.

Districts that border Thailand (Myawady, Tachileik and Katwthoung), India (Tamu and Hkamati) and China (Muse) report high rates of net in-migration (MOLIP and UNFPA 2016). Both border trade and connections with economically active international centers just over the border provide economic opportunities. Border trade is expected to increase as Myanmar economically develops and imports more goods, and neighboring countries (especially China) move more toward the hinterlands (Rahardja, Artuso, and Cadot 2016).

Table 6.3

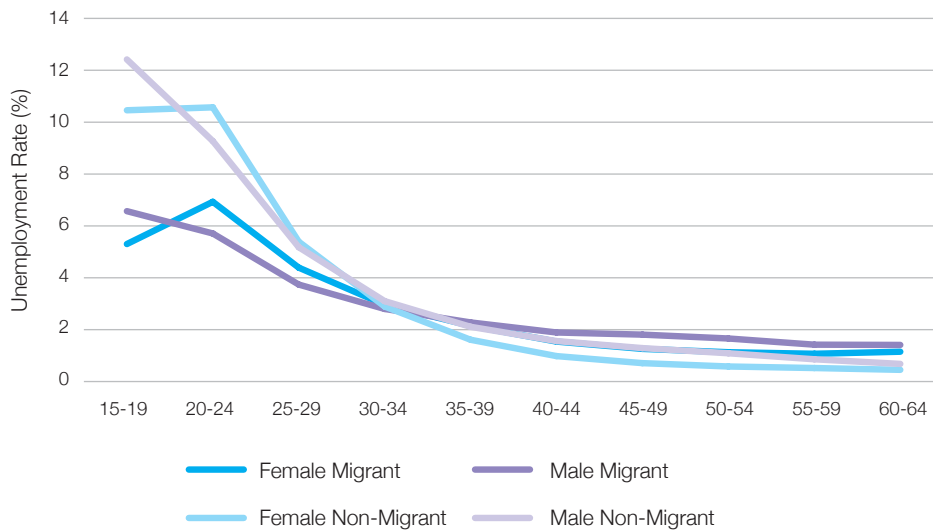
Top 20 district-to-district flows for recent migrants, 2014

Rank	District to District flow	Number of migrants
1	West Yangon to East Yangon	56,601
2	Phayapon to North Yangon	51,086
3	West Yangon to North Yangon	43,044
4	Hinthada to North Yangon	35,311
5	Maubin to North Yangon	33,369
6	Labutta to North Yangon	29,796
7	Thayawady to North Yangon	29,362
8	North Yangon to East Yangon	28,368
9	Pathein to North Yangon	27,852
10	East Yangon to West Yangon	26,257
11	East Yangon to North Yangon	25,652
12	Phayapon to East Yangon	24,891
13	South Yangon to North Yangon	24,660
14	Myingyan to Mandalay	24,500
15	Myaungmya to North Yangon	21,694
16	Bago to East Yangon	20,807
17	Bago to North Yangon	18,663
18	North Yangon to West Yangon	17,519
19	Magway to North Yangon	16,231
20	Pathein to East Yangon	14,835

Source: MOLIP & UNFPA (2016)

Figure 6.5

Unemployment Rate by Internal Migrant Status, by sex and age group, 2014



Source: MOLIP & UNFPA (2015)

Migrant work objectives are reflected in their lower unemployment rates than non-migrants. Figure 6.5 shows that young internal migrants have significantly lower unemployment rates than those who did not migrate. For example, less than 6 percent of migrant men age 20-24 years old are unemployed as compared to more than 9 percent of non-migrant men. The gap narrows with age, finally converging at age 30-35.

A range of additional factors might push people to seek jobs elsewhere in Myanmar. The absence of social safety nets that provide income support or of insurance schemes that help people smooth income, together with extreme poverty rates that limit private saving means that internal migration for jobs is often used as a form of coping (World Bank 2017). Severe weather that destroys livelihoods (MOLIP and UNFPA 2016), a lack of off-farm employment in rural areas, and seasonality of agriculture that limits rural livelihoods (Mahajarn and Myint 2015; World Bank and EMR 2016) are often dealt with in the moment. And some of the lesser reported reasons for migration in Figure 6.4 – escaping conflict, eviction from one’s home, or education – may be the tipping factor for people to seek work elsewhere. Pull factors may lower the cost of migration sufficiently to warrant a move: low costs to move to other jobs markets due to geographic proximity to economic centers or access to roads that shorten the migration time, established migration channels (social capital that facilitates moves) (MOLIP & UNFPA 2016), or good information on job prospects.⁵

Most migrants work in the same occupation than they did before they left home. Approximately 80 percent of employed people who changed township in the period 2005-2015 did not change occupation. The exception is farm owners and unskilled agricultural workers, where about 50 percent changed occupation, primarily to unskilled non-farm labor. Thus, while people migrate to work, they do not upgrade their occupational status (MPLCS 2015).

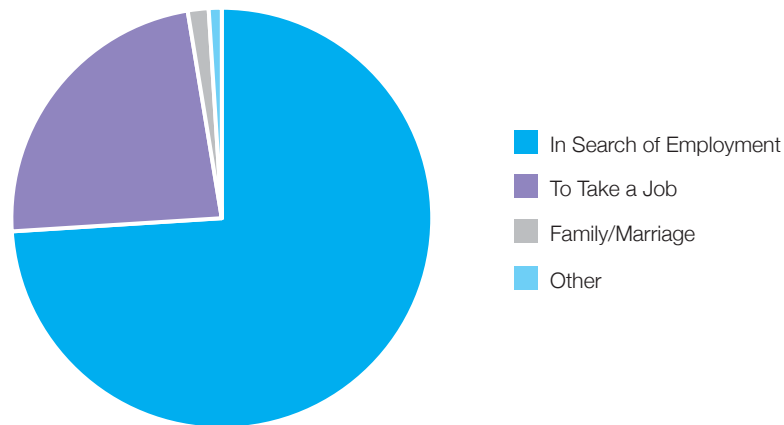
⁵ For example, all these factors contribute to the mass migration out of Ayeyarwady. It is a poor state, located next to the most dynamic job market in Myanmar. It is highly agricultural and subject to seasonality. It has been hit by severe natural disasters that have destroyed livelihoods and assets.

Jobs are the motivating factor for international migration

Nearly all international migration is jobs-related. The family member who replied to the reasons that someone in the household was living abroad nearly unanimously identified jobs as the reason. While one-quarter moved to another country to begin a job, three-quarters moved in order to search for a job (Figure 6.6).

Figure 6.6

Motivation for International Migration



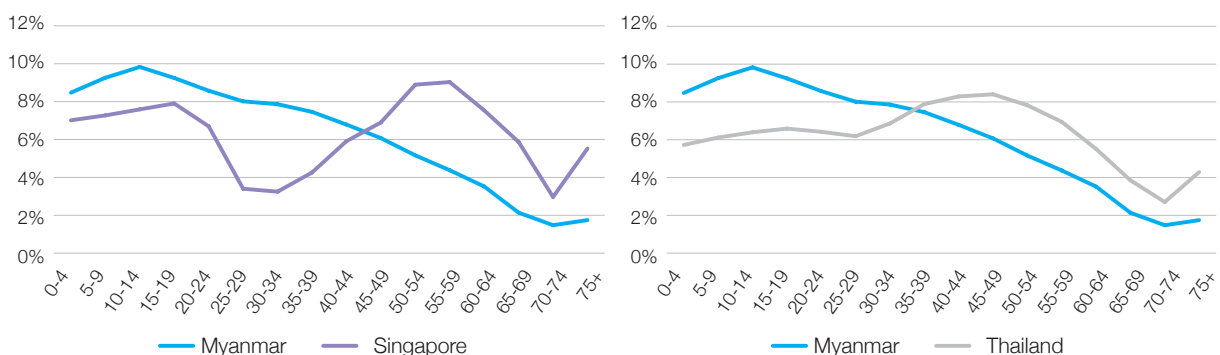
Source: author's calculations, MPLCS (2015).

Similar to internal migration, international migrants also flow to more economically dynamic countries. The primary destination countries of Myanmar migrants – Thailand and Malaysia – are complex economies with a large range of jobs. These countries are also significantly wealthier than Myanmar–Malaysia’s GDP per capita is 5 times higher than Myanmar’s while Thailand’s is 3 times higher–which means that migrants have an opportunity to improve their wages simply by moving to these countries.

Myanmar’s relatively young population is able to fill a need for workers as populations age in other countries in the region. Populations are ageing rapidly in countries such as Thailand and Singapore. The median age in Myanmar is 28 compared to Thailand’s 38 and Singapore’s 40. Figure 6.7 emphasizes this: Myanmar’s population bulges at the youngest ages while Thailand and Singapore’s populations bulge in the later ages of the working years. This suggests that Myanmar will have continued opportunities to fill the gaps in the labor markets of Thailand, Singapore, and other aging countries in the region as their working age populations shrink leaving shortages.

Figure 6.7

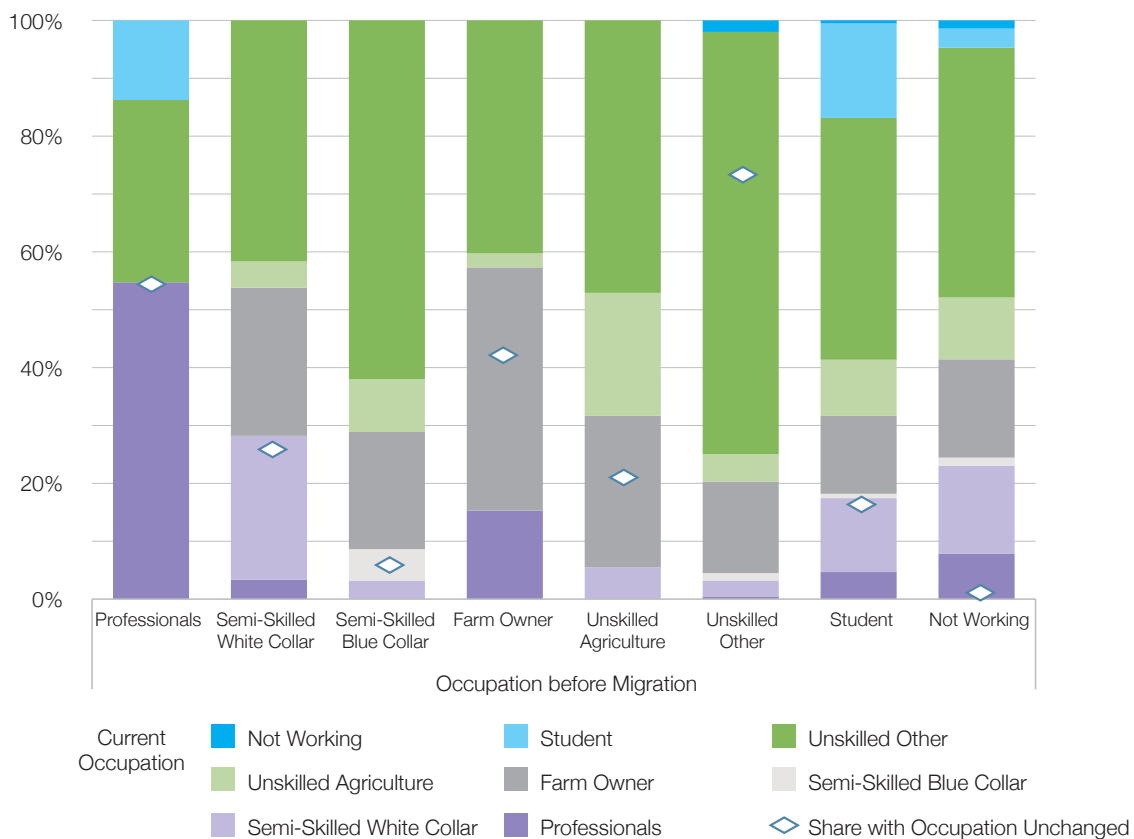
Local Population Age Distribution



Source: UN (2015)

Myanmar migrants work in similar occupations before and during migration. Figure 6.8 shows the occupation before and during migration of a subset of Myanmar migrants: those who migrated abroad after 2005, are still living outside of their household, and could be reported on by the respondent to the household survey. The segment of each bar represents the share of migrants who work in each occupation at the time of the survey (as a migrant); each bar represents all current international migrants who worked in the indicated occupation before migrating. Figure 6.8 suggests that most migrants work in a similar occupation upon migration as they did before migrating (the bar segment indicated by the diamonds on each section of the graph). The most prevalent changes in occupation are primarily into unskilled non-agriculture (“other”), which are purely manual tasks in non-agricultural industries. There is also movement into semi-skilled blue collar occupations, which includes manufacturing jobs. Both those who had “higher” occupations before migrating (professional, semi-skilled white collar) and “lower” occupations before migrating, display this pattern.

Figure 6.8
Occupation of Current International Migrants, by Occupation Previous to Migration, 2015



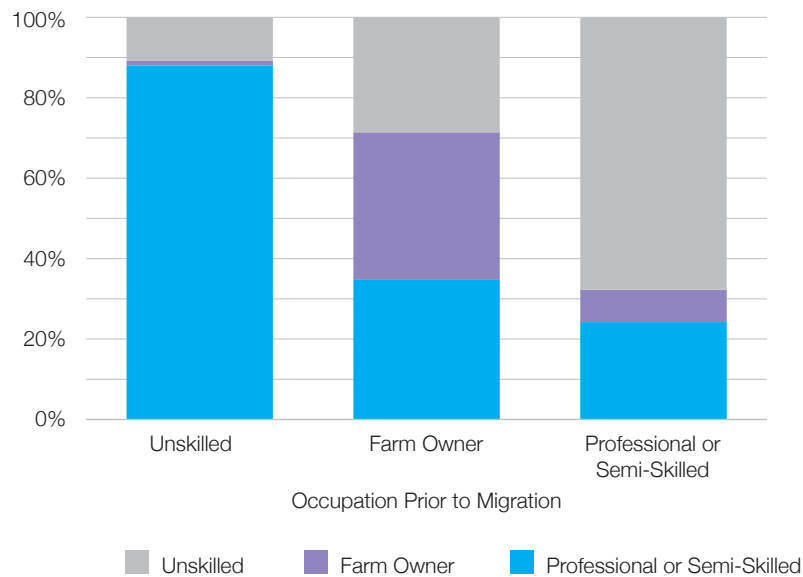
Source: author’s calculations MPLCS (2015). Notes: a diamond indicates the share of migrants that works in the same occupation as did before migrating. The sample are those international migrants who left their households in the period 2005-2015.

Some migrants are able to improve their occupation post migration. Figure 6.9 presents the post-migration occupation, for each group that was in the designated occupation before migrating.⁶ Professionals and semi-skilled largely stay in the same occupational grouping. With the pre-migration unskilled workers, there is some movement from being an unskilled agricultural worker to unskilled work off-farm. The farm owners most frequently change occupation, with one-third moving to “semi-skilled” occupations (primarily blue collar) and one-third moving to “unskilled” occupations (mostly non-farm elementary occupations).

6 The sample size is too small to disaggregate the data further.

Figure 6.9

Occupation of Return International Migrants, by pre-migration occupation, 2015



Source: author's calculations MPLCS (2015)

The Impacts of Migration on Migrants and on Source Countries are Generally Positive

Even though international migration results in limited occupational mobility, the experience still confers significant benefits. Research on the impacts of migration in Myanmar is very limited. However, literature from sending countries in the region and around the world finds that migration has mostly positive impacts on migrants and their households, on non-migrants, and on the source country itself.

Emigration can increase the income of the left-behind household through remittances thereby reducing poverty. Myanmar receives significant inflows of remittances from abroad. In 2015 international remittances were USD3.2 billion or 5 percent of GDP, the third-highest in ASEAN after the Philippines and Vietnam. A small study in Myanmar found that more than half of internal migrants remit, sending a median of 250,000 kyat over a 12 month period (World Bank 2017). Overall, about half of households in Myanmar receive either internal or international remittances. By channeling money to households, remittances can relax credit constraints in turn permitting investment in income-generating activities and in human capital accumulation. Remittances can also act as insurance, smoothing consumption during income shocks. Research from 71 developing countries shows that a 10 percent increase in remittances is associated with a 3.5 percent reduction in the share of poor households (Adams and Page 2005). Positive impacts of remittances on households have been found in the Philippines (Rodriguez 1998; Ducanes 2015), Indonesia (Yang and Martinez 2006; Adams and Cuecuecha 2014), and Vietnam (Viet 2008). Overall, how remittance income is spent depends on household income with poorer households more likely to use remittances as safety nets and spend them on consumption while wealthier households are more likely to use them for productive and investment purposes. Evidence from a small sample in Myanmar finds similar results (World Bank 2017). While positive impacts are at times found on spending on education and health, these results do not always arise (Ahsan and others 2014).

Emigration generally increases the wages of non-migrating workers in source countries. Out-migration can increase the wages of non-migrating workers by reducing the labor supply in contexts like Myanmar where good jobs are scarce. This has been found to be the case in Mexico (Hanson 2007; Mishra 2007), Poland (Dustmann, Frattini, and Rosso 2015), Moldova (Bouton, Paul, and Tjongson 2011), Puerto Rico (Borjas 2008), and Honduras (Gagnon 2011).

The negative effects of the emigration of high-skilled workers (“brain drain”) on source countries may be overstated. Concerns often arise that the emigration of high-skilled individuals means the depletion of resources to educate individuals who then work abroad where they pay taxes and participate in knowledge creation. However, this effect may be overstated. High-skilled emigration can actually incentivize human capital formation in the source country. Because the returns to education are larger abroad, emigration increases the perceived returns to education in turn encouraging non-migrants to pursue more education. This seems to be the case in Myanmar where Beine, Docquier, and Rapoport (2008) estimate that high-skilled emigration has actually increased the proportion of the skilled workforce in the country. Additionally, even when they remain abroad migrants continue to interact with their source country which can reduce the cost of transmitting knowledge, ideas, and capital across borders and in turn increase trade flows and foreign direct investment (Docquier and Rapoport 2012).

High Costs Impede Migration for Jobs

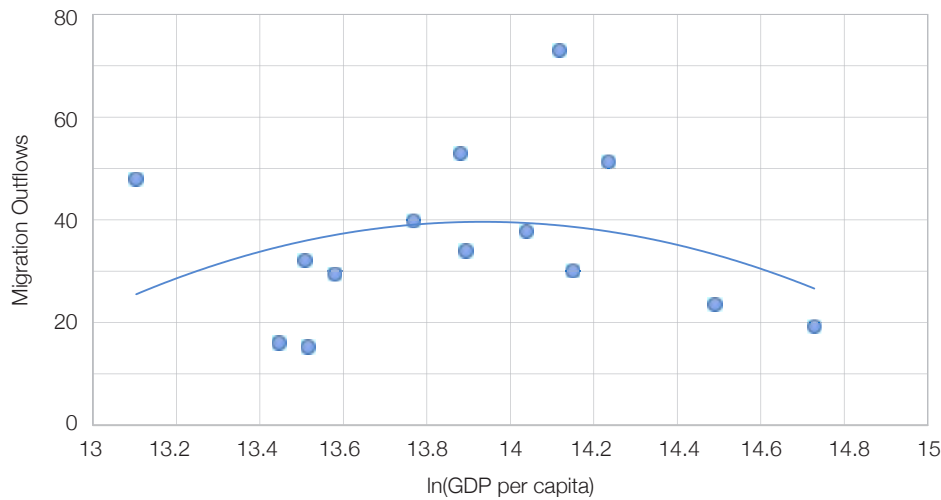
Barriers to mobility in Myanmar prevent some migrants from moving for work and lead others to seek out informal channels. High fixed costs of migration can inhibit households, especially the poorest, from taking advantage of employment opportunities in other locations. These costs include transportation costs, the cost of searching for a job, recruitment costs, and even the risk of a failed migration experience. They also include the documentary and time costs associated with complying with migration policies. These latter costs are increased when systems for managing migration are weak.

High costs may prevent the poorest households from migrating to take advantage of job opportunities internally. Although economic goals draw migrants to dynamic jobs centers, households in the most economically depressed areas in Myanmar seem to be less able to do so. Figure 6.10 shows that the relationship between migration and the wealth of a state/region is an inverse U-shape: households in the poorest regions/states seem to be unable to afford migration while the households in wealthier states have opportunity costs which are too high to do so. The least outmigration is between the richest (Yangon, Tainingthay) and poorest states/regions (Shan, Kayin). The same inverse U-shaped relationship between migration and wealth has been observed for international migration (McKenzie and Rapoport 2007).

Costs also impact the migration decisions of international migrants from Myanmar. Myanmar migrants consider the cost of migrating internationally when making decisions about where to migrate. Very few migrants from Myanmar migrate to Singapore, the region’s wealthiest economy, or to other wealthier Southeast Asian countries like Indonesia (Figure 6.11). The cost of migrating to these more distant economies is much higher than that to migrate to Thailand or Malaysia where geographical proximity, existing migration networks, and significant demand for low-skilled labor reduce migration costs.

Figure 6.10

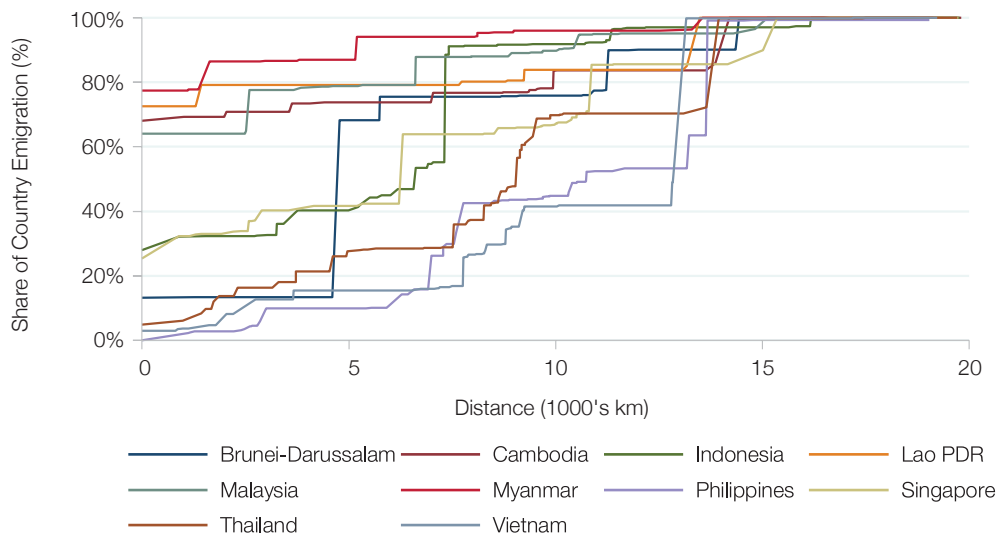
Migration Outflows per 1,000 People, by state/region



Source: author's calculations based on (MOLIP and UNFPA 2015)

Figure 6.11

The Cumulative Distribution of Migration from ASEAN Countries



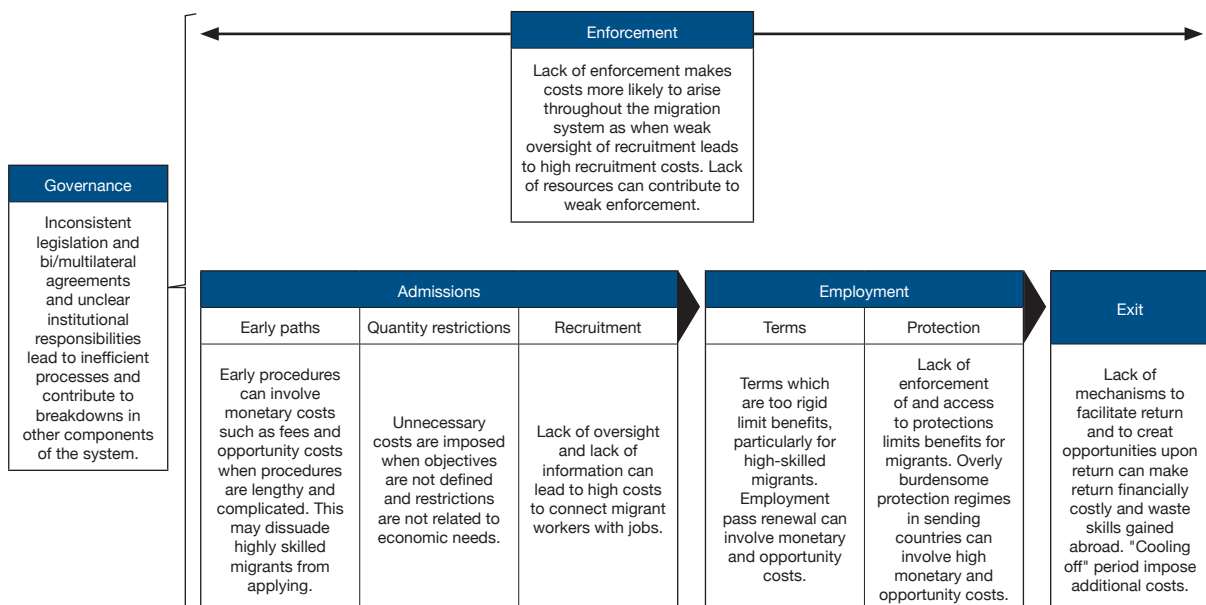
The low internal out-migration from poorer regions and the migration to closer, but less wealthy, countries suggests that households in Myanmar face barriers to migration. Migration over short distances, along transportation routes, and guided by social networks can be quite affordable. For example, 70 percent of migrants out of Ayeyarwady spent less than 40,000 kyat to migrate. If they have a secure job and lodging in their destination, the costs can be quite manageable (World Bank 2017). However, the cost of migration may be prohibitive for those who are less connected. Limited migration may be related to low disposable incomes in poor regions relative to the direct costs of financing the transport and living expenses in migration destinations, poor access to information about opportunities in remote areas, job search costs, weak migratory social networks, or immovable assets such as land. The risk of failed migration may also prevent the poorest households from migrating, as has been observed in Bangladesh (Bryan, Chowdhury, and Mobarak 2014).

Systems for managing international migration can also impact the cost of migrating. Migration systems can be broken down into several components (Testaverde et al. 2017)). These are the governance of the migration system which includes the legal and institutional framework organizing the system and the bi- and multilateral agreements between sending and receiving countries; the admissions component which relates to entry paths and quantity restrictions, which are generally set by the receiving country, and recruitment; the employment components which involves the terms of employment, again generally set by the receiving country, and the protection provided to workers while employed abroad; the exit component which involves the return of migrant workers to their source country; and the enforcement component which involves implementation of migration policy and oversight of other components of the migration system. Figure 6.12 shows how migration costs can arise in each of these components of the migration system.

Weaknesses in Myanmar’s international migration system likely lead to higher costs to migrate internationally. Myanmar has a relatively weak legal and institutional framework for the management of migration. A memorandum of understanding (MOU) with Thailand established a formal migration process which had been absent from the Myanmar-to-Thailand corridor before the 2000s. However, uptake of the MOU pathway is limited because the process is lengthy and complex, requiring as many as 89 days and 25 steps to complete with documentary submissions to and approvals from government agencies in both Myanmar and Thailand (ILO 2015b). Although the MOU is supposed to function through a public recruitment process, in practice migrants need to utilize private recruitment agencies in both Myanmar and Thailand to navigate the complex process. Despite regulations in place to oversee such recruitment agencies, illegal brokers are common and legal recruitment agencies skirt required procedures (Hall 2012; Win 2013). Efforts to protect migrant workers while they are employed abroad are very limited, exposing migrants to riskier migration. There are no comprehensive reintegration programs for returning migrants (ILO 2013). Finally, Myanmar has imposed several bans on migrant workers, particularly domestic workers, traveling to certain countries in response to cases of abuse and in response to political controversy.

Figure 6.12

Migration Costs Associated with the Migration System



Source: Testaverde et al. (2017).

The dominance of informal international migration from Myanmar is evidence that the migration system increases the cost of migration. Undocumented migration dominates migration from Myanmar. The country's long border, weak enforcement capacity, significant demand in Thailand, and political and ethnic conflict make informal migration attractive. However, the lengthy and complex formal migration process under the MOU with Thailand does not recognize these challenges and involves significant bureaucratic procedures that cost migrants time and money. A survey of 5,027 Myanmar migrants in 7 provinces in Thailand found that just 0.5 percent of respondents had used the formal MOU recruitment channel (IOM 2013). As of February 2016, more than 900,000 migrants from Myanmar had been registered in Thailand's National Verification Process, meaning that they had been undocumented, while just 143,461 had received work permits via the MOU (IOM 2016b).

Migration Policies for More and Better Jobs

Policymakers can reduce the barriers to successful migration. By targeting the high costs of migration, policymakers can increase the likelihood of successful migration experiences in which migrants can obtain good jobs which match their skills, assist non-migrating household members through remittances, gain skills while migrating, and reintegrate into home labor markets upon return. Indeed, an increasing number of countries both in the region (China, Indonesia, and the Philippines) and beyond (Bangladesh, Nepal, and Sri Lanka) are introducing measures to promote better outcomes for internal and international migrants. A common element of these policies is that they recognize that barriers to labor mobility prevent migrants and sending countries from fully maximizing the benefits of migration.

Overall, Myanmar should seek to balance protections for migrants with the needs of economic development. Myanmar should consider how migration can fit into its economic development strategy. This is being done in part through an ongoing effort with the International Organization for Migration to define a national migration strategy. However, a deep institutional assessment of the policies and programs in place to manage internal and international migration is necessary to ensure that the migration management system minimizes the cost of out-migration, incentivizes formal migration, and maintains links with the Myanmar diaspora to facilitate the transfer of knowledge and capital.

Interventions to reduce barriers to migration in Myanmar are particularly important in four areas. While interventions are necessary in each component of the migration system (Figure 6.12), these interventions can be grouped into four solution areas which can facilitate internal and international migration. Policymakers should work to 1) reduce information asymmetries; 2) expand access to migration to poor households; 3) improve coordination with migrant-receiving countries; and 4) enhance the development impact of migration.

Reducing Information Asymmetries

The provision of information about jobs, recruitment practices, and migration procedures can reduce recruitment fees, protect migrants, and improve the quality of matches with employers. Information asymmetries arise in the relationship between migrant workers and employers because the former know which jobs are available and the latter know the skills they possess. Although a high share of migrants use informal and social networks to determine their migration path (ILO 2015), others look to recruiters and labor brokers to bridge the gap. This strategy brings risk of exploitation, particularly of low-skilled migrants who are in great supply and who may not be familiar with migration rules. Providing information to potential migrants can empower them in this imbalanced relationship, minimize the role

of labor intermediaries, and even improve matching between employers and workers. For example, an information intervention with a group of Filipino domestic workers found positive outcomes during their employment in Singapore. Providing a flyer on migrants' legal rights in Singapore, including about their right to change employers led to an improvement in an 'index of self-reported employment conditions' which included work hours as one component (Shrestha and Yang 2015).

Providing information about jobs online is an efficient way to ease information constraints faced by migrants. As discussed in Note 2, the internet and mobile apps offer a range of information on jobs in different labor markets. This may involve accessing private or public job boards⁷, company web sites, or web sites of local chambers of commerce, or even searching for task-related work. A challenge is for people to become aware of these sites and how to manage them. Labor Exchange Offices could help coordinate an effort to gather job information and publicize its availability. These can be used for international migration, as well: Philippines makes overseas job listings available through the job advertising site JobStreet.com.⁸

Pre-departure orientation programs can increase the likelihood that international migration is successful. Pre-departure orientation is currently mandatory for international migrants from Myanmar but the curriculum is not standardized, certified trainers are lacking, and the quality of the programs is uncertain (Moroz 2017). The Philippines requires individuals considering migration to take a free online course even before they have decided to migrate to help them consider the risks and rewards of migration. An orientation seminar is then offered to individuals who have decided to migrate. The involvement of local government partners, the inclusion of NGOs, an orientation for migrants upon arrival in a destination, and provision of information at the local level are recognized as good practices with the program (Asis and Agunias 2012). In general, a standardized curriculum and oversight of implementation are key factors to the success of orientation programs. The Bangladeshi NGO BRAC relies on community-driven programs to oversee labor brokers while the Pacific Islands incorporate destination country representatives in pre-departure orientations (Testaverde et al. 2017).

China provides an example of how information, employment assistance, and other services can enhance migration as a jobs strategy. China's rapid industrialization resulted in a shortage of local workers and a need to attract workers from rural areas to the new urban centers. Rural-to-urban migration was inhibited by: 1) limited and informal information on job opportunities or living conditions in destination cities; 2) limited access to training in rural areas for jobs in urban areas; and 3) little knowledge about worker rights. As a result, the internal migration that did happen ended in migrants working in jobs that were often menial, low-paid, and subject to employment rights abuses and unpaid wages. In response, the Government of China, with World Bank support, developed policies and programs to facilitate migration and ease the transition of rural workers to urban centers. Specifically, the programs:

- Improved access to skills development opportunities by providing training in rural areas for urban jobs (as defined by the urban employers) through training center- employer partnerships
- Reduced the cost of job search through enhanced employment services
- Provided legal aid services to migrant workers

Nearly all graduates found employment in the occupational field for which they were trained within six months of training completion. Furthermore, the project helped reduce the cost of job search (World Bank, 2015b). After six years of operation, the beneficiaries found work more quickly in their field of study, acquired jobs with higher wages, and increased their acquisition of formal qualification certifications (Table 6.4).

7 See, for example, <https://ec.europa.eu/eures/public/en/homepage>. Last accessed May 25, 2017.

8 See <http://poea.jobstreet.com.ph/>. Last accessed December 9, 2016.

Table 6.4

Results of the China Rural Migrant Project

Indicator (rural only)	Before program	After program
% of graduates from training institutions that find work within 6 months	48%	98%
% of graduates from training institutions that find work in their field within 6 months	20%	88%
Real wage of graduates of project long-term training institutions	1400 rm	3130 rm
% of graduates from project training institutions receiving a National Occupational Qualifications Certification	46%	98%
% of students taking “ordered training” (the firm places a request for the types of workers and training they need)	20%	59.8%
% of project graduates that find jobs with partner enterprises	56%	84.5%
Number of workers using employment services (counseling, job referral, etc)	17,154	345,390

Source: World Bank (2015b)

Expand Access to Migration to Poor Households

Enhancing access to financing for prospective migrants may improve access to migration for jobs.

As described above, the high fixed costs of migration seem to deter internal and international migration in Myanmar, particularly by the poorest households. While provision of information and assistance with documentation may make migration more successful, these actions do not seem to encourage additional migration (Beam, McKenzie, and Yang 2015). However, relaxing financial constraints by providing subsidies or loans to potential migrants may allow additional households to migrate. In a recent study of internal migration in Bangladesh, Bryan, Chowdhury, and Mobarak (2014) offered an incentive to households in a famine-prone region of the country to migrate to an urban area. The incentive led to an increase in the number of seasonal migrants, a significant increase in the consumption of the migrant’s household, and an increase in the likelihood of subsequent migration even without the incentive. The incentive may have worked by helping households manage the risk of a failed migration experience which prevented some from migrating.

Pre-departure loans or subsidies could be considered for migrants in Myanmar where households in the poorest states/regions migrate at lower rates and international migrants tend to migrate to closer destinations. Several countries have or are beginning to establish pre-departure loan programs (Testaverde et al. 2017). In addition to the subsidy for out-migration in the lean season in Bangladesh, the NGO BRAC provides loans of USD300 to USD3,7000 to international migrants with a one-month grace period, which allows migrants to settle in their destination before beginning repayment, and with a maximum payback of two years. The loans acts to finance migration but also to help the remaining household members cope while the migrant begins work. Loans are also available to migrants based on remittances. Vietnam offers several types of financial assistance to migrants, including loans with preferential conditions and the “62 Poorest Districts” program which pays travel-related expenses and provides preferential credit to poor workers. A program to finance migration is currently under construction

in Tonga. Implementation of these programs is critical as repayment problems have arisen with programs in the Philippines and Sri Lanka.

Improve Coordination with Migrant-Receiving Countries

Better coordination between Myanmar and migrant-receiving countries can facilitate the access of migrant workers to good jobs in advanced economies that face labor shortages. Myanmar has made progress in coordinating with Thailand, resulting in a new memorandum of understanding which was signed in 2016 and covers areas related to skills development and re-employment but is not yet operational (Moroz 2017). Myanmar also participates in Korea's Employment Permit System which requires an MOU and had been discussing an MOU with Malaysia before a ban was imposed on out-migration to Malaysia in 2016. However, more can be done to engage countries with low-skilled labor shortages that could provide skills development and higher earnings for migrants from Myanmar.

Mobility partnerships which are bilateral labor agreements on specific occupations facilitate professional mobility including exchanges of young professionals. The Jamaica-United Kingdom agreement to send Jamaican teachers to the UK is one example. Such partnerships on specific occupations could guide Myanmar's students and skills development institutions on skills to acquire. These partnerships could also build an international reputation for Myanmar talents. For example, the Philippines focused its mobility partnerships on nursing and health care workers. The country developed a system of training programs in these professions and today is globally recognized as a source country for high-quality nursing and health care workers.

Myanmar could also help potential migrants learn about and develop skills in occupations which appear on the critical occupations lists that receiving countries use to target migrants for admissions. For instance, New Zealand publishes a long-term skill shortage list at all levels of skills as well as an immediate one. These lists provide information about the kinds of skills – and qualifications – that are required in other markets, allowing Myanmar's training institutes to provide training for jobs where there is a market demand.

Myanmar, like most sending countries, will face challenges to negotiate bilateral agreements with often reluctant receiving countries but the agreements and their negotiation remain a useful channel to pursue. Receiving countries generally have leverage when negotiating agreements with sending countries because there is generally an oversupply of low-skilled labor seeking to work in countries with labor shortages. In the case of Myanmar, the challenge is greater because of the ease of crossing the border to Thailand informally. Myanmar can continue to work with Thailand to use the existing MOU to make formal migration between the two countries as efficient as possible while still managing flows. The Philippines, which has been particularly successful negotiating MOUs, considers them to be an element of an ongoing process of improving the management of migration (Testaverde et al. 2017). The country's guiding principles for negotiating MOUs are to ensure safe and orderly migration, safeguard the rights and welfare of migrants, recognize mutual benefits and shared responsibilities, sustain a good relationship with the host country, and develop human resources (Lanto 2015).

Enhance the Development Impact of Migration

Policies can also enhance the development impact of migration in Myanmar. The benefits of migration for migrants, non-migrating members of the household, and Myanmar as a whole can be translated into greater gains if policies and programs are in place to support mindful migration. This is particularly true in four areas: financial literacy; the use of remittances; reintegration upon return; and diaspora engagement.

Financial literacy. Financial literacy programs have the potential to improve the engagement of migrants with the financial system. Such programs can improve migrants' awareness of finances and improve financial behaviors such as savings. Additionally, these programs can improve awareness of programs designed to protect migrants during their migration experience. Financial literacy programming which was provided to migrant domestic workers in Indonesia increased financial knowledge, budgeting, savings, and awareness of mandatory migrant insurance, though the quantity and frequency of remittances did not increase (Doi, McKenzie, and Zia 2014). Importantly, the recipient of the training programs was critical. Effects were greater when both the migrant and their family member received the training, less when just the family member received the training, and absent when just the migrant received the training. Positive impacts of financial literacy training have been found in several cases (McKenzie and Yang 2015).

Use of remittances. Most remittances in Myanmar travel through informal channels (Moroz 2017, World Bank 2017). Recent efforts have made using formal channels more attractive including permission for banks to establish overseas operations. However, moving remittances into the formal financial system, particularly by lowering the cost to send them formally, is important for the development of Myanmar's financial sector. Additionally, remittances could be channeled to encourage local development. Mexico's *tres por uno* (3x1) program offers a government match for remittances sent to migrant associations which use the money to fund local infrastructure projects including electrification, water, and education and health projects (McKenzie and Yang 2015). There is evidence that the program increases access to infrastructure, but program design is also important since there is evidence that the program can be regressive and the right match must be decided.

Reintegration upon return. Research on how policymakers can help reintegrate internal and international migrants into their labor markets upon their return is very limited. Some migrant-sending countries such as the Philippines have programs to support self-employment among returning migrants through training and loans. Programs of this type can ease the transition of returning migrants back into a labor market with which they may have lost the connections necessary to find jobs. These programs also have the potential to leverage the skills that returning migrants have acquired working in urban areas or abroad.

Engagement with diaspora. Research on the links between migrant-sending countries and their diasporas shows that these links are often strong and can facilitate knowledge and financial flows in both directions. Argentina's RAICES program, Thailand's Reverse Brain Drain project, and Ethiopia's Diaspora Volunteer Program are designed to build bridges to talented members of the diaspora. Jamaica, for example, has created a database of migrants who are currently working abroad (McKenzie and Yang 2015). Many countries have developed programs to attract migrant workers back to their country of origin both permanently and on a short-term basis to promote the circulation of ideas, technology, and capital (Dickerson and Özden 2016). Malaysia's Returning Expert Program (REP) uses incentives to attract high-skilled Malaysians back to the country. A recent evaluation found that the incentives increased the probability of return by 40 percent for applicants who had an existing job offer with only a modest fiscal impact (Del Carpio and others 2016). Myanmar could consider developing programs to strengthen links with its diaspora and to encourage return. Such programs seem to work best when they have clear objectives, a targeted group, a defined budget, and clear program terms (Dickerson and Özden 2016).

In sum, internal and international migration is happening in Myanmar. While it benefits the migrants and their families, the benefits could be greater if the barriers to quality migration could be reduced. If migrants had better information about job opportunities in receiving markets, access to finance so migrants could move when they needed to (both out- and in-migration), guidance from international MOUs that identify better jobs, and lower costs to bringing the benefits of migration back home, migration would not only enhance personal well-being, but be a source of overall growth. The international experience, though limited, offers some directions for Myanmar to consider to develop a comprehensive Migration for Jobs strategy, design policies and programs to implement the program, and allocate financing accordingly.

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