Unpacking School-to-Work Transition
Data and evidence synthesis

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### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AFDB</td>
<td>African Development Bank</td>
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<td>ALMP</td>
<td>active labour market programme</td>
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<td>COE</td>
<td>Centre of Excellence</td>
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<tr>
<td>CVET</td>
<td>continuous vocational education and training</td>
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<td>DHS</td>
<td>Demographic and Health Survey</td>
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<td>EAP</td>
<td>East Asia and Pacific</td>
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<td>ECA</td>
<td>Europe and Central Asia</td>
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<td>ECD</td>
<td>Early Childhood Development</td>
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<td>FCS</td>
<td>fragile and conflict-affected states</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GEI</td>
<td>Global Entrepreneurship Index</td>
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<td>GEM</td>
<td>Global Entrepreneurship Monitor</td>
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<td>GER</td>
<td>gross enrolment ratio</td>
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<td>GVC</td>
<td>global value chain</td>
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<td>HCI</td>
<td>Human Capital Index</td>
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<td>IADB</td>
<td>Inter-American Development Bank</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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<td>IVET</td>
<td>initial vocational education and training</td>
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<td>IYF</td>
<td>International Youth Foundation</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>IZA</td>
<td>Institute of Labor Economics</td>
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<td>LAC</td>
<td>Latin America and Caribbean</td>
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<td>LAYS</td>
<td>learning-adjusted years of schooling</td>
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<td>LIC</td>
<td>low-income countries</td>
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<tr>
<td>LMC</td>
<td>low middle-income countries</td>
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<tr>
<td>LMIC</td>
<td>low and middle-income countries</td>
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<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
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<td>MICS</td>
<td>Multiple Indicators Cluster Survey</td>
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<tr>
<td>MIS</td>
<td>management information systems</td>
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<td>MSME</td>
<td>micro, small and medium enterprise</td>
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<td>NEET</td>
<td>not in education, employment or training</td>
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<td>NQF</td>
<td>National Qualifications Framework</td>
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<td>NSDC</td>
<td>National Skills Development Council</td>
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<td>NVQF</td>
<td>National Vocational Qualifications Framework</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PES</td>
<td>public employment service</td>
</tr>
<tr>
<td>PIAAC</td>
<td>Programme for the International Assessment of Adult Competencies</td>
</tr>
<tr>
<td>PPP</td>
<td>public-private partnership</td>
</tr>
<tr>
<td>RPL</td>
<td>recognition of prior learning</td>
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<tr>
<td>S4YE</td>
<td>Solutions for Youth Employment</td>
</tr>
<tr>
<td>SABER</td>
<td>Systems Assessment for Better Education Results</td>
</tr>
<tr>
<td>SAR</td>
<td>South Asia Region</td>
</tr>
<tr>
<td>SDF</td>
<td>Skills Development Fund</td>
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<tr>
<td>SEZ</td>
<td>special economic zones</td>
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</tbody>
</table>
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- Informal and unfair recruitment practices
- Inadequate access to capital
- Gendered roles and responsibilities
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Proposed theory of change for UNICEF
Executive Summary

Why does school-to-work transition matter?
School-to-work transition is a critical juncture in the lives of young people and has consequences for future employment, well-being and social connectedness. In particular, the first years on the labour market set the precedent for future employment and earnings trajectories. Meanwhile, young people with unsatisfactory transitions are also more likely to show signs of depression and lower sense of well-being well into mid-life. Further, school-to-work transition matters for economic and societal well-being. In many developing countries, a large share of the population is still young; if this young cohort is met with opportunities for productive and decent work when they enter the workforce, they will be able to contribute to the development of their societies. Limited economic prospects on the other hand, lead to a mass of frustrated youth and high rates of youth migration to urban areas or other countries, with ensuing humanitarian risks.

How successful are young people in their transitions from school to work?
School-to-work transition outcomes of young people in low- and middle-income countries are weak, suggesting inadequate integration of youth in labour markets. 1 in 5 youth are not in education, employment or training (NEET) and young women, in particular, constitute the bulk of youth in this situation, their status driven less by unemployment and more by inactivity. Among those who are employed, more than 8 in 10 are in informal employment and the majority are in poor quality jobs – evidenced by low earnings, low job satisfaction, and inadequate conditions of service for those in paid jobs (e.g. low medical insurance and social security coverage, lack of written contracts). Further, work outcomes of young people deviate significantly from the high aspirations they have about their careers. A major concern is that a large number of youth (nearly 4 in 10) do not make the transition to stable employment even when they are older – this means that the opportunity to earn a decent living will remain elusive to many for the rest of their lives. On average, youth fare worse than adults in the labour market. Gender and demographic differences vary based on choice of indicator. For example, while rural youth are less likely to be unemployed than urban youth, they tend to be in very low-quality jobs. Similarly, unemployment and NEET rates are lower in low-income countries compared to middle-income countries but young people in these settings are more likely to be stuck in low quality jobs.

Drivers of school-to-work transition: skills demand
The first driver of school-to-work transition outcomes is the number of good jobs in the economy to absorb the rapidly growing labour force which drives the demand for specific types and combinations of skills. The structure of the labour market in many low and middle-income countries (LMICs) is tilted towards high levels of informality and low productivity employment. In low income and lower middle-income countries, in particular, a substantial share of the workforce is in non-wage (typically subsistence) and agriculture sector employment. Consequently, the intensity of analytical and interpersonal skills use at work is lower in countries at lower levels of development. Notwithstanding these cross-country differences in intensity of analytical and interpersonal skills use, changes in technology and labour market structure over time have been leading to an increase in analytical and interpersonal skills use and a decline in routine/manual skills use across all income groups. Another notable shift in the labour market structure is a trend toward premature de-industrialization and labour re-allocation from agriculture to lower productivity service sector activities, characterized by informality and vulnerable employment. At the same time, new jobs are not being created fast enough in many LMICs to absorb the increase in new labour market entrants. Gaps in
access to capital, skills, business linkages, regulatory environment and innovations eco-systems are some of the key factors affecting the entry, growth and productivity of enterprises in the farm/non-farm sector that will create new and better jobs in the economy.

Technological, climate, demographic and other changes such as globalization are shaping the future of work and consequently future skill demand. While the impact of these changes will vary based on country context, the emerging trends in developing countries are changes in the criteria for integration in global value chains in manufacturing, creation of new jobs in the digital and green economies, increase in non-standard forms of employment (e.g. gig economy), and higher demand for higher-order transferable and digital skills. For developing countries, there is some concern that today’s jobs will be lost through automation (though much less so than advanced economies), and there is a real risk that these countries will lose out on jobs that are never created. This means that policy makers need to identify concrete ways for developing countries to position themselves to address the disruptions and leverage the opportunities brought about by these trends.

**Drivers of school-to-work transition: skills availability**
The second driver of school-to-work transition is the availability of skills for work in youth as demanded by the labour market. In terms of educational attainment, the majority of young people in LMICs exit the education system by the age of 18 (and earlier in low-income countries) and before completing upper secondary education (particularly in low- and many lower middle-income countries). Looking beyond educational credentials, available data also suggest gaps in the cognitive, digital, and technical skills of young people, especially those in less developed and fragile countries, from poor households, with less education, rural youth and young women. There is also evidence of skills mismatches, comprising both over- and under-qualification relative to job needs, with young people in less developed countries more likely to be underqualified for the jobs they are in compared to young people in more developed countries where over-qualification rates are higher. Some of the key underlying causes of skills gaps and mismatches include: (i) poor skill foundations laid in early childhood and in basic education; (ii) barriers to accessing skills development opportunities in terms of cost, distance, entry requirements, and lack of alternative pathways; (iii) poor quality and weak market relevance of skills development systems; (iv) weak coordination, management and oversight; (v) inadequate and inefficient financing; (vi) lack of information and awareness of labour markets and misaligned study choices; and (vii) gender biases in informing study and work choices.

**Drivers of school-to-work transition: skills activation**
The third driver of school-to-work transition are factors that affect young people’s search for work and labour market attachment. Young people face significant obstacles in their search for work. As a result, the job search process can be protracted. Based on school-to-work transition surveys in 23 LMICs, the average time for young people in low- and middle-income countries to find the first job is 17 months and 53 months to find their first stable employment. Young women and those with lower education have considerably longer search durations. At the same time, the high share of labour market inactivity among young women compared to young men tells us that a significant number never enter the workforce after completing their education and despite aspirations to do so. The underlying factors that affect young people in connecting to productive and decent jobs is their lack of work experience, informal recruitment practices of firms, lack of information and networks to connect to jobs, inadequate employment services, constraints in access to capital (for those preferring self-employment), spatial mismatches (between location of jobs and where
young people live), cost of transportation for job seeking, social and cultural norms (including care responsibilities of young women), and access to social protection.

**What works in improving young people's transitions to work?**

The current evidence base around the impact of programmes to strengthen school-to-work transition presents a mixed record in terms of increasing employment and earnings, and almost 70 per cent of the programmes evaluated are not effective in raising employment and earnings for beneficiaries. However, amongst those evaluated, some specific design and implementation features are consistently associated with higher effectiveness. These include: comprehensive programmes that provide a diversified package of interventions corresponding to the multiple constraints of the beneficiaries (such as programmes that combine classroom training, internship/work experience, job search assistance, counselling and life skills training, or entrepreneurship, and that combine skills training with finance and/or mentoring/technical advice); programmes that profile and target the specific needs and contexts of beneficiaries, as well as provide individualized follow-up, counselling and monitoring; and programmes that link payments to the outcomes of the beneficiaries (e.g. labour market outcomes). However, evidence gaps exist in our understanding of the transmission mechanisms and optimal design features; what works to enable young entrepreneurs (and start-ups) to grow; impact of soft-skills training; long-term and general equilibrium impacts; and cost-effectiveness. Although growing in popularity, there is also an evidence gap around system-wide interventions such as integrating youth in value-chains, supporting their market linkages and social entrepreneurship.

**Proposed theory of change framework**

Drawing on the above, we propose a theory of change framework to help inform UNICEF’s thinking on school-to-work transition (this framework has also informed the background note on employability for the Education Strategy 2030). The framework focuses on young people aged 15 and above; it is intended to be multi-sectoral and holistic and reflects both the demand and supply sides. In this context, demand-side refers to typically firm/farm level interventions that support the creation of new and better jobs in the economy and are not typically youth-specific. Meanwhile, supply-side refers to measures which are youth-focused and are intended to develop market-relevant skills for work in youth and help them connect to productive and decent work opportunities. UNICEF’s operations and mandate suggest a far bigger potential role on the supply-side but informed by dynamics on the demand-side.

The supply-side is built on five pillars with the objective of smoothing youth transition to productive and decent work as measured by NEET and work outcomes (including job quality) amongst those employed. These pillars are: (i) access to equitable opportunities to develop market-relevant skills for work; (ii) development of market-relevant skills for work (i.e. an integrated package, not stand-alone skills) via multiple pathways and modalities; (iii) strengthening the quality and market-relevance of skills provision; (iv) access to productive and decent work opportunities; and (v) eco-system strengthening. The theory of change is accompanied by a comprehensive inventory of interventions and approaches in that space.

The success of school-to-work transition, as conceptualised below, depends on strong skill foundations and investments laid in early childhood and through the system of basic education. As such this framework is not a substitute but builds on and extends the life course perspective on skills development. In other words, a strong early child development (ECD) and basic education system that is oriented towards quality (not just quantity) is an essential prerequisite for any operationalization of this framework.
Theory of Change Framework

**Outcomes:** Youth transition smoothly to productive and decent work.

<table>
<thead>
<tr>
<th>Reduced NEET</th>
<th>Reduced time to find employment</th>
<th>Better quality of employment</th>
<th>Improved retention in employment</th>
<th>Increased earnings</th>
</tr>
</thead>
</table>

**SUPPLY-SIDE**

- **Intermediate Outcome:** Youth possess market-relevant skills for work needed to secure, retain and thrive in productive and decent work.
- Promoting equitable access to opportunities to develop skills for work of youth.
- Developing market-relevant skills for work of youth via multiple pathways & modalities.
- Strengthening quality and market-relevance of skills provision.
- Facilitating youth to access productive and decent work opportunities.

**Demand-Side**

- **Intermediate Outcome:** More and better quality jobs are created in the economy.

**Fundamentals:** Macroeconomic stability, Rule of law, Regulatory environment, Peace and security, Infrastructure.

Policy, Planning and Advocacy
Governance and Coordination
Financing

Intermediate Outcome: An enabling eco-system for youth transition to productive and decent work is developed
01 Purpose and scope

IN BRIEF

- The school-to-work transition of young people matters because it impacts their future employment and earning prospects, well-being and social cohesion.
- The purpose of the scoping paper is to inform the development of a common understanding in UNICEF on school-to-work transition issues. The paper is one in a series of products to help UNICEF determine its strategic positioning in this area.
- The paper clarifies the concepts around school-to-work transition; highlights trends in school-to-work transition of young people and the drivers that shape these trends; and uses the evidence to propose a holistic theory of change for consideration by UNICEF.
- The paper takes a holistic view of the school-to-work transition of young people aged 15–24 in low- and middle-income countries. Since brain maturation and role transitions of adolescents continue well after the age of 20, an inclusive focus (ages 15–24 vs 15–19) is taken to understand the full scope of challenges and opportunities for successful transitions.

WHY DOES SCHOOL-TO-WORK TRANSITION MATTER?

The first years on the labour market have impacts on future earnings, well-being and social connectedness. These early years in work set the precedent for future employment and earnings trajectories. Research from Ghana and Tanzania, for example, shows that low-paid employment has a scarring effect, with young workers especially likely to fall into, and remain trapped in, low-pay activities.\(^1\) In Peru, starting a labour market trajectory in a high quality job increases the probability of getting a high-quality job later by 12 per cent as compared to a young person who starts their transition in a low-quality job.\(^2\) Good livelihoods are also a source of dignity, self-esteem, connectedness, well-being, and social peace, while longer transitions lead to greater vulnerability and risky behaviours among youth.\(^3\)

Young people have high expectations about their future – unmet aspirations have long-term effects on individual mental health and sense of well-being. According to the Global Millennial Viewpoints Survey,\(^4\) 74 per cent of youth believe they will get the kind of job they want while 65 per cent feel they will be able to make as much money as they want. Young people in low- and middle-income countries (LMICs) are even more optimistic as more than 75 per cent of youth surveyed in India and Africa feel they will be able to do both. Similarly, 79 per cent of urban youth in LMICs in a survey sponsored by the Citi Foundation,\(^5\) feel they will have opportunities to succeed in their preferred career, while 87 per cent feel that they have
more ability to achieve their professional goals than their parents did. When aspirations are not met, they incur a significant toll on young people by reducing their sense of subjective well-being (even into mid-life) and increasing symptoms of depression. Unmet aspirations also lead to lowered job satisfaction in the future, which has been found to increase stress, anxiety, and other markers of poor mental health.

In 2015, 45 per cent of the population in LMICs was under the age of 25 but without economic opportunity, this demographic gift will turn into a demographic curse. The majority of developing countries are young with 56 per cent of LMICs having more than half of their population below the age of 25 in 2015. In particular, 47 per cent of the global under-25 population (and 44 per cent between the ages of 15 and 24) is in sub-Saharan Africa (SSA) and the South Asia region (SAR). While the share of global under-25 population in LMICs is projected to be stable in the future (around 90 per cent), the share of global under-25 population living in SSA and SAR is projected to increase. By 2030, 52 per cent of the global under-25 population (and 49 per cent aged between 15 and 24) will be in SSA and SAR. Further, by 2050, 57 per cent of the global under-25 population (and 55 per cent between the ages of 15 and 24) will be in SSA and SAR. However, reaping the demographic dividend is not automatic; if a large cohort of young people are not able to access and leverage economic opportunity to improve their lives, a large mass of frustrated youth is likely to become a potential source of social and political instability. Further, such adverse prospects for youth can undermine the economy for years to come.

WHAT IS THE SCOPE AND OBJECTIVE OF THIS PAPER?

The purpose of the paper is to inform the development of a common understanding in UNICEF on school-to-work transition. It seeks to clarify the concepts around school-to-work transition, highlights the trends and drivers of the transition, and uses the evidence available to propose a holistic theory of change for consideration by UNICEF. This scoping paper is one of a series of products by the Policy Lab, under the workstream “skills and employment”, and complements the technical note developed by UNICEF’s Education Section in Programme Division. Jointly, these products (among others) seek to inform UNICEF’s vision and agenda-setting on this topic.

The paper provides a comprehensive view of the school-to-work transition of young people aged 15 to 24 in low- and middle-income countries. The transition concerns the interface between education and the labour market, and includes aspects of educational, social and employment policies, however, the majority of published reports focus on either skills or employment. This paper is an effort to develop a holistic perspective, linking skill demand, skill supply and labour market outcomes of young people aged 15 to 24 in LMICs, while highlighting the underlying causes that shape these trends. The paper is based on an extensive review and synthesis of literature and evidence thus making it a relevant source of information for policy design and research within and outside UNICEF.

The focus on young people aged 15 to 24 is informed by research on adolescent brain development and role transitions. Rather than limit the analysis to ages 15–19, an inclusive approach covering ages 15–24 corresponds more closely to current research on adolescent brain maturation and the timing of their social role transitions, in particular, their transition to work (Box 1.1). Old notions and static views of adolescent development also risk limiting the duration of investments in the full scope of policies and programmes needed to maximize chances for successful transitions across diverse contexts.
The paper is divided into eight chapters. Chapter 1 lays out the purpose and scope. Chapter 2 explains key concepts, definitions, and methodology. Chapter 3 highlights trends in school-to-work transition outcomes, while chapters 4, 5 and 6 reflect on the proximate and underlying causes of these trends. Chapter 7 summarizes evidence on what has worked to improve youth employment in LMICs. Chapter 8 synthesizes the main findings to propose a theory of change that can inform UNICEF’s thinking in this area.

**BOX 1.1: WHAT IS THE JUSTIFICATION FOR FOCUSING ON AGES 15 TO 24?**

Adolescence is a period of transition that begins with biological changes related to puberty and ends with the attainment of adult roles and responsibilities. In this conceptualization, the start and end-points of the transition are not static as both the age of puberty and the timing of role transitions are no longer the same as they were 30 or 50 years ago. Even the World Health Organization, which defines adolescence as the ages of 10 and 19, cautions that “age is a convenient way to define adolescence … but it is only one characteristic that delineates this period of development … age is often more appropriate for assessing and comparing biological changes (e.g. puberty), which are fairly universal, than the social transitions, which vary more with the socio-cultural environment”. Indeed, an article published in the Lancet in 2018 made a case for re-defining adolescence as ages 10–24, the American Academy of Pediatrics had identified adolescence as ages 11–21, while New Zealand changed its child protection system in 2016 to recognize its protective duty to people older than 18 on leaving care due to their continued vulnerability.

Adolescents’ brain maturation and role transitions continue into their 20s which justifies a more inclusive age focus. Neuroscience studies indicate that the brain continues to develop into the 20s.
especially the pre-frontal cortex, which is responsible for executive functioning\textsuperscript{23} associated with skills (such as problem-solving, self-control, initiative, adaptability) valued by employers (Figure 1.1(a)). Tests show a burst of improvement in the proficiency of executive functioning skills around ages 3–5 with another significant increase between ages 15 and 23 (Figure 1.1(b)), suggesting that the window of opportunity to develop these skills extends into the 20s. Findings from school-to-work transition (SWT) surveys by the International Labour Organization (ILO) in 33 countries suggest that among the 15–29-year-olds who have transited to stable employment, the age at first employment is 17 years in low-income countries (LICs), 19 years in lower middle-income countries (LMCs), and 20 years in upper middle-income countries (UMCs).\textsuperscript{24} In fact, for this transited cohort, the process of finding work begins earlier at the age of 16 years in LICs, 18 years in LMCs, and 19 years in UMCs.\textsuperscript{25} Meanwhile, models that taken into account both transited and non-transited cohorts estimate even longer job search durations: 17 months to find a first employment, and 53 months to transit to a first stable employment.\textsuperscript{26} For the reasons above, the upper age cut-off is 24 years.

**Meanwhile, labour and compulsory education laws inform the choice of the lower cut-off age at 15.** The Minimum Age Convention, 1973 sets the minimum age for admission to employment at 15 years and 18 years for hazardous work.\textsuperscript{27} Further, in the 119 LMICs for which data on duration and official age at start of compulsory education was available, the median official age at exit from compulsory education in LMICs is 15 years (Figure 1.2).\textsuperscript{28}

**Figure 1.2: Number of LMICs by age at exit from compulsory education**

<table>
<thead>
<tr>
<th>Age at Exit</th>
<th>LMICs</th>
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<tr>
<td>Below 15 yrs</td>
<td>35</td>
</tr>
<tr>
<td>15 yrs</td>
<td>27</td>
</tr>
<tr>
<td>16 yrs</td>
<td>27</td>
</tr>
<tr>
<td>17 yrs</td>
<td>12</td>
</tr>
<tr>
<td>18 yrs</td>
<td>15</td>
</tr>
<tr>
<td>19 yrs</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: UIS.Stat, WDI
Notes: Estimated as official age at entry in primary in 2017 plus years of compulsory primary and secondary in 2017.
IN BRIEF

- This paper defines school-to-work transition as processes that enable young people aged 15–24 to move easily from initial education to productive and decent work. Two processes are salient to this definition: (i) the process of preparing young people for the transition; (ii) the process of making the actual transition. School-to-work transition is embedded within an integrated lifelong learning and employability framework.
- The framework for analysis in the paper unpacks both the proximate and underlying causes of school-to-work transition outcomes.
- The proximate causes are the demand and supply of skills – namely, the availability of jobs (skill demand), whether young people have the skills demanded by the labour market and whether they can connect to productive and decent jobs aligned with their skills (skill supply). The demand and supply of skills are further shaped by micro, meso, and macro factors (underlying causes), for example individual attributes, family background, institutions, markets, culture, global mega-trends, among others.
- The paper is based on extensive review and synthesis of evidence and data from 200+ global, regional and country studies, research papers, meta studies, project documents, primary and secondary data sources.

WHAT IS SCHOOL-TO-WORK TRANSITION?

There is no precise definition of school-to-work transition in terms of its duration, start and endpoints. For example, the European Centre for Development of Vocational Training defines school-to-work transition as the process of moving from education or training to employment, but does not assign any attributes to the quality of employment. Meanwhile, ILO uses a stricter definition of school-to-work transition: the passage of a young person from end of schooling to the first stable or satisfactory employment. While both definitions see the starting point of the transition as the end of schooling, one could argue that the transition starts before leaving school; work-study combinations or apprenticeships, for example, constitute stepping stones for individuals, facilitating faster transition to employment upon leaving school. For instance, a recent study commissioned by the Mastercard Foundation defined successful school-to-work transition as a process in which youth acquire the skills to make decisions in their job search that maximize their options and enables them to start an employment trajectory that
improves their livelihood. Indeed, the low employer perception of workforce skills in LMICs suggests that youth entering the workforce are not adequately prepared for the transition (chapter 5).

School-to-work transition trajectories of young people are not linear and do not follow a specific sequence. Some young people study while holding multiple jobs, while others may go back to school after work. Some youth start off in irregular employment and then transit to regular employment, while others may never be able to make the transition. Alternatively, some youth may see their transition trajectories interrupted by spells of unemployment or inactivity due to economic or life transitions, while others with prolonged bouts of unemployment may become inactive. Thus the transition from school to work (and transition to stable or satisfactory employment in particular) should not be seen as an “event” but a “process” within which a number of transitions may occur, and several factors – such as education, skills, gender, family background, cultural norms, location, regulatory and economic climate – impact the school-to-work transition trajectories.

This paper defines school-to-work transition as processes that enable young people aged 15–24 to move easily from education to productive and decent work. Two processes are salient to this definition:

- **the process of preparing young people for the transition**, whereby young people aged 15–24 develop the relevant skills for work, such as the broad set of qualifications, knowledge, competencies, attitudes and values that are needed to secure, maintain and thrive in employment, and adapt to the evolving economy (see Box 2.1 for description of skill typologies). Developing skills for work in this context encompasses building new skills demanded by the labour market as well as mastering, contextualizing and/or reinforcing the existing stock of skills (i.e. those acquired in earlier life-course periods) which enables an individual to be more productive in an economic sense. The different skills for work can be built via multiple pathways (e.g. formal, non-formal, informal, on-the-job) and multiple modalities (e.g. in school, outside school, online, work-based, among others); and
- **the process of making the actual transition**, whereby young people are able to find and connect to productive and decent work opportunities that make effective use of their skills. Further, in this definition, the end-point of the transition is movement into “productive and decent work” (see Box 2.1) establishing that quality of work matters for transitions to be successful.

**BOX 2.1: SOME KEY CONCEPTS**

What are “skills for work”? According to UNICEF, skills for work (and life) comprise the following mix of skills:

- **Foundational skills** (e.g. literacy, numeracy) are needed regardless of employment aspirations, and are essential prerequisites to develop further skills for work (and life).
- **Transferable skills** are the set of competencies, attitudes and values needed to become adaptive and agile learners, and navigate personal, academic, social and economic challenges. They are the “magic
“glue” that connect, reinforce, and develop all other types of skills. UNICEF further categorizes transferable skills as cognitive skills (e.g. problem-solving, critical thinking, creative thinking); social skills (e.g. cooperation, communication); emotional skills (e.g. self-management, resilience).

- **Technical and vocational skills** encompass the acquired knowledge, expertise, interactions needed for competent performance of the duties associated with a specific job. Some technical and vocational skills have very narrow application in a single economic sector, while others are more mobile across sectors and occupations.

- **Digital skills** are the knowledge, competencies, attitudes to use and understand technology; search, manage, communicate, collaborate, create and share digital content; build knowledge and solve problems safely, critically and ethically in digital spaces.

**What is “productive and decent work”?”**

There are many measures of job quality. Eurofund’s job quality index has four pillars: earnings, prospects, intrinsic job quality, and working time quality. The framework elaborated by the Organisation for Economic Co-operation and Development (OECD) has three aspects – earnings quality, labour market security, quality of work environment. ILO’s “decent work” framework has 10 elements – employment opportunities; adequate earnings; decent working time; work-life balance; work that should be abolished; stability and security of work; equal opportunity and treatment at work; safe work environment; social security; social dialogue and representation. Meanwhile, a job quality index by the World Bank and Government of Turkey has six areas: legal protection, earnings, prospects, career growth, skill use, resilience to shocks and adaptability.

Based on this, productive and decent work in this paper refers to wage or self-employment (or a ‘portfolio’ thereof) with these attributes: (i) adequate earnings and hours; (ii) adequate and resilient market demand for product, service or job role; (iii) advancement prospects and trajectories; (iv) work safety; (v) productivity matched to skills; (vi) written contracts (wage work); (vii) compliant with relevant labour laws; and (viii) social security coverage (regardless of work status).

**School-to-work transition is embedded within an integrated lifelong learning and employability framework (Figure 2.1).** Employability refers to an individual’s ability to find initial employment, maintain employment, advance and thrive in employment, obtain new employment, and adapt to changing technology and labour market conditions. Individual ‘employability’ is therefore a dynamic concept having both a capabilities and an opportunity dimension, namely, (i) whether individuals possess the relevant skills (developed via a process of lifelong learning) required to find, maintain and thrive in employment when they first enter the labour market and over the course of their working life in the context of an evolving economy; and (ii) whether individuals are able to connect to productive and decent work opportunities that make optimal use of their skills when they first enter the labour market and over the course of their working life in the context of shifts in the world of work and personal life course transitions. In this stylized framework, school-to-work transition is a stage in the life course of individuals when they are young and poised to enter and/or navigate the labour market for the first time.
The lifelong learning perspective in the framework is also informed by research on the technology of skill formation. Findings from research suggest that:

- Skill formation is dynamic, meaning that the mastery of skills for success at work (and life) and the development of their underlying neural pathways follow hierarchical rules. Later attainments build on foundations that are laid down earlier (i.e. skills beget skills).\(^{44}\)
- The formation of cognitive and socio-emotional skills is inter-dependent, and skill development in one domain affects the stock of skills in the other domains.\(^{45}\)
- Skills are best formed in a predictable sequence of sensitive periods, during which the development of specific neural circuits and the behaviours they mediate are most plastic and optimally receptive to environmental influences (Table 2.1).\(^{46}\)
- Skills development is optimized when learning is scaffolded – in other words, it is easier to adopt and maintain new knowledge if it builds upon and connects to previous knowledge, and if the learning activity is adjusted to the level of the learner.\(^{47}\)
• Learner motivation is crucial to skill development. If the learner considers the skill important, then she will be willing to invest the effort to learn it. This significance may be derived from intrinsic or extrinsic motivation.48

• Skills decay if they are not used or practiced – this applies especially to tasks requiring cognitive skills.49 But not all practice is equally effective. Providing feedback during practice plays a central role for the accumulation of skills.50

Hence, solid skills foundations, laid in childhood through adolescence, form the basis for developing more advanced skills (including higher order cognitive as well as technical and vocational skills) in later years (i.e. older adolescence, young adulthood, and adulthood). Without developing these skill foundations during sensitive developmental periods in earlier life stages, the prospects of strengthening skills for work later in the life course are thin.

**Table 2.1: Sensitive periods of skills formation**

<table>
<thead>
<tr>
<th>Types of skills</th>
<th>early childhood</th>
<th>middle childhood</th>
<th>adolescence</th>
<th>young adulthood</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic cognitive problem-solving resilience achievement motivation control teamwork initiative confidence ethics communications technical skills</td>
<td>foundational optimal</td>
<td>foundational optimal</td>
<td>optimal</td>
<td>reinforce</td>
</tr>
<tr>
<td>foundational optimal</td>
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<td>foundational optimal</td>
<td>foundational optimal</td>
<td>optimal</td>
<td>reinforce</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from the PRACTICE model

Notes: 'Foundational' indicates that skills built in this period form the basis for the core skill building in the next period. 'Optimal' refers to the particularly appropriate period for building skills. 'Reinforce' indicates that skills acquired in preceding period needs intense practice in this stage for the skills to be truly learned.

**WHAT IS THE SCOPING METHODOLOGY?**

**FRAMEWORK FOR ANALYSIS**

The framework to analyze school-to-work transition outcomes of young people addresses the proximate and underlying causes that affect these outcomes. In this framework (Figure 2.2), school-to-work transition outcomes are defined in terms of labour market outcomes of young people aged 15–24, which encompasses the extent of youth labour market participation, as well as the type and quality of employment. To understand the drivers of the transition, the framework seeks to unpack both proximate and underlying causes that shape youth labour market outcomes. Proximate causes refer to immediate factors that affect the school-to-work transition of young people, while underlying causes refer to indirect or distal factors that affect outcomes via their effect on the proximate factors.
Understanding the underlying causes is necessary to developing the full scope of policy and programme solutions to address the school-to-work transition challenge in a sustainable way.

**Figure 2.2: Framework for analysis**

**Underlying Causes**
- Individual attributes
- Family, social network

**Proximate Causes**
- Community
- Spatial factors
- Sectoral or local policies & institutions
- Markets & enterprises
- Culture & social norms
- Demographic shifts
- Investment climate
- Fragility and conflict
- Global mega-trends

**Short-term and Long-term Consequences**
- Availability of productive and decent ‘job’ opportunities in the economy
- Availability of skills demanded in productive and decent ‘jobs’
- Connecting with productive and decent ‘jobs’ aligned with skills

**Notes:** ‘Jobs’ refer to both wage employment and self-employment in the formal or informal sector.

**Proximate causes in the framework relate to skill demand and supply.** Skill demand refers to the number and type of work opportunities in the labour market, while skill supply refers to both the availability of skills amongst youth as demanded by the labour market, and whether youth are able to activate their skills by connecting to work opportunities that align with their skills. The relationship between skill demand and supply is interlinked, as smooth transition from school-to-work requires both robust skill demand and supply, and alignment between the two. The relationship between skill demand and supply is also mutually reinforcing – countries that develop and deploy the skills of their workforce effectively are more likely to grow, increase productivity, and create more and better jobs.51

**The underlying factors in the framework relate to the mix of micro-, meso- and/or macro-societal factors that shape skill demand and supply.** Micro-level factors are those which relate to the self (e.g. gender, disability, individual motivation and aspirations) and one’s immediate social setting (e.g. family background); meso-level factors refer to group-level, sectoral and/or organizational factors (e.g. geographic region, market dynamics, enterprise level capabilities, school quality); while macro-societal factors refer to broader societal, cultural and economic factors (e.g. culture, economy, migration, automation, etc.).
DATA SOURCES
The scoping methodology is based on an extensive desk-based review and synthesis of findings from more than 150 reports, studies and documents. The paper reviews and synthesizes evidence from more than 150 global, thematic, regional and country reports, research papers, journal articles, meta studies, and project documents, which have been produced by academics, think tanks, foundations, private sector, and international organizations. Our search prioritized publications produced by (or available through), inter alia, the following sources: OECD, World Economic Forum (WEF), Institute of Labor Economics (IZA), the Global Entrepreneurship Monitor (GEM), Mastercard Foundation, McKinsey & Company, Asian Development Bank (ADB), African Development Bank (AFDB), Inter-American Development Bank (IADB), International Youth Foundation (IYF), World Bank, International Finance Corporation (IFC), ILO, United Nations Development Programme (UNDP), United Nations Department of Economic and Social Affairs (UNDESA), United Nations Educational, Scientific and Cultural Organization (UNESCO), UNICEF.

The methodology also comprises synthesis and/or analysis of data from more than 50 primary and secondary data sources. The primary and secondary data sources used for the paper were produced and/or curated by international agencies and think tanks, for example World Bank, ILO, UNESCO, UNICEF, International Telecommunications Union (ITU), UNDESA, GEM. Notable data sources used are:

- **Secondary data sources** (or consolidated databases of indicators) such as ILOSTAT, UIS.Stat, World Development Indicators (WDI), EdStats, Human Capital Index (HCI), World Bank Enterprise Surveys, Systems Assessment for Better Education Results (SABER), STEP Skills Measurement survey results database, Global Findex Database, Doing Business Indicators, Global Competitiveness Index, GEM, UN Population Database, Jobs database. The use of these data sources entails data extraction, filtering, and where applicable, low to medium light data cleaning and manipulation for analysis.

- **Primary data sources** (or micro datasets) such as STEP Skills Measurement surveys, School-to-work Transition (SWT) surveys, Demographic and Health Surveys (DHS), Multiple Indicators Cluster Surveys (MICS), GEM Adult Population Survey. The use of these data sources entails data cleaning and relatively intensive data manipulation for analysis.

LIMITATIONS OF THE ANALYSIS
This paper is intended to explain key concepts and provide an evidence-based overview of school-to-work transition outcomes and drivers to build a common understanding within UNICEF on this topic. As such, this paper is neither intended to be a deep dive on different aspects of the topic nor is it a programmatic guidance note for UNICEF staff. Further, while the paper recognizes (and re-affirms) the salience of developing critical skills foundations across a breadth of skills domains (including cognitive, social and emotional skills) in early childhood and through basic education, and sees these as essential pre-requisites for building market-relevant skills for work in young people aged 15 and older, these levels of education are outside the scope of this paper. To the extent possible, the analysis in the paper is limited to ages 15–24, but in certain cases, a more expansive definition of youth (ages 15–29, 18–24, etc.) is used. In such cases, the paper will make explicit the age group; in all other cases, where the age cohort 15–24 is referred to, the term young people or youth is used interchangeably. Lastly, the paper does not go into detail in describing the theory of change framework and intervention matrix in chapter 8, which are elaborated in a companion Technical Note produced by the Education team in UNICEF’s Programme Division.
Unpacking School-to-Work Transition: Data and evidence synthesis
03
How successful are young people’s transitions from school to work?

IN BRIEF

- School-to-work transition outcomes are weak, suggesting inadequate integration of youth in labour markets. Nearly 1 in 5 youth are not in education, employment or training. However, successful school-to-work transition is about more than just securing employment but also the quality of employment. Among those who are employed, more than 8 in 10 are in informal employment and the majority are in poor quality jobs – exemplified by low earnings, low job satisfaction, and/or inadequate conditions of service.
- A major concern is that a large number of youth (nearly 4 in 10) do not make the transition to stable employment even when they are older – this means that opportunity to earn a decent living will remain elusive to many for the rest of their lives.
- On average, youth fare worse than adults in terms of their employment outcomes. Young females and those with less education also face more difficulties than young men and those who are better educated in integrating into the labour market. Young migrants and those in fragile and conflict situations are also disproportionately affected.
- Youth have high aspirations and expectations about the future; however, current labour market outcomes deviate significantly from youth aspirations and expectations about their careers and conditions of employment.

Hence, the extent to which young people are able to successfully transition from school to work is measured in this chapter along several dimensions, including:

- The extent of their labour market participation (e.g. employment, unemployment, NEET);
- Their employment status (e.g. informal vs formal employment, wage vs self-employment);
- The quality of their employment (e.g. earnings, working hours, conditions of service);
- Their transition status; and
- The extent to which labour market outcomes of youth meet their aspirations.
Globally, 1 in 3 young people between ages 15 and 24 are in employment but there are significant gender and cross-country differences. As seen in Figure 3.1, 53 per cent of youth in low-income countries (LICs) are employed compared to 32 per cent in lower middle-income countries (LMCs) and 38 per cent in upper middle-income countries (UMCs). The higher employment rate in LICs is partly driven by higher poverty and lack of social protection which necessitates participation in economic activities even of poor quality. There are also substantial regional differences – the share of employed youth exceeds 40 per cent in SSA, East-Asia and the Pacific (EAP) and Latin America and Caribbean (LAC) but is low in the Middle East and North Africa (MENA) and SAR. Young men are more likely to be in employment than young women – at the global level, the gap between male and female employment is 14.7 percentage points but rises to more than 30 percentage points in MENA and SAR.

Youth who are not in employment may still be studying, unemployed and looking for work, or are inactive (i.e. discouraged, uninterested or unable to work). 21 per cent of the world’s youth are not in employment, education or training (NEET), while 37 per cent are in employment and 42 percent are not in employment but in education or training. The youth NEET rate is a broad measure of the underutilization of youth, and touches on matters of unemployment, early school leaving, and labour market discouragement. However, global NEET rates mask significant gender and cross-country differences. As shown in Figure 3.2, NEET rates are highest in LMCs (25 per cent), in SAR (28 per cent) and MENA (29 per cent in Arab States and 27 per cent in North Africa). Female NEET rates are high across the board (globally 7 out of 10 NEETs are young women) but the magnitude of female NEET rates also shows cross-region
differences: e.g. 47 per cent of young women in SAR are NEET (comprising 8 out of 10 of all NEETs in the region) vs 25 per cent in SSA (comprising 6 out of 10 all NEETs in the region). The gender gap in NEET rates emerges in late adolescence and widens over time. Based on ILO’s SWT surveys, the NEET rate is 1.5 times higher for girls aged 15–19 than boys (at 17 per cent and 11 per cent, respectively). The gender gap jumps significantly to 17 percentage points for young women aged 20–24 with the female and male NEET rates standing at 36 per cent and 19 per cent, respectively. 56

Among youth active in the labour force, those who are unemployed and actively seeking work are more likely to be urban, female, and have advanced education. Youth are three times as likely as adults to be unemployed – in MENA, SAR, SSA and parts of EAP (specifically, South-east Asia and Pacific), youth comprise 40 per cent or more of the total unemployed population, despite representing less than 25 per cent of the active labour force in their regions. 57 The female youth unemployment rate is also higher than male youth unemployment in most countries – it is particularly high in MENA where the female unemployment rate reaches nearly 40 per cent. 58 Urban youth unemployment is also higher than rural youth unemployment: out of the 78 LMICs for which urban/rural youth unemployment data was available, urban unemployment exceeded rural unemployment in 68 countries, with urban-rural gaps being significantly prominent in SSA countries. Meanwhile, in 72 out of 90 LMICs for which youth unemployment data by education level was available, the unemployment rate was higher amongst youth with advanced education compared to youth with basic education – the gap being in excess of 40 percentage points in countries like Egypt and Tunisia. 59 One plausible reason for high unemployment of youth with advanced education is that they are more likely to wait to find a job that meets their expectations/requirements.

Young migrants and youth in fragile and conflict states (FCS) find themselves disadvantaged in the labour market. While on average, unemployment rates of youth in FCS are similar to the average for LMICs (12.9 per cent vs 12.8 per cent), 60 in some FCS countries, more than one in four youth who are active in the labour force are unemployed (e.g. West Bank Gaza, Libya, Haiti, Sudan, Somalia). 61 Since many FCS countries are also low-income countries, young people find themselves compelled to take on employment even if it is of poor quality. Although data on migrants’ employment outcomes is sparse, there is some evidence to suggest that young migrants struggle in the labour market. In 2017, more foreign-born young people aged 15–29 years in the European Union (EU) were NEET (20 per cent) than native-born young people (13 per cent). The unemployment rate for young people not born in the EU was also higher than for other young people throughout 2007–2017. Among all young employees aged 15–29 in the 28 EU countries, those who were not EU-born consistently had the highest rates of temporary employment between 2007 and 2017. Further, in 2017, young migrants born outside the EU recorded the highest shares of part-time employment (30 per cent), ahead of young native-born (23.1 per cent) and young migrants born in other EU Member States (23 per cent). 62 Among all migrant categories, refugee youth appear to be most disadvantaged.

STATUS IN EMPLOYMENT

Young people are less likely to be in wage employment in low- and lower middle-income countries compared to upper middle-income countries. While more than 3 in 4 employed youth aged 15 to 29 in UMCs are in wage employment, less than 1 in 2 employed youth are in wage employment in LICs and LMCs, albeit with significant cross-country differences. 63 Findings from ILO’s SWT surveys in LMICs suggests that youth are more likely to be in wage employment in LAC, MENA, and Europe and Central Asia (ECA) regions (Figure 3.3(a)). Conversely, self-employment is higher in SSA and SAR, as is the share of youth working as unpaid workers in family/household enterprises. Youth entrepreneurship in LMICs is
varied in terms of the motivation, size and scope (Box 3.1 for details). Young women were more likely to be unpaid family workers than men, but the trend is less discernible in the case of self-employment; young women are less likely to be in self-employment compared to young men in UMCs but more likely in LICs and some LMCs.\(^{64}\)

**Figure 3.3: Employment status of youth**

![Graph showing employment status of youth](image)

Source: (a) SWT surveys, (b) Women and Men in the Informal Economy: A Statistical Picture (ILO, 2018)

There is some evidence to suggest that young people, in particular in low income settings, simultaneously engage in multiple types of employment (i.e. mixed livelihoods). For instance, a study\(^{65}\) by the Mastercard Foundation in rural Uganda and rural Ghana found that an overwhelming majority of study participants practiced mixed livelihoods. The young people in the study were nearly all engaged in small-scale agricultural production. Both formal and informal wage employment were rare and sporadic, or elusive; those who did engage found paid informal sector work typically in casual labour or by working in small businesses. Entrepreneurship and self-employment were important economic activities in both countries. The businesses that young people did engage in were characterized as ‘patchwork’ and were pursued in reaction to various immediate opportunities. These youth-owned businesses were not capital-intensive, meaning they could be started and stopped relatively easily, and did not require sacrifices such as declining other income-generating activities. The research found that mixed livelihoods allow for risk mitigation and help to maximize young people’s economic opportunities within vulnerable geographic areas.

More than eight out of ten employed young people aged 15–24 in LMICs are in informal employment.\(^{66}\) As seen in **Figure 3.3(b)**, young workers have the greatest chance to work formally in ECA and, to a certain degree, LAC. In contrast, nearly 9 in 10 young workers are in informal employment in
Africa and Asia (particularly South Asia). The composition of informal employment shows a dramatic shift as national income levels increase. Informal employment among youth in low-income countries is strongly focused around employment in the informal sector, while shares in informal jobs in the formal sector are low. In the upper-middle income countries, in contrast, higher shares of informally employed youth are engaged in informal employment in the formal sector than the informal sector.\textsuperscript{67} On average, informal employment is also correlated with education and age — however, for youth with primary education or less, age is not correlated with informality, suggesting an education threshold effect.\textsuperscript{68} When it comes to gender-based comparisons, there is significant country-level variation. For example, among 20 countries where SWT surveys were conducted, 11 (principally in ECA and MENA) had higher informal employment for young males aged 15 to 29 than young females, while 9 countries (mostly in SSA and LAC) showed the contrary.\textsuperscript{69} One apparent difference was in the composition of informal employment; whereas informally employed young women work in the informal sector, in contrast, young men are nearly equally split between the informal sector and informal jobs in the formal sector.\textsuperscript{70}

**Box 3.1: Youth Entrepreneurship in LMICs**

We analyzed the Global Entrepreneurship Monitor (GEM) 2015 survey in 28 LMICs to identify patterns in entrepreneurship among young people aged 18–24 years.\textsuperscript{71} Based on the GEM classification, 18 per cent of young people aged 18–24 in the 28 LMICs were engaged in entrepreneurship. This included nascent entrepreneurs (50 per cent), new entrepreneurs (32 per cent), and established entrepreneurs (18 per cent).\textsuperscript{72} A majority of these were male (58 per cent) and the average age was 22 years. Of these young entrepreneurs, 31 per cent had necessity motives for engaging in entrepreneurship, while 43 per cent had improvement-driven opportunity motives.\textsuperscript{73}

A majority of these enterprises were small — 67 per cent of young entrepreneurs had no employees (42 per cent, excluding nascent entrepreneurs), while 28 per cent had between 1 and 5 employees (50 per cent excluding nascent entrepreneurs). 65 per cent of young entrepreneurs were in consumer-oriented industries; while the majority served only local markets, around 28 per cent served export markets to some degree. A sizeable minority of young entrepreneurs were also engaged in innovation; 20 per cent reported using latest technologies or procedures and 22 per cent reported offering new products, that were offered only by a few or no competitors, to some customers.

Regarding future prospects, 45 per cent of early-stage and 32 per cent of established entrepreneurs expected some market expansion, though expectations of significant market expansion were low (3 per cent). The majority of young entrepreneurs also expected to hire more employees in the future although the scope of this expansion was moderate — 48 per cent of young entrepreneurs expected to hire between 1 and 5 additional employees in the next 5 years, 11 per cent between 6 and 10 additional employees, and only 9 per cent were expecting to hire more than 10 additional employees in the next 5 years.
Entrepreneurial interest in youth is high: 44 per cent of 18- to 24-year-olds who are not currently entrepreneurs said they perceive good opportunities in the next 6 months for starting a business, 44 per cent felt they had the skills to start a business, and 34 per cent would want to start their own business in the next 3 years. However, early-stage entrepreneurial rates for ages 18 to 24 and 25 to 29 (15 and 21 per cent respectively) suggest that young people find it difficult (now and later) to convert entrepreneurial intentions into an activity; 70 per cent of 18- to 24-year-olds who are not current entrepreneurs felt that starting a business is not easy in their country or that fear of failure would prevent them from trying.

QUALITY OF EMPLOYMENT

Nearly 4 out of 10 young people in LMICs are in working poverty. In particular, more than half of all young workers are in working poverty in LICs (70 per cent), SSA (68 per cent) and SAR (53 per cent) (Figure 3.4(a)). A comparison of working poverty rates of young workers vs all workers suggests that young workers aged 15 to 24 are also more likely to be in working poverty than older workers aged over 25 years across all regions and income groups.

Even when young people in LMICs are in wage employment, it does not seem to guarantee stability. Based on data from SWT surveys, the conditions of service of young people aged 15 to 29 in wage employment does not provide for labour security and protection, with significant cross-region differences. In MENA, while most young workers are in paid employment, fewer than half are covered by a written contract and have access to basic entitlements (insurance, paid sick leave, pension, etc.). In the Asia and Pacific region, at least two-thirds of young wage earners are engaged on the basis of an oral contract in three of the five countries surveyed and with a minority of workers receiving core entitlements. Meanwhile across the eight surveyed countries in SSA, of the few young workers who do attain paid work, only one-quarter have a written contract and more than 40 per cent are engaged on temporary contracts; meanwhile, core entitlements are received by only a small proportion of these paid young workers.

Nearly one-half of employed youth in LMICs seem to work too few or too many hours, although with significant cross-country differences. For instance, amongst non-student youth aged 15 to 29 who were employed, the share of those who worked less than 30 hours was greater than those who worked more than 50 hours in ECA (20.9 per cent vs 17.4 per cent) and SSA (45 per cent vs 25 per cent), while the opposite was true in the case of MENA (12.8 per cent vs 37.7 per cent) and Asia and Pacific (21.8 per cent vs 33.5 per cent). However, the share of youth working less than 10 hours remains well below 10 per cent across most LMICs. Following ILO’s definition of time-based underemployment, less than 10 per cent of youth aged 15-24 are underemployed in most LMICs, albeit with some country exceptions (e.g. Afghanistan, Algeria, Azerbaijan, Cape Verde, Ethiopia, Liberia, and Nicaragua have more than 20 per cent of employed youth in time-based underemployment).
A sizable number of young people aged 15 to 17 are also engaged in hazardous work classified as child labour. There are almost 38 million adolescents aged 15 to 17 in child labour – 24 million boys and 14 million girls. It should be recalled that 15- to 17-year-olds are above the minimum working age but are counted as in child labour if they are engaged in hazardous work (i.e., the work is or may be physically or psychologically injurious to their health and well-being). The incidence of 15- to 17-year-olds in hazardous work is higher in Africa, in countries affected by conflict, and in the industry sector (although the number of 15- to 17-year-olds in hazardous work in agriculture is higher).79

Finally, only 1 in 2 employed youth in LMICs are satisfied with their employment and not willing to change jobs.80 In the 32 low- and middle-income countries for which SWT survey data was reviewed, 17 countries had less than 50 per cent of youth aged 15 to 29 who were satisfied and not willing to change jobs. Moldova was the only country where more than 70 per cent of youth expressed job satisfaction and unwillingness to change employment, while 7 countries had between 60 and 70 per cent of youth who were satisfied and would not change jobs (i.e. Bangladesh, Vietnam, Jordan, Lebanon, Kyrgyz Republic, Russia, Ukraine). Conversely, job dissatisfaction was especially prevalent among youth in SSA where in eight of the nine SWT survey countries, less than half of young workers were satisfied and not willing to change jobs. In particular, job dissatisfaction was very high in Congo, Liberia, Tanzania, Malawi, and Zambia where less than 1 in 3 youth were satisfied and not willing to change their jobs.81

**TRANSITION STATUS**

A large number of young people have not yet transitioned to stable or satisfactory employment. In low-income countries, the age at which transition begins is lower than in other regions as low education attainment, poverty and lack of social protection speed the school-to-work transition; however, it also...
reduces the probability of finding quality employment over one’s life cycle, in turn contributing to persistent social and economic exclusion. As seen in Figure 3.5(a), even though the likelihood of finding stable employment increases with age across different contexts, nearly 4 in 10 youth aged 25–29 had not yet transited into stable or satisfactory employment. Young men and those with more years of education are more likely to have transited than young women and those with fewer years of education.

Many young people in LMICs are at risk of never making the transition to stable employment (Figure 3.5(b)). Research based on data for youth aged 15–29 from 23 SWT country surveys estimates that a non-trivial fraction – on average 10 per cent – of youth in these countries are expected to never find employment, and certainly not quality employment, over their life course. Longer durations as well as the risk of never transiting to employment over one’s life cycle was estimated to be considerably higher among women compared to men. There was also a clear positive association between school leaving age and work prior to leaving school on the probability of finding employment faster. In particular, young people who leave school after 18 (associated with tertiary education) had a lower likelihood of not transiting compared to those who left school before age 16 or between 16 and 18 years old.

Figure 3.5: Transition status of youth aged 15–29

Source: (a) Elder (2014), Elder and Koné (2014); Elder et al. (2015); (b) Manacorda et al. (2015).
Notes: ILO defines “transited to stable employment” as youth who are currently employed in a job based on a written contract of duration at least 12 months; or based on an oral agreement and are likely to keep the job over the next 12 months. “Transited to satisfactory self- or temporary employment” are youth who are currently employed in a job based on a written contract of duration less than 12 months and do not want to change the job; or based on an oral agreement and are not certain to keep the job over the next 12 months but do not want to change the job. “Transited to satisfactory self-employment” are youth who are currently self-employed and do not want to change the job. “In transition” are youth who are currently either active students (employed or unemployed); or unemployed (non-student); or employed in a temporary and non-satisfactory job; or currently inactive and not in education or training with the aim of looking for work later. “Transition not yet started” are youth who are currently still in school and inactive (inactive students); inactive and not in education or training with no intention of looking for work.
YOUTH EXPECTATIONS VS REALITY

There is a disconnect between the types of jobs youth aspire to and actual youth labour market outcomes. Young people in LMICs enter the labour market with high career aspirations. However, existing jobs in these countries do not live up to youth aspirations. Evidence from SWT and the ILO’s employment projections indicate that youth career aspirations by skills level are overly optimistic in the light of today’s and tomorrow’s labour-market needs. Overall, about 60 per cent of students wishing to work in highly skilled occupations will be unlikely to fulfile their career aspirations, while as many as 73 per cent of young workers who occupy a medium-skilled job, and 80 per cent who occupy a low-skilled job, may be unable to satisfy their career preferences. The gap is particularly pronounced in Africa and Latin America. Strong youth employment preferences for the public sector, observed in all regions of the developing world, are also unlikely to be satisfied. A major concern is that the gap between youth career aspirations and the reality of the labour market persists for tertiary-educated youth. On average across the 32 SWT survey countries, around 48 per cent of tertiary-educated individuals wishing to work legitimately in a highly skilled job will probably not be able to do so. Africa stands out as the region with the largest share of tertiary-educated workers engaged in medium- or low-skilled jobs.

Another key challenge is the gap between facets of job satisfaction youth aspire to and the reality of job conditions. Two types of insights emerge from confronting facets of job satisfaction with real employment conditions. On the positive side, a number of facets that raise job satisfaction, such as being self-employed by choice or as required by the family, tend to be observed among a non-negligible proportion of young people in low-income countries. In Congo and Malawi for example, one out of three young workers are self-employed by choice. On the less positive side, a number of employment characteristics and job conditions that drive down job satisfaction are relatively common in developing countries. This is the case for low-skilled employment or agriculture, which constitutes a significant share of youth employment in LMICs. It is also true for other job facets that contribute to dissatisfaction and unease among young workers, such as low job security, informality, skills mismatch and lack of training opportunities.
04
Drivers of school-to-work transition: skills demand

IN BRIEF

- Non-wage and agriculture sector jobs are dominant in LICs with progressively declining shares in LMCs and UMCs. High levels of informality are especially pervasive in LICs and LMCs.
- By 2025, jobs in the agriculture sector will decline and rise in the service sector. The share of manufacturing jobs is declining or stagnating, giving rise to concerns about pre-mature de-industrialization. Since the projected rise in services is in market services, typically characterized by high vulnerability, it will have a muted effect on increasing job quality.
- The majority of jobs in LMICs are in micro, small and medium enterprises. There is some evidence to suggest that the majority of new jobs are created by firms that are younger, more innovative and have higher productivity. However, in many LMICs, new jobs are not being created fast enough to absorb the increase in new labour market entrants.
- Gaps in access to finance, managerial skills, business linkages, regulatory environment and entrepreneurial eco-systems are some of the reasons affecting the entry, growth, innovation and productivity of enterprises in the farm/non-farm sector.
- Technological, climate, demographic and other changes such as globalization are shaping the future of work. These changes will affect job availability, the task composition of jobs and skills required in the labour market. While the impact of these changes will vary based on country context, the emerging trends in developing countries are changes in the criteria for integration in global value chains in manufacturing, creation of new jobs in the digital and green economies, increase in non-standard employment (e.g. gig economy), and higher demand for transferable and digital skills.

It is not possible to substantially improve youth labour market outcomes if there are too few productive and decent work opportunities available to young people. For instance, the ILO school-to-work transition surveys in LMICs showed lack of jobs amongst the most commonly cited obstacles to finding a job, while studies have also documented the challenges faced by youth in starting and sustaining their own businesses. In these situations, investments in increasing attainment of higher levels of education and building skills for work will not yield optimal benefits if there are not enough productive and decent work opportunities (either wage- or self-employment) in the economy, and will instead lead to large numbers of educated youth who are unemployed, underemployed, discouraged, or compelled to migrate in search of better economic opportunities. In Tunisia, for example, unemployment rates among young university
graduates was estimated at an incredible 68 per cent in 2013,\(^9\) reflecting in part the challenge of job creation in the region.\(^9\)

This chapter provides an overview of the various aspects of current and future skills demand in LMICs. Following the skills anticipation literature,\(^9\) skills demand in this chapter refers firstly to labour demand (i.e. the number and type of current and future ‘jobs’ in the labour market based on e.g. status, sector, occupation) which in turn drives the demand for specific types or combinations of skills. Note that ‘jobs’ in this chapter refers to all kinds of employment, whether it is wage- or self-employment or whether it is in the informal or formal sector. Further, the chapter provides an overview of some key underlying factors (including global mega trends) driving skills demand in LMICs now and in the future.

WHAT ARE THE NUMBER AND TYPE OF JOBS IN THE LABOUR MARKET?

QUALITY OF JOBS

Work across the developing world is largely characterized by a high prevalence of vulnerability and informality. Approximately 7 in 10 jobs in LMICs are informal; even excluding employment in the agriculture sector, 6 in 10 jobs in LMICs are informal.\(^9\) Of these informal jobs, 85 per cent are in the informal sector (including employees, employers and own-account workers) and 11 per cent are in the formal sector.\(^9\) Informality hence affects workers of various types: for employees in informal jobs whether in the formal or informal sector, their employment relationships are, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits, which makes them vulnerable. Meanwhile, informal sector employers and own-account workers tend to lack legal recognition, and often face serious difficulties in entering into commercial contracts and gaining access to financial resources, markets or property.\(^9\) From a regional perspective, SSA, SAR and the South-East Asia and Pacific region have the highest informality (89.2 per cent, 87.8 per cent, and 75.2 per cent, respectively). The incidence of informality is highest in the agriculture sector in LMICs (94.3 per cent).\(^9\) It is also notably high in market services and manufacturing in LICs and LMCs; the transport, storage and communication sector is also subject to transitory, unstable employment as they are characterized by high levels of fragmentation due to the prevalence of franchised enterprises and the use of outsourcing.\(^9\)

The poor quality of many jobs also manifests itself in the fact that more than one quarter of workers in LMICs live in extreme or moderate poverty, though with significant cross-country differences.\(^9\) 65.7 per cent of workers in LICs and 37.8 per cent in LMCs live in extreme or moderate poverty (i.e. on less than USD 3.20 per day in purchasing power parity (PPP) terms) compared to 5.2 per cent in UMCs. From a regional perspective, working poverty is highest in SSA (62.4 per cent) and SAR (43 per cent) as well as in low-income countries of LAC (42.2 per cent).\(^9\) While there is a strong correlation between poverty and informality, it is worth noting that there are some workers in informal employment who are not poor, and others in formal employment who are poor.\(^9\) Nevertheless, enormous progress has been made since 1993 in reducing the share of workers living in extreme or moderate poverty,\(^9\) and it is expected that there will be further progress in the years to come. By 2023, the share of working poor is projected to decline in LMCs (7.2 per cent) and LICs (4.8 per cent).\(^9\) However, while in LMCs, the decline in share of working poor is accompanied by a corresponding decline in the absolute number of working poor, in LICs, the absolute number of those in working poverty is projected to increase by 2023 despite its falling share.\(^9\)
EMPLOYEES VS ENTREPRENEURS

Wage employment accounts for less than half of total employment in LMICs, of which one half is informal employment, albeit with significant cross-country differences. Wage-earning jobs are particularly scarce in LICs and LMCs (18.8 and 34.5 per cent, respectively) compared to UMCs (59.2 per cent). Regional differences are also significant: wage employment is lowest in SSA (22.6 per cent) and SAR (26.5 per cent) but exceeds 70 per cent in ECA and the Arab States in MENA. While low wage employment in SSA and SAR is partly due to the large share of agricultural sector employment in the two regions (55.1 and 42.7 per cent, respectively), it still constitutes less than half of total employment in the non-agricultural sector in these regions. However, even when wage-earning jobs are available in LMICs, 49.7 per cent are informal, of which 68 per cent is in the informal sector and 27 per cent in the formal sector. The situation is much more serious in South Asia, Eastern Africa, and Western Africa where more than 6 in 10 wage-earning jobs are informal. In contrast, informality of wage employment is a less pressing issue in Eastern Europe and Central Asia where around 1 in 4 wage-earning jobs are informal.

Employers and own-account workers represent more than half of all employed in LICs and LMCs (52.5 and 52.2 per cent respectively) and 31.6 per cent of the employed in UMCs, and mostly operate in the informal sector. Across all income groups, own-account workers (i.e. not employing other workers) far outnumber employers (i.e. who do employ other workers) from a low of 0.3 employers per 10 own-account workers in LMCs to a high of 1.2 own-account workers per 10 employers in UMCs. From a regional perspective, the share of employers and own-account workers is the highest in SAR (59.6 per cent) and SSA (53.9 per cent) and lowest in ECA (14 per cent amongst UMCs and 25.3 per cent amongst LMCs in the region). In the context of LMICs, the great majority of this group operates in the informal sector (84.5 per cent), even in the non-agricultural sectors (80.3 per cent). To some extent, entrepreneurship in LMICs is driven by necessity motives. The level of necessity motives drops as the economic development level increases. In low-income economies, 35 per cent of entrepreneurs identify necessity motives; this declines to 28 per cent in middle-income economies and 18 per cent in high-income economies.

There is considerable heterogeneity amongst informal sector entrepreneurs in LMICs in terms of their motivation, abilities, attitudes, productivity and profitability. Research suggests that informal sector entrepreneurs fall under three categories: (i) Top performers – they have a high capital–high profit profile and higher cognitive skills, managerial competence and entrepreneurial attitudes. Top performers also have high entrepreneurial drive (i.e. an opportunity motivation), and they are more willing diversify and formalize their business and hire outside workers. (ii) Survivalists (or subsistence entrepreneurs) – they have a low capital–low profit profile (typically operating at a subsistence level) and very different abilities and attitudes compared to top performers and constrained gazelles (but more similar to non-entrepreneurs). Survivalists are also more likely to have necessity motives for engaging in entrepreneurship and may not aspire to grow the business to the point of creating jobs for workers outside their family. While subsistence entrepreneurship as a first step to growth entrepreneurship is not supported by data, the performance and survival of these businesses is essential to the livelihoods of the poor who own them. (iii) Constrained gazelles – they share the low capital–low profit profile of the survivalists but have similar traits as the top performers in terms of education, motivation, sector choice, entrepreneurial attitudes, language skills, cognitive and some basic management abilities. This is to say that constrained gazelles are not yet successful but have high untapped entrepreneurial potential. Surveys in Mexico, Sri Lanka and West Africa found that between 20 per cent and 60 per cent of entrepreneurs in the informal sector were constrained gazelles, depending on the country context and measurement approach (e.g. 59 per cent in Cote d’Ivoire, 43.9 per cent in Senegal, 28 per cent in Benin).
By 2024, the share of wage employment is projected to increase in low-income (1 percentage point) and middle-income countries (2 percentage points). The changes in the share of wage employment are mainly driven by a projected decline in the share of contributing family workers by 1 percentage point in LICs, 2.5 percentage points in LMCs and 1.5 percentage points in UMCs. Meanwhile, the aggregate share of own account workers and employers (entrepreneurs) is projected to remain mostly unchanged. From a regional perspective, the projected increase in wage employment will be highest in South Asia and South-East Asia and Pacific (2.6 percentage points).

**SECTORAL ALLOCATION OF JOBS**

Whilst the share of agriculture sector employment is declining, it will continue to be the leading source of employment in low-income countries; however, low productivity constrains the sector’s potential to catalyse decent jobs and livelihoods. In LICs, the agricultural sector comprises seven out of ten jobs and in LMCs almost four in ten jobs; meanwhile, the share of agriculture sector employment is much lower in UMCs at 17 per cent. Across all levels of income, the employment share in agriculture has been declining for decades; going forward, the decline is projected to be most pronounced in LMCs (a drop of 6 percentage points by 2025) followed by LICs (a drop of 3.5 percentage points by 2025). However, despite employing the majority of the workforce, agriculture in LICs and some LMCs is low-tech, low-skilled, with low productivity. An example of the problem is the cereal yield which was 1,496 kg per hectare in sub-Saharan Africa in 2017 compared to 6,029 kg per hectare in China and 5,434 kg per hectare in Vietnam. A report by OECD and the Food and Agriculture Organization notes that productivity per agricultural worker improved by a factor of only 1.6 in Africa over the past 30 years, compared to 2.5 in Asia in the same period. Hence, raising agricultural productivity will be critical for catalysing growth and economic transformation in low- and lower middle-income countries.

Employment in manufacturing is declining or stagnating across all income groups, giving rise to concerns about premature de-industrialization in LICs and LMCs. According to the ILO, the industrial sectors, including construction, manufacturing, mining, quarrying and utilities, accounted for around 26 per cent and 22 per cent of all jobs in UMCs and LMCs in 2017, but for only around 10 per cent in LICs. Manufacturing is the most important among the industrial sectors, accounting for 16 per cent of total employment in UMCs, 12 and 6 per cent respectively in LMCs and LICs. By 2020, the ILO estimates the share of manufacturing employment to continue its decline in UMCs and stagnate in LMCs. In the past, the increase in productivity, job creation and growth in the majority of developed countries and in some middle-income countries, especially in Asia, came via manufacturing, as a result of diversifying away from agriculture into higher value-added manufacturing. However, the declining shares of industrial employment at earlier stages of development in LICs and LMCs point to a trend of “premature de-industrialization”. This means that the path to higher development through structural transformation for these countries will be markedly different from that taken in the past by developed and upper middle-income countries. This is partly due to the fact that many low- and lower middle-income countries have relied heavily in the past on growth generated by natural resources and traditional services, without developing the necessary capabilities for specialization in manufacturing. This situation is likely to be exacerbated as the increasing adoption of technology, intensification of competition and high-skill intensity in manufacturing are making it more difficult for LICs and LMCs to compete in the global market.

**Service sector jobs are expected to be the principal driver of future employment growth.** By 2017, the service sector employed the largest share of the workforce in all country income groups, with the exception of LICs, where the sector’s share of total employment (at 21 per cent) is far smaller than that of
Employment in market services has expanded significantly in all income groups over the past few decades, albeit most prominently in UMCs, where its share has doubled since 1997. Going forward, ILO projections suggest the employment share of market services is projected to expand by around two percentage points in LICs, and by around five percentage points in LMCs and UMCs. Among market services, employment growth in wholesale and retail trade and repair activities is projected to be the main driver of the overall employment expansion in LICs in the years 2017 to 2024; while in LMCs and UMCs, real estate and business services activities are projected to see the largest expansion in employment. Finally, employment in accommodation and food services will expand to varying degrees in all income groups.

The re-allocation of labour away from agriculture into services sub-sectors, which are characterized by low productivity and vulnerability, would have muted effects on improving workers’ welfare. As seen in Table 4.1, most workers moving out of agriculture are anticipated to find employment in a range of market services, where the incidence of poor working conditions is higher than in industry. Further, within market services, informal employment is particularly common in accommodation and food services in all income groups, and in wholesale and retail trade in LMICs. This suggests that a shift of employment from agriculture to these distributive services does not necessarily lead to a decrease in the incidence of informality.

Table 4.1: Projected employment growth vs vulnerable employment rate by sector

<table>
<thead>
<tr>
<th>Sectors</th>
<th>LICs</th>
<th>LMCs</th>
<th>UMCs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase in employment share 2017-2025 (rank)</td>
<td>Vulnerable employment share 2017 (rank)</td>
<td>Increase in employment share 2017-2025 (rank)</td>
</tr>
<tr>
<td>Agriculture</td>
<td>decline</td>
<td>1st</td>
<td>decline</td>
</tr>
<tr>
<td>Construction</td>
<td>3rd</td>
<td>7th</td>
<td>3rd</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4th</td>
<td>6th</td>
<td>2nd</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade; repair</td>
<td>1st</td>
<td>2nd</td>
<td>2nd</td>
</tr>
<tr>
<td>Accommodation, food services</td>
<td>2nd</td>
<td>3rd</td>
<td>5th</td>
</tr>
<tr>
<td>Transport, storage, communication</td>
<td>6th</td>
<td>5th</td>
<td>4th</td>
</tr>
<tr>
<td>Financial &amp; insurance activities</td>
<td>9th</td>
<td>8th</td>
<td>9th</td>
</tr>
<tr>
<td>Real estate &amp; business services</td>
<td>4th</td>
<td>9th</td>
<td>1st</td>
</tr>
<tr>
<td>Education</td>
<td>8th</td>
<td>12th</td>
<td>7th</td>
</tr>
<tr>
<td>Health &amp; social work</td>
<td>7th</td>
<td>10th</td>
<td>10th</td>
</tr>
<tr>
<td>Public administration &amp; defense</td>
<td>no change</td>
<td>11th</td>
<td>8th</td>
</tr>
<tr>
<td>Other services</td>
<td>5th</td>
<td>6th</td>
<td>6th</td>
</tr>
</tbody>
</table>

Source: Based on ILO’s World Economic and Social Outlook 2018

Occupational Distribution and Skill Content of Jobs

While agricultural occupations dominate the jobs landscape in LICs, more than 4 in 10 jobs in LMCs and UMCs are in medium-skilled non-agricultural occupations (Figure 4.1). More than 1 in 2 jobs in LICs are in agricultural occupations, typically characterized by low analytical and interpersonal skills content, with a dwindling share in middle-income countries. Across all income groups, around 1 in 5 jobs...
are in non-agricultural low-skilled occupations, associated with performance of simple and routine manual tasks with very little analytical or interpersonal skills content.\textsuperscript{126} Low- and middle-income countries however differ in their share of medium-skilled occupations, associated with performance of tasks that require relatively more advanced literacy and numeracy skills, good interpersonal communications, and high levels of manual dexterity to operate, maintain and/or repair machines and mechanized tools.\textsuperscript{127} While approximately 1 in 4 jobs in LICs are in non-agricultural medium-skilled occupations, nearly 1 in 4 jobs in LMCs and 1 in 2 jobs in UMCs fall in the same category. In particular, blue collar jobs (characterized by high routine/manual but low to medium analytical and interpersonal skills content) and grey-collar jobs (characterized by low levels of specialization using a mixture of low to medium interpersonal, analytical and routine/manual skills) comprise the bulk of non-agricultural medium-skilled jobs in these countries.\textsuperscript{128} Meanwhile, medium-skilled white-collar jobs (characterized by medium to high analytical and interpersonal, and low to medium routine/manual skills content) tend to be scarce. There is also a considerable difference between countries in their share of high- and highly-skilled non-agricultural occupations, associated with performance of complex tasks that require extended literacy and numeracy skills, well-developed analytical and interpersonal skills (especially, decision-making, complex problem-solving, and creativity skills in the case of highly-skilled jobs), and specialized knowledge.\textsuperscript{129} These jobs are more commonly available in UMCs and least in LICs (where less than 1 in 10 jobs fall into the high/highly-skilled occupational category).

![Figure 4.1: Occupational distribution by level of skills](image)

**Figure 4.1: Occupational distribution by level of skills**

<table>
<thead>
<tr>
<th>Level 1: Low-skilled</th>
<th>Level 2: Medium-skilled blue collar</th>
<th>Level 2: Medium-skilled grey collar</th>
<th>Level 3: High-skilled</th>
<th>Level 4: Highly-skilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural occupations</td>
<td>Level 1: Low-skilled (skills intensity: low analytical, interpersonal; high routine/manual)</td>
<td>Level 2: Medium-skilled blue collar (skills intensity: medium analytical, interpersonal; high routine/manual)</td>
<td>Level 2: Medium-skilled grey collar (skills intensity: medium interpersonal; routine/manual; low analytical)</td>
<td>Level 3: High-skilled (skills intensity: high analytical, interpersonal; low routine/manual)</td>
</tr>
</tbody>
</table>

Source: ILOSTAT, WDI

Notes: Calculations based on pooling data on number of employed persons by occupation and income group for 77 LMICs available from ILOSTAT. For each country, most recent year estimates between 2010 and 2018 are used. Skill levels 1-4 are mapped to occupations in accordance with International Standards for Classification of Occupations (ISCO) guidelines. Since available data on “agricultural, forestry and fishery workers” does not distinguish between market-oriented and skilled vs subsistence workers, skill levels 1-4 are assigned to non-agricultural occupations only. Level 2 (medium-skilled) occupations are further disaggregated by blue-collar work (i.e. plant and machine operators, assemblers, craft and related trade workers), grey-collar work (i.e. service and sales workers), and white-collar work (i.e. clerical support workers). The reason for disaggregating level 2 occupations is due to the differential mix of routine/manual, analytical and interpersonal skills content of these occupations in LMICs.
Jobs in higher income countries require using analytical and interpersonal skills more frequently and are more homogenous in terms of skills mix across occupations. The use of different types of skills at work is dissimilar between countries at different levels of development in two ways. First, the frequency with which different skills are used at work is dissimilar. For instance, the use of reading/writing skills at work on a scale of 0-5 is 0.66/0.86 in Ghana vs 2.04/2.1 in Armenia; presentations are made by only 10 per cent and 13 per cent of workers in Lao and Ghana vs 58 per cent and 57 per cent in Sri Lanka and Vietnam. As discussed above, the difference is partly attributable to differences in occupational structures between these countries, with more developed countries having a higher share of jobs in occupations that require more intensive and frequent use of analytical and interpersonal skills. Second, the skills content is more homogenous across occupations (i.e. lower variance) in countries with higher levels of development. For instance, the standard deviation of analytical skills intensity across occupations is more than 3.5 in Kenya but decreases to less than 2.5 in Colombia. Similarly, the standard deviation of interpersonal skills intensity across occupations is more than 1.7 in Kenya but decreases to less than 1.2 in Armenia. An IADB study, using Linkedin data, shows that occupations in the US are more connected in terms of shared skills content (3.7 related occupations for every occupation) compared to developing countries like Argentina (1.6), South Africa (1.7) and India (2.0), albeit with some exceptions.

The homogeneity of skills content across occupations has significant implications for policies around labour mobility and re-skilling. In countries with more connected occupations (i.e. having more homogenous or shared skills content between different occupations), the skills of workers are more readily transferable from one occupation to another, thus making it easier from them to make job transitions in the context of labour market disruptions. However, not all transitions are feasible. Although two occupations may be related, it may still take significant re-skilling to acquire the average skillset for the destination occupation. To identify transitions that would provide "quick wins" for labour mobility policy, the IADB study ranked transitions between occupations based on (i) their potential impact on overall employment, and (ii) the "feasibility" of the transition. The findings suggest that countries with the highest numbers of feasible transitions between occupations are developed economies like the UK and USA where 7 of the top 10 transitions would be feasible, followed by Australia (6 of the top 10). Meanwhile, in LMICs like India and South Africa, only one of the top 10 transitions would be feasible, and 2 of the top 10 in Brazil and Mexico.

Over time, the skills content of jobs has become less intensive in terms of routine/manual skills and more intensive in terms of non-routine analytical/interpersonal skills; this trend is expected to persist in the future. Multiple studies looking at the evolution of skills content of jobs over time in developed and developing countries suggest that the intensity of non-routine analytical and inter-personal skills at work has been increasing while routine and manual skills have become less important. However, the size of these skills shifts over time shows cross-country variations. For instance, the USA, Costa Rica, Chile, Poland, Brazil and Vietnam show a strong increase in intensity of non-routine analytical skills use over time while the increase is somewhat more moderate in Georgia, Serbia, Sri Lanka, Turkey and India; among these countries, the increase in non-routine cognitive interpersonal skills intensity is strongest in the USA, Vietnam and Chile, and moderate in all others. Projected shifts in occupational shares from jobs that are intensive in routine/manual skills and/or do not require much in the way of analytical and interpersonal skills suggest that this trend will continue in the future. For instance, between 2018 and 2024, ILO projects the share of professionals and managers to increase by 0.3 percentage points in LICs, 2.3 percentage points in LMICs and 1.6 percentage points in UMCs; and the share of service and sales workers to increase by 1 percentage point in LICs, 1.4 percentage points in LMICs and 2.4 percentage points in UMCs. Meanwhile, the share of agricultural workers and those in elementary occupations is expected to decline by 2.6 percentage points in LICs, 5.6 percentage points in LMICs and 3 percentage points in UMCs.
HOW FAST ARE NEW JOBS BEING CREATED?

The pace of new job creation in LMICs is slower than growth in the number of young people entering the workforce. According to World Bank estimates, the global economy must create 600 million new jobs by the year 2027 – with 90 per cent of those jobs being created in the private sector – just to hold employment rates constant, given current demographic trends. In Africa, which is home to the world’s largest youth cohort, only 3 million jobs are created by the labour market every year against the 10–12 million additional youth who enter the labour market every year. The same applies to LAC – the region will need to create approximately 20 million jobs before 2020 in order to provide employment to the entire workforce, which increases by an average of 2.5 per cent every year. In fact, the need goes further than simply the creation of jobs: to promote better standards of living and inclusive growth, one of the urgent priorities for economies whether large or small, is the creation of `better' jobs.

WHO CREATES JOBS IN LMICS?

The private sector is the main engine of job creation in LMICs. The main source of almost nine out of every ten jobs in the world is the private sector although, in LICs and LMCs, the role of the public sector is also substantial (40 per cent of wage employment). The majority of jobs in the private sector in LMICs are in micro, small and medium enterprises (MSMEs) (Figure 4.2). While informal sector enterprises account for a significant share of employment in LMICs, many of them tend to be unproductive and small (typically comprising the owner and family helpers); more importantly, these enterprises continue to stay small and informal. Meanwhile, job creation (i.e. employment growth) comes largely from productive firms in the formal sector; in particular, SMEs seem to play an important role in generating new jobs in the formal sector in middle- and high-income countries. However, more important than firm size, firm characteristics strongly associated with job creation are age, innovation and foreign exposure, in other words younger firms, innovative firms and trading firms are more likely to create new jobs. More recent literature from developing countries implies that it is the ability of high productivity firms to grow quickly, which is the key to job creation. In Brazil, Cote d’Ivoire, Ethiopia, Indonesia and Turkey for example, high growth firms are 10 to 20 per cent of the total firms, yet generated more than half of all new jobs and also created positive spillovers. Factors such as innovation, agglomeration and network economies, managerial capabilities and worker skills, global linkages, and financial access are key to support the emergence and expansion of high growth firms that create jobs.

![Figure 4.2: Employment in MSMEs](image-url)

Source: MSME Country Indicators 2014
WHAT ARE THE UNDERLYING CAUSES THAT AFFECT THE AVAILABILITY OF QUALITY JOBS?

Entrepreneurial success does not take place in a vacuum, and weak entrepreneurial eco-system constrains innovation and growth entrepreneurship in LMICs. A review of research and key frameworks and indicators on entrepreneurial eco-systems highlights the following as key dimensions of an enabling environment for entrepreneurship: people with entrepreneurial motivation, mindset and skills; access to finance; access and adoption of technology and innovation; enabling regulatory frameworks; business linkages; favourable market dynamics; and access to networks, and social and cultural support (Figure 4.2). Comparing scores on entrepreneurial framework conditions of 85 LMICs in the Global Entrepreneurship Index, entrepreneurial eco-systems in LMICs are considerably weaker than those in advanced economies. In particular, SSA and SAR countries have weaker entrepreneurial eco-system conditions compared to LMICs in other regions with 50% of LMICs in SAR and SSA ranking in the bottom 20; outside these regions, only Myanmar (EAP), Nicaragua and Venezuela (LAC) are in the bottom 20. While this section will not examine all aspects of the entrepreneurial eco-system in LMICs, it does provide an overview of some of the more important elements of the entrepreneurial eco-system in LMICs.

Figure 4.2: Entrepreneurship Eco-System Dimensions

Access to finance
- savings, grants, credit, equity, VCs, angel investors

Regulatory environment
- entry regulations, taxes, subsidies, standards (including labour standards), commercial & legal infrastructure

Market dynamics
- competition, access to domestic and international markets, consumer demand, pricing

Business to business linkages
- agglomeration, supply-chain linkages, ownership networks, FDI

Technology and innovation
- R&D, knowledge and technology transfer & adoption

Support networks
- family support, social norms, role models, mentors, peer groups, advisory services, incubators, accelerators, social security

Entrepreneurial success
- start-up, expansion, productivity, profits, job creation

Entrepreneurial motivation, mindset, skills
- opportunity perception & recognition, cognitive skills, socio-emotional skills, leadership and management skills, entrepreneurial intentions

Notes: R&D = research and development, VC = venture capital, FDI = foreign direct investment.

Access to finance is one of the factors constraining business growth in LMICs. Globally, 1 in 4 firms in the formal sector identify access to finance as a major constraint, especially in SSA (39 per cent), MENA (29 per cent) and SAR (27 per cent). In particular, MSMEs face numerous obstacles in borrowing funds because they are small, less diversified, and have weaker financial structures: in more than 60 per cent of 113 LMICs for which data is available, the share of formal sector SMEs citing access to finance as a major constraint is greater than the share of large enterprises reporting the same. In addition, MSMEs find it difficult to provide high-quality collateral at all times, and also experience difficulties in ensuring transparency with respect to their creditworthiness. Since MSMEs are more likely to face more credit...
constraints in the formal finance market, they rely more heavily on informal sources and trade credit. Indeed, “throughout the developing world access to credit is inversely related to firm size but positively related to productivity and financial deepening in the country”.146 A new study estimates that 131 million or 41 per cent of formal MSMEs in developing countries have unmet financing needs. The finance gap for MSMEs in developing countries is estimated to be USD 4.5 trillion – 1.3 times the current level of MSME lending. In addition, there is an estimated USD 2.9 trillion potential demand for finance from informal enterprises in developing countries, which is equal to 10 per cent of the GDP in these countries.147 Women-owned businesses are especially credit constrained – they comprise 23 per cent of MSMEs and account for 32 per cent of the MSME finance gap.

Managerial capabilities are low in large and small firms in LMICs compared to advanced economies. Studies show that better managed firms perform better, and that the quality of management practices is strongly correlated with per capita income at the country level.148 A study of large firms in selected LMICs (China, Brazil, India and Mexico) showed that management practices in these countries (scores between 2.67 and 2.92) were significantly lower than those in advanced economies (a score of 3.35 in the United States, for example). Small firms in developing economies, which comprise the bulk of the enterprise sector and employ a sizeable share of the workforce also demonstrate weak management practices.149 A study of small firms surveyed in Bangladesh, Chile, Ghana, Kenya, Mexico, Nigeria and Sri Lanka showed that these firms make use of 39 per cent of the 26 business practices measured. The most frequently used practices are knowing which goods make the most profit per item (83 per cent), not running out of stock frequently (70 per cent), working out the cost of producing each main product sold (66 per cent) and attempting to negotiate with suppliers for lower prices (58 per cent). The least frequently used practices are preparing a balance sheet (5 per cent), cashflow statement (7 per cent), income and expenditure statement (16 per cent), and the use of marketing/advertising (17 per cent).150

Effective business regulation affords micro and small firms the opportunity to grow, innovate and, when applicable, move from the informal to the formal sector of an economy. Recent research shows the positive effects of improved business regulation. Fewer procedures and lower levels of minimum capital, for example, are positively and significantly associated with the process of starting a business.151 Where procedures are more complex or unclear, the likelihood of corruption is higher. A study in Vietnam discusses the benefits to companies of formal registration, such as greater access to new equipment and a larger scale of operations, which can lead to increased competitiveness and productivity.152 However, the ease of doing business is not very high in many LMICs (Figure 4.3). UMCs represent 26 per cent of the top 50 economies in the ranking; the only LMCs and LICs that appear in the top 50 are Georgia, Kosovo, Moldova (LMCs) and Rwanda (LIC); meanwhile, SAR and LAC are the two regions absent from the top 50 ranking.153
Compared to entrepreneurs elsewhere, those in fragile and conflict affected states have different characteristics, and face significantly different challenges, which would require a different set of policy and programme incentives. The majority of businesses in FCS countries are small, informal, and concentrated in the trade/services sectors. According to the enterprise surveys, the average FCS firm in SSA and the ECA regions produces less output than non-FCS firms; the average FCS firm in ECA is 20 per cent less likely to innovate (that is, to introduce/upgrade new products and services) than its non-FCS counterpart; FCS firms start smaller and grow significantly more slowly, or even shrink (in the number of employees) over time, compared to firms in countries that are neither fragile nor affected by conflict. In the majority of FCS environments, it is extremely difficult to start a business. The regulatory systems are very weak; and the key trust-based relationships for public-private dialogue and commerce may have broken down or even dissipated owing to heavy and widespread rent-seeking, severe political instability, inefficient courts, and lack of state-provided security. Moreover, the general business environment suffers from political instability and very poor access to formal finance (Asia and SSA), as well as burdensome tax rates (ECA). Last, serious basic infrastructure shortages (such as of power or water supply) elevate the costs of doing business in FCS countries. In addition, poor access to general purpose technology (high-speed internet) makes business facilitation slower and even more costly. Despite these obstacles, new entrepreneurial opportunities can arise even in the most difficult FCS environments, such as the mobile telephony industry that has thrived in Afghanistan, Guinea-Bissau, Iraq, and Somalia.

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

WHAT ARE THE KEY GLOBAL TRENDS SHAPING FUTURE SKILLS DEMAND?

Technological, climate, demographic and other changes such as globalization will have a profound impact on the future of work. These changes will affect job availability, the task composition of jobs, and skills required in the labour market. However, the effects of these changes will vary according to country context as well as a host of other factors. Current discussions have focused greatly on the role of automation and artificial intelligence (AI) in replacing labour. The research on how this affects LMICs is nascent, with significant gaps (such as implications for the informal sector), and the available estimates of susceptibility of jobs to automation vary widely. However, these numbers refer to jobs that could be automated, rather than jobs that will be automated: technological adoption depends on economic, financial, legal, ethical, and social considerations, as well as on the availability of the skills needed to work with the new technologies.

TREND #1: CHANGES IN SKILLS DEMAND DUE TO TECHNOLOGICAL SHIFTS

The demand for technology-related skills is experiencing a surge globally. In most countries, developed and emerging, digital skills represent at least nine of the twenty fastest growing skills. Web design and software development tools are the top two emerging skill categories almost everywhere. Other emerging skills include data storage, software development life cycle, social media management, marketing, advertising, and graphic design. A related category that also overlaps with the tech category is digital marketing. Further, while automation and new technologies are unlikely to destroy entire occupations, they will replace or augment some tasks in existing occupations. A paper on the future of work in India by Quest showed that within the services, sub-sectors like hospitality and retail are likely to experience significant transformations as a result of automation, digitalization and the growing use of data analytics. Technological change that modifies or augments occupations is thus likely to require individuals who can embrace, operate and make use of technologies in their work.

Transferable skills, in particular problem-solving skills, interpersonal skills and skills to adapt and learn, are becoming more valuable. The trend in decline of routine manual tasks and increase in routine analytical and interpersonal tasks in a large number of LMICs is already documented. With digitalization, this trend is likely to continue, reducing demand for routine and manual tasks while increasing demand for problem-solving and interpersonal skills. The need for transferable skills will likely be reinforced by the emerging trend in non-permanent employment and an uncertain work future whereby the individual has to be agile, motivated and able to be re-skilled/up-skilled, and adapt to the evolving skills demand. In this future, more frequent transitions between positions and sectors also increase the importance of having transferable skills, a system of lifelong learning to acquire new skills, as well as a system of credible skills certification that allows them to signal their qualifications to employers.

TREND #2: DIGITAL ECONOMY AND NON-STANDARD FORMS OF EMPLOYMENT

Gig-economy or freelancer platforms have the potential to expand the supply of labour by increasing opportunities, locally and abroad, for new, flexible types of work that complement traditional forms of employment. Technology is bringing the labour market closer to a model in which individuals participate as micro entrepreneurs or freelancers, thus no longer as permanent employees. Normally called the *gig-economy* this can take many forms because it spans across multiple sectors, occupations and skills’ levels. The additional income may reduce income fluctuations for secondary
earners. In some countries in South Asia, the gig economy is seen as an opportunity to boost employment. In Malaysia, the Malaysia Digital Economy Corporation, a public agency, has set up several programmes to shift underemployed Malaysians onto gig economy platforms. Meanwhile, Bangladesh represents 15 per cent of the global labour pool online, contributing with 650,000 freelance workers. In Africa, online talent platforms could result in 536,000 additional full-time equivalent jobs, a USD 3 billion increase in GDP in Kenya, and 1.9 million jobs and USD 20 billion additional GDP in Nigeria by 2025.

For young workers, the gig economy presents an important opportunity to access the labour market which will require digital skills. According to the Deloitte Millennial Survey, half of millennials and gen-z workers would consider leaving a full-time job for one as a freelancer in the gig economy. This trend is enhanced in emerging economies. The gig economy’s expansion will have implications especially for youth, where job creation is lagging. It is logical to conclude that, to participate in the gig economy, especially in settings with slow job creation, beyond the job-specific skills, youth will need to be at least digitally literate to manage linkages, negotiation, sales and overall relations with multinationals. However, self-employed workers in the platform and gig economy tend to have limited access to training opportunities, thus financial and non-financial incentives for increasing access to training for both employers and workers in all types of employment will become more important in the future.

The opportunity to truly reap the benefits of a digital economy means bridging the digital divide and enhancing its analog complements. Access to digital infrastructure is missing in many developing countries, particularly Africa. In 2017, the penetration of fixed broadband among advanced countries was more than 100 times as large as that of African nations, and was about 35 times as large for other developing countries. In Africa, the median rate of household penetration is about 2 per cent (much lower than the median rate of 7.5 per cent for South Asia). The higher prices of broadband connectivity and lack of network coverage in many countries constitute barriers to fixed broadband take-up. Catalyzing a digital revolution is not just a matter of connectivity and access, it is about implementing meaningful policies that allow the public and private sectors to participate in the new economy. This requires policies that support the adoption, diffusion and use of digital technology, including policies that support high-quality and competitively priced internet roll-outs. In parallel, policy measures that enhance “analog” complements (business climate, skills, and institutions) are needed to accelerate the rate of adoption of digital technologies.

Further, the effect of the gig economy on the labour market must be studied carefully. Even though it can help reduce unemployment and increase labour participation, it can also blur the lines between formal and casual employment. Although flexibility may be a benefit, it also raises concerns around income instability, social protection and well-being, traditionally connected with standard employer-employee relationships (pension plans, health insurance, and paid leave). The payroll-based insurance model is increasingly challenged by working arrangements outside standard employment contracts. Discussions have been held around how to overcome this, considering possibilities like a labour guarantee that provides support independent of employment, or the implementation of universal basic income (social protection floor).

**TREND #3: GLOBALIZATION AND THE FUTURE OF GLOBAL VALUE CHAIN INTEGRATION**

Changing technologies and shifting globalization means that the criteria for becoming an attractive production location are changing. Trade is slowing. Global value chains (GVCs) remain concentrated...
among a small number of countries. The Internet of Things, robotics, and 3-D printing are shifting the criteria that make locations attractive for production and are threatening significant disruptions in employment, particularly for low-skilled labour. Philips in the Netherlands and Adidas in Germany are two companies that recently "re-shored" production of their shavers and sneakers back home. Synergies with services, which are increasingly either embodied or embedded in goods, are also emerging as important hallmarks of the future of manufacturing. Yet, few lower-income countries have a revealed comparative advantage in anything but labour-intensive tradeables or commodity-based regional processing. These trends raise fears that manufacturing will no longer offer an accessible pathway for low-income countries to develop and, even if feasible, would no longer provide the same dual benefits of productivity gains and job creation for unskilled labour. For developing countries to position themselves to address the disruptions of technology and take advantage of globalization, they would need to become competitive not on the basis of low wages alone but by developing a robust eco-system for doing business; developing the necessary infrastructure, rules and skills to adopt and use new technologies; addressing openness to trade in goods and logistics performance; and strengthening synergies with services embodied and embedded in goods.

Not all global value chains will be affected similarly. Despite a rising bar for economies to be globally competitive, there are opportunities ahead for developing countries. The production of tradable goods such as textiles, garments, and footwear continue to be labour intensive and do not yet feature much automation. Commodity-based manufacturing, such as food processing, wood and paper products, and basic metals will also remain an entry point for less-industrialized countries. Finally, services, including those related to businesses – such as call centres and data centres – and those related to manufactured products – such as design, marketing and distribution – are another area where developing countries can take advantage of future opportunities.

**TREND #4: CLIMATE CHANGE AND GREEN JOBS**

The transition towards a more sustainable pattern of economic growth will generate new jobs, cause some job losses and alter the skills composition of many jobs. The skills of business and government leaders will need to embrace the knowledge on climate change and environment to drive the green transition. New consumption and production patterns, resource efficiency and emission targets will influence workforce tasks and skills across the board and require new hybrid skills, such as green plumber or green electrician. The ILO estimates that the net employment effect from transition to a low-carbon economy will be positive, with around 18 million new jobs expected by 2030 created globally as a result of the decarbonization of energy use and energy efficiency measures alone. Recycling, repair, remanufacturing, and sustainable agriculture will also generate many jobs. However, some job losses are inevitable in the extraction industry and high carbon-emitting manufacturing. Skills development and active labour market policies in this context will become central in both supporting displaced workers and promoting the green transition.
05
Drivers of school-to-work transition: skills availability

IN BRIEF

- Employers in developing countries value a broad range of foundational, transferable and job-specific/technical skills. Digital skills are also becoming increasingly valued.
- There appear to be gaps in foundational, transferable, digital, and technical skills of young people, as well as in their educational qualifications. Skill gaps are especially pronounced in young people in lower income and FCS countries, young people from poor households, with less education, rural youth and young women.
- Skills mismatches comprise over- and under-qualification relative to job needs. Young people in employment in ECA and MENA are more likely to be over-qualified for the jobs they are in compared to young people in SSA.
- Key underlying causes of skills gaps and mismatches include: (i) poor skill foundations laid in childhood; (ii) barriers to access; (iii) poor quality and weak market relevance of skills development systems; (iv) weak coordination, management and oversight; (v) inadequate and inefficient financing; and (vi) lack of information and awareness of labour markets and misaligned study choices.

DO YOUNG PEOPLE POSSESS THE RELEVANT SKILLS FOR WORK DEMANDED BY THE LABOUR MARKET?

Employers in developing countries perceive lack of adequate workforce skills as a constraint. Surveys of formal enterprises from 139 countries show that 22 per cent of firms identify workforce skills as a major constraint – the challenge is highest in LAC (32 per cent) followed by SSA (21 per cent), MENA (20 per cent), and SAR (20 per cent).167 There is also some evidence to suggest that formal sector firms face challenges in recruiting talent due to lack of required skills. For instance, talent shortage surveys in 2018 by the Manpower Group in ten LMICs (Brazil, Colombia, Costa Rica, Guatemala, India, Mexico, Peru, Romania, South Africa, Turkey) show a significant share of formal sector firms facing difficulties in hiring (from a low of 32 per cent in South Africa to a high of 81 per cent in Romania, and a median of 43 per cent across the ten countries).168 The top three drivers are lack of experience (from a low of 16 per cent in Romania to a high of 34 per cent in Colombia, and a median of 27 per cent), lack of hard skills in applicants (from a low of 17 per cent in Colombia to a high of 33 per cent in Brazil, and a median of 21 per cent), and lack of applicants (from a low of 9 per cent in Guatemala to a high of 41 per cent in Romania, and a median
of 18 per cent), with lack of soft skills in applicants coming in at fifth place (from a low of 3 per cent in Romania and Colombia to a high of 19 per cent in Brazil, and a median of 6 per cent).¹⁶⁹

We analyze the availability of skills for work that the labour market demands of youth through both the skills gap and skills mismatch lens, and highlight the underlying factors shaping the development of these skills. Evidence suggests that employers in LMICs value educational qualifications as well as a broad range of foundational, transferable and technical and vocational skills (Box 5.1). At the same time, the demand for digital skills is also on the rise (chapter 4). Hence, we first assess trends in the availability amongst youth aged 15 to 24 of those skills valued by the labour market through the lenses of existing gaps and mismatches (proximate cause analysis). The skills gap lens assesses the extent to which young people are proficient in these skills, while the skill mismatch lens looks at the extent to which young people’s skills are relevant to job needs. Second, we examine the main underlying factors that shape the development of the skills for work (underlying/root cause analysis). To the extent possible, based on data and space limitations, the analysis also looks at how these trends vary across region, income, gender, and other factors.

**Box 5.1: What skills are most valued by labour markets in LMICs?**

Employers in LMICs value a broad range of foundational, transferable, technical and vocational skills. We reviewed 15 studies of employer surveys from LMICs; since there is no standardization across the surveys on skill types, we clustered the top 5 skills that employers identified as being important across the 15 studies into seven skills areas. As seen in Figure 5.1, self-management skills had highest preference (28 times out of 75) and within this, honesty and time-management are cited most often, appearing 8 and 6 times (out of 28). The next highest preferences were communications (11) and working with others (11), followed by problem-solving (10) and job-specific/technical skills (10). Although there is very little data on employers’ perceptions in the informal sector, there is some evidence to suggest that here too the skills preferences were similar. In urban Uganda, for example, a survey of 422 SMEs showed that the top two skills preferred by SME owners were technical skills followed by transferable skills (in particular, honesty).¹⁷₀

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**Figure 5.1: Employer skill preferences in LMICs**

Source: Based on 15 studies of employer surveys
The preferences revealed by employers also suggest that they value a combination of foundational, transferable, technical and vocational skills. What employers say may be different from what they do as is suggested by the STEP surveys of employers in six developing countries (Armenia, Azerbaijan, China (Yunnan Province), Georgia, Sri Lanka and Vietnam which indicate that job-specific technical skills are prioritized by employers when they make retention decisions for both white- and blue-collar workers. Meanwhile, the secondary criteria for retaining new recruits varied among worker types; in all six countries, leadership skills and numeracy skills (corresponding to the foundational and transferable skills clusters) are ranked as most important in retaining white-collar workers. For blue-collar workers, communication skills and the ability to work independently (corresponding to the transferable skills cluster) are most valued.\textsuperscript{171}

The demand for digital skills is also on the rise. As explained in chapter 4, the increase in digitalization of the economy has led to a growing market demand for digital skills. There is also evidence of returns to digital skills: a study of eight countries using STEP surveys showed complexity of computer use at work associated with substantial earnings premiums in all countries, even after controlling for type of employment, occupation and years of schooling.\textsuperscript{172}

Educational attainment still matters for securing employment. Education remains a strong predictor of employment probability, employment status and earnings, with or without controlling for skills.\textsuperscript{173} In particular, tertiary education (relative to secondary) demonstrates the highest private returns in LMICs (between 20 and 27 per cent) while secondary education (relative to primary) the least (between 18 and 19 per cent).\textsuperscript{174} Educational credentials also serve as an important screening and signaling mechanism for employers when assessing job seekers.\textsuperscript{175}

**EDUCATIONAL ATTAINMENT**

School participation rates decline with age – more than 4 in 10 young people exit the education system before the age of 17 in the majority of LICs and before the age of 18 in the majority of LMCs and UMCs (Figure 5.2). Age-specific school participation rates from a sample of 61 LMICs show that more than 40 per cent of 15-year-olds were no longer in school in only 9 of the countries; as regards the 17- and 18-year-olds, more than 40 per cent were out of school in 24 and 41 of the LMICs respectively. By age 19, more than 40 per cent had already exited the education system in 54 out of the 61 LMICs, and by age 24, only 13 of the countries had participation rates between 20 and 40 per cent (and none over 40 per cent). The age-education profiles vary by country income status; in 11 out of 17 LICs and 14 out of 26 LMCs in our sample, more than half of 18-year-olds are no longer in school and are either employed, looking for work, or inactive. Young people from poorer households (bottom two quintiles) are more likely to exit the education system early with more than half of poor young people aged 15–24 having exited the education system by age 16 in Lao and Nigeria, for example, compared to age 18 for the overall cohort. The gender picture is more nuanced: in many countries, school participation rates of young women is lower than that for young men (e.g. Guinea, Lao and Nigeria) but not in several others (e.g. Algeria, Serbia and Thailand).
Figure 5.2: Per cent of LMICs by age-specific school participation rates

Notes: SP = School Participation. Based on data on 61 LMICs representing a mix of income groups (17 LICs, 26 LMCs, 18 UMCs) and regions (8 EAP, 10 ECA, 7 MENA, 10 LAC, 4 SAR, 22 SSA (of which 10 from Eastern and Southern Africa and 12 from Western and Central Africa). Most recent year survey was used to calculate SP rates. The earliest survey year was 2011-12 and the latest survey year was 2018. Of the 61 countries, estimates for 29 countries were calculated using latest available DHS and latest available MICS for 32 countries.

Figure 5.3: Educational attainment of young people in selected LMICs (%)

Notes: ARM = Armenia, BGD = Bangladesh, CAM = Cambodia, CMR = Cameroon, EGY = Egypt, GIN = Guinea, HTI = Haiti, IND = India, KEN = Kenya, KGZ = Kyrgyz Rep, MWI = Malawi, MEX = Mexico, NAM = Namibia, NGA = Nigeria, PHI = Philippines, RWA = Rwanda, SLV = El Salvador, TAJ = Tajikistan, THA = Thailand, TUN = Tunisia; EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America, MENA = Middle East and North Africa, SAR = South Asia, SSA = sub-Saharan Africa. Country selection is a mix of LICs, LMCs and UMCs.
The educational attainment of young people varies by country context but in most LMICs, the majority of young people never complete (upper) secondary education. As seen in Figure 5.3, the major share of young people aged 15–24 in LMICs – particularly in SSA and SAR – do not complete secondary education (let alone any tertiary education). Since a significant share of 15- to 24-year-olds have not yet completed their formal education trajectories, it could be misleading to look at their educational attainment. However, an examination of school participation rates by age in Figure 5.2 and the educational attainment of 20- to 24-year-olds (Figure 5.3) supports the thesis that a substantial number of young people will exit school before completing upper secondary education, particularly in SSA and SAR. Conversely, education attainment is higher in LAC, ECA and MENA, where more young people are likely to complete (upper) secondary and/or get some tertiary education.

However, schooling is not the same as learning, and different countries produce different levels of skills for the same years of schooling. In Nigeria, for example, 19 per cent of women aged 18–37 who have completed only primary education are able to read; by contrast, 82 per cent of Tanzanians in the same category are literate. Accounting for quality (i.e. learning), learning-adjusted years of schooling completed (LAYS) are much lower than unadjusted years of schooling completed (UYS) in many LMICs. As seen in Figure 5.4, expected LAYS is lower than expected UYS by 4 or more years in 65 out of 109 LMICs. For example, expected UYS is the same in Indonesia and Vietnam (11.1 years) but expected LAYS is higher in Vietnam than in Indonesia (10.2 compared to 7.9 years). This should not come as a surprise: where Vietnam’s top performance on PISA attracted a lot of attention, the issue of flat learning profiles in Indonesia is also well-documented. Flat learning profiles – when each extra year of schooling produces very small learning gains – are not exclusive to Indonesia, and have also been documented in other countries (Bangladesh, Ghana, Guinea-Bissau, India, Malawi and South Africa, among others).

![Figure 5.4: Unadjusted and learning-adjusted years of schooling in LMICs](image)

Source: World Bank’s Human Capital Index (HCI)
Notes: UYS = Unadjusted years of schooling completed, LAYS = Learning-adjusted years of schooling completed. Calculations based on expected UYS and LAYS indicators for 109 LMICs.
FOUNDATIONAL SKILLS

The majority of young people meet basic reading literacy thresholds, with some country exceptions, particularly in SSA. Although the concept of foundational skills is broader, we use youth literacy rates as a proxy for foundational skills. As seen in Figure 5.5, basic literacy is nearly universal amongst youth in ECA, LAC and EAP; is high (though not universal) in MENA and SAR; and declines further in SSA. On average, three-fourths of youth in SSA have basic literacy, but this conceals significant cross-country differences: Chad, Mali and Niger have youth literacy rates of less than 50 per cent compared to countries like Zimbabwe (90 per cent) and South Africa (99 per cent).

Figure 5.5: Youth literacy rates

![Diagram showing youth literacy rates by region](source: WDI)

Notes: LR = Literacy Rate of youth (15-24 years). Calculations are based on 80 LMICs for which LR data was available for all or any of the years between 2012 and 2018. LR values used above denote LR for the latest year for which data is available.

TRANSFERABLE SKILLS: COGNITIVE AND SOCIO-EMOTIONAL

While basic literacy is high, young people seem to do less well on tasks that require them to integrate, interpret and evaluate information (Figure 5.6). Consistent with evidence on basic literacy rates in Figure 5.4, the data from STEP surveys suggest that between 90 and 100 per cent of urban youth in Armenia, Bolivia, Colombia, Georgia, Lao, Sri Lanka and Vietnam met the minimum reading literacy threshold, with Kenya (80 per cent) and Ghana (67 per cent) being the exceptions. Meanwhile, findings from the extended reading assessment showed greater cross-country variation in levels of reading proficiency (i.e. proficiency related to locating, understanding, evaluating and interpreting information from different types of texts). Young people in urban Vietnam demonstrated the highest reading proficiency followed by ECA countries (Armenia, Georgia and Ukraine); however, even in these countries, reading proficiency remained lower compared to some advanced countries (e.g. Japan). Meanwhile, in urban Ghana and Kenya, reading proficiency was comparatively lower; part but not all of this difference is attributable to lower education attainment of youth in Ghana and Kenya as reading proficiency of tertiary graduates in these countries was at par with reading scores of primary graduates in urban Georgia and Ukraine. In Bolivia, Ghana and Kenya more than 40 per cent of 19- to 20-year-olds with an upper secondary education scored below the basic literacy level, compared with only 3 per cent in Vietnam.
Thinking and learning skills are not applied very intensively by working young people. The future of work demands critical thinkers, problem-solvers and agile learners. While there is lack of data on these skills among the general youth population in LMICs, the STEP surveys provide some information on the use of these skills by young people aged 15–24 at their work. According to the nine STEP surveys analyzed, in six out of the nine countries, more than 40 per cent of working young people reported not using these skills frequently at work (Figure 5.7). Even in countries like Georgia and Vietnam, which have high educational attainment and where young people performed relatively well on the literacy assessment, more than 50 per cent of young people reported not using these skills at work on a frequent basis. The reason for low-intensive use of these skills could be due to skills gaps in these areas but also in part due to the nature of jobs young people find in these economies.
Available measures of socio-emotional skills show more intra-country than inter-country variations; however, results should be interpreted with caution due to measurement issues. Figure 5.8 shows that the average scores on each of the Big Five personality traits (openness to experience, conscientiousness, agreeableness; extraversion, emotional stability), plus grit and decision-making, are similar across the countries in the STEP survey sample. While scores on conscientiousness, emotional stability, extraversion and grit seem to show more cross-country variations, these differences are not substantial.\textsuperscript{185} Within-county differences were more significant on a number of socio-emotional skills based on, for example, gender, education and, to some extent, age.\textsuperscript{186} However, measuring socio-emotional skills is a complex undertaking and these findings should be interpreted with caution. First, cross-country comparisons should be treated with caution as different cultural contexts may affect the way certain behaviours develop and are rewarded. Second, there is limited information on the optimal level of these skills for these contexts to make any assessment about the magnitude of skills gaps (or lack thereof). Last, there are measurement issues that affect the robustness of these estimates related to, for example, the limited number of question items per skill in the STEP surveys, the reliability and validity of the measures being below accepted norms, not correcting for acquiescence bias, and the misalignment between the factor structure arising from the data and the model of the Big Five personality factors, among others.\textsuperscript{187}

\textbf{Figure 5.8: Socio-emotional skills of urban youth in selected LMICs}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.8.png}
\caption{Socio-emotional skills of urban youth in selected LMICs}
\end{figure}

Source: STEP surveys
Notes: The STEP survey builds on the Big 5 framework to measure seven socio-emotional skills (openness to experience, conscientiousness, agreeableness; extraversion, grit, emotional stability and decision-making). The skills were rated on a scale of 1 to 4: a score of 4 is assigned to signify “almost always”, 3 to signify “most of the time”, 2 to signify “some of the time”, and 1 to signify “almost never”.

**DIGITAL SKILLS**

Computer use by young people is more frequent in countries with higher GDP per capita and countries with better connectivity. Data on the digital skills of young people in developing countries is very sparse; hence, we use frequency of computer use as a proxy for digital literacy. Based on STEP
surveys (Figure 5.9), computer use is more frequent in more developed countries (i.e., having higher GDP per capita). For instance, urban youth in countries such as Armenia (87 per cent), Georgia (89 per cent), and Vietnam (74 per cent) frequently use computers compared to urban youth in countries such as Ghana (26 per cent) and Lao (28 per cent). Gender differences also play a role; in India, a survey of rural 14- to 18-year-olds revealed that 49 per cent of males have never used the internet, but close to 76 per cent of females have never done so. Connectivity also plays a key role as seen in Bolivia and Kenya, both lower middle-income countries but with different connectivity profiles: internet penetration is 44 per cent in Bolivia compared to 18 per cent in Kenya; not surprisingly therefore, medium-high computer use is cited by 61 per cent of youth in Bolivia compared to only 30 per cent in Kenya.

![Figure 5.9: Frequency of computer use (general) by urban youth in selected LMICs](image)

Source: STEP surveys

**TECHNICAL AND VOCATIONAL SKILLS**

The share of young people aged 15–24 who participated in technical and vocational education and training in 2017 was low overall, with significant regional and gender differences. Globally, 3.5 per cent of youth aged 15–24 participated in technical and vocational training in 2017: the share was 0.9 per cent in low-income countries, 3 per cent in middle-income countries and 9 per cent in high-income countries. There were significant cross-country and gender disparities: participation rates in 2017 were highest in ECA (>12 per cent) and lowest in SSA and SAR (around 1 per cent); meanwhile, the female participation rate in 2017 was around two-thirds of male participation in low- and lower-middle income countries, but the ratio was closer to 90 per cent in UMCs.

Participation rates in formal education and training opportunities to develop technical and/or vocational skills are highest in ECA and lowest in SSA and SAR. Technical and/or vocational skills can be delivered formally as a dedicated track at secondary and post-secondary levels. At the post-secondary or tertiary level, technical skills (especially advanced and specialized technical skills) required for a number of occupations are also built via academic-oriented programmes such as STEM, accounting and so on. Formal technical and vocational education and training (TVET) is typically introduced as a parallel track at the upper secondary level. As seen in Figure 5.10(a), the share of upper secondary students in TVET is substantial in ECA (52 per cent) and EAP (37 per cent) but is quite low in SSA and SAR; given these
regions also have low secondary enrolment overall, a critical concern is that more young people are leaving formal education than are continuing in general education or TVET.\textsuperscript{192} Enrolment at the post-secondary and tertiary level is lowest in SAR and SSA but is notably higher in ECA countries (Figure 5.10(b)). In particular, the demand for formal post-secondary programmes that are associated with preparing young people for the labour market (ISCED 4-5) remains low across all regions.

**Figure 5.10: Uptake of formal TVET and tertiary education in LMICs**

(a) Share of TVET in total enrolment

![Graph showing % enrolled in TVET](image)

(b) Gross enrolment rate (post-secondary)

![Graph showing GER](image)

Source: Calculations based on data from EDSTATS

Notes: GER – gross enrolment rate. Post-secondary enrolment refers to enrolment in post-secondary non-tertiary (ISCED 4) plus tertiary education (ISCED 5-8). Data on TVET orientation in ISCED 4-8 is not available. Since ISCED 4-5 programmes typically prepare students for labour markets (although not exclusively), they are included in panel (a), but should not be interpreted as a share of TVET in post-secondary or tertiary. Data on post-secondary non-tertiary enrolment (ISCED 4) are not available for MENA. ISCED5 enrolment for MENA in panel (a) should be interpreted as a percentage of tertiary enrolment. In panel (b), GER for post-secondary is calculated as post-secondary enrolment divided by 5-year age group starting from official secondary school graduation age (i.e. same denominator as used in GER tertiary).\textsuperscript{193}

**Uptake of non-formal vocational training opportunities and apprenticeships by young people does not appear to be high, albeit with some exceptions.** There is some evidence to suggest that young people’s participation in trainings outside the formal education/TVET system is also not very high: based on STEP surveys, 6 per cent of (urban) youth in Armenia had participated in non-formal training, 15 per cent in Bolivia, 16 per cent in Colombia, 10 per cent in Georgia, 4 per cent in Ghana, 3 per cent in Lao, 9 per cent in Kenya, 7 per cent in Sri Lanka, and 9 per cent in Vietnam. Apprenticeships are another medium by which young people can acquire vocational skills. Apprenticeships can be formal or informal, with informal arrangements more prevalent in SSA. Based on STEP surveys, the share of (urban) youth that ever completed an apprenticeship was modest in Armenia (11 per cent), Georgia (16 per cent), Ghana (11 per cent), Lao (19 per cent), Kenya (9 per cent), Vietnam (14 per cent) and Sri Lanka (21 per cent) but higher in Bolivia (62 per cent) and Colombia (41 per cent). High incidence in LAC could be due to a number of factors; LAC countries have a history of active labour market programmes with apprenticeship/internship
as one key component, while in Colombia, for example, the law makes it compulsory for firms with more than 15 employees to hire apprentices and fines firms who do not comply.194

Employers in developing countries perceive technical skills as the weakest amongst the various skill types. Technical skills are industry and occupation-specific and standardized cross-country comparisons of these skills do not exist. Hence, to infer the availability of technical job-specific skills in young people in LMICs, we look at employers’ assessment of these skills. Findings from a number of employer studies in LMICs suggest that the technical skills gap is highly salient. Of the 15 studies referenced above, 11 also asked employers to rank skills where they perceive the greatest gaps. Among the 11 studies, technical skills gaps were the most frequently cited (four studies) followed by problem-solving skills gaps (three studies), self-management skills (three studies), and communication skills gaps (one study). ILO’s labour demand enterprise surveys (LDES) in Liberia, Tanzania, Vietnam and Zambia showed that employers perceived technical skills of young labour market entrants as being the weakest amongst the different skill types assessed.195 Employers in a survey of nine countries by McKinsey & Company also identified technical skills to be the weakest.196

SKILLS MISMATCHES

A substantial number of youth did not perceive their studies during formal education as very useful to the work they were doing. According to the STEP surveys analyzed for 8 countries, between 30 and 60 per cent of surveyed youth found their formal education to be either not or only somewhat relevant to their work: in Bolivia, 44 per cent, 36 per cent in Colombia, 46 per cent in Georgia, 41 per cent in Ghana, 51 per cent in Kenya, 33 per cent in Lao, 38 per cent in Sri Lanka, and 58 per cent in Vietnam. Many young people also feel there is a mismatch between their qualifications and the qualifications and skills required by their job. In Armenia, 41 per cent of youth aged 15–24 felt this mismatch, 64 per cent in Bolivia, 62 per cent in Colombia, 41 per cent in Georgia, 58 per cent in Ghana, 72 per cent in Kenya, 73 per cent in Lao, 57 per cent in Sri Lanka, and 85 per cent in Vietnam. The mismatch could be due to either being under or overqualified for the job – over-qualification appears more prevalent in upper middle-income countries while under-qualification is more present in low-income countries (Figure 5.11).

Figure 5.11: Qualifications mismatch of youth aged 15-29 as % of total employment

Source: ILO Global Employment Trends 2015
WHAT ARE THE UNDERLYING FACTORS THAT AFFECT THE AVAILABILITY OF SKILLS FOR WORK AMONG YOUTH?

POOR SKILLS FOUNDATIONS

Skills beget skills – poor skill foundations laid in childhood and early adolescence impacts development of skills later in life. Skills development is cumulative and establishing sound foundations early on leads to a virtuous cycle of skill acquisition. However, pre-primary enrolment is low (gross enrolment rate of 46 per cent in LMICs), and despite a rapid increase in primary enrolment, 10 per cent of children of primary age in low- and middle-income countries are out of school. However, even when they attend schools, many children are not learning. Globally, six out of ten children and adolescents of primary and lower secondary age are not achieving minimum proficiency levels (MPLs) in reading; most are in school but are not learning (Figure 5.12). As a result, a substantial number of young people completing basic education and/or continuing onto further education or entering the labour market are lacking in fundamental skills. For instance, 86 per cent of 14- to 18-year-olds in India are in formal education and 81 per cent have completed 8 or more years of schooling. However, amongst young people aged 14–18 who had completed 8 or more years of schooling, 37 per cent could not tell the time on a clock, 40 per cent could not add weights, 61 per cent could not calculate the time difference, 60 per cent could not measure the length of a pencil against a ruler, and 42 per cent could not read and understand even 3 out of 4 instructions on an oral rehydration salts packet.

Figure 5.12: Per cent of children and adolescents by minimum proficiency levels in reading
by region and school exposure

Source: UNESCO UIS Fact Sheet No. 46, 2017
Notes: Calculations based on estimates in Table 1 and Figure 10 in source document.
Poor teacher quality in basic education is a key constraint to the development of both foundational and transferable skills in children. As shown in Figure 2.1, the optimal period for developing higher-order cognitive and non-cognitive skills is in childhood and/or early adolescence when children are likely to be in basic education. At this level of education, teacher quality is a serious concern. For instance, surveys from 6 African countries where grade 4 teachers were tested on grade 4 language and math materials, nearly 40 per cent did not meet minimum proficiency marks (equivalent to 80 per cent score on the test) – in Nigeria, 76 per cent and 69 per cent of grade 4 teachers did not meet the proficiency score in language and mathematics, respectively.\(^\text{203}\) In Bihar, India, only 10.5 per cent of tested public-school teachers are able to solve a three-digit by one-digit division problem and show the steps correctly.\(^\text{204}\) Is it then really plausible to believe that teachers who are not even proficient in what they have been teaching for years (let alone how they teach it) are developing the non-cognitive and higher-order thinking skills that children need (like problem-solving and creativity)?

**BARRIERS TO ACCESS**

Gender bias can restrict the choices of girls in determining the subjects they wish to study, and the types of jobs and careers they aspire to or have access to. In all regions of the world, girls and boys are often steered into stereotyped study areas, traditionally “feminine” or “masculine”. The effects of this can negatively impact young women in non-technical specializations when it comes to finding work in an economic landscape that is increasingly valuing skills in science, technology, engineering or mathematics (STEM). Only 7 per cent of young women aged 25–29 in the school-to-work transition survey countries majored in STEM at the secondary level compared to 18 per cent of young men.\(^\text{205}\) At the tertiary level, although female enrolment is at par with or exceeds male enrolment (except in LICs), very few women pursue STEM fields (Figure 5.13). Women in LICs are 8 percentage points less likely than men to enroll in tertiary programmes under the category ‘engineering, manufacturing and construction’. In LMCs and UMCs, the gap is between 11 and 17 percentage points. A number of reinforcing factors at the individual, community and societal level likely influence young women’s low participation in STEM fields, such as individual attitudes to STEM subjects, along with self-efficacy, and the presence of social networks and support systems, rules, regulations, stereotypes and norms that define ‘feminine’ or ‘masculine’ professions.

Figure 5.13: Share of male and female enrolment at the tertiary level in STEM fields

Source: UIS.Stat, WDI. Notes: Calculated based on pooled enrollment from 72 LMICs by income group. For each country, the most recent year between 2012 and 2018 for which data is available is used.
Migrants and refugees face significant challenges to access skills development opportunities as well as getting recognition for skills acquired in their home countries. Refugee children are five times more likely to be out of school than non-refugee children. Only 50 per cent have access to primary education and only 22 per cent attend lower secondary. At the tertiary education level, the gap becomes a chasm, as just one per cent of young refugees attend university. Many barriers reduce migrant and refugee demand for skills development through TVET. Initial unemployment and precarious employment in ill-matched jobs lower migrants’ return on investment in their skills. Undocumented migrants and asylum-seekers may not have the legal right to work, discouraging participation in vocational training. Multiple providers and entry points can also make navigating the TVET system difficult. Recognizing professional qualifications of migrants and refugees facilitates and maximizes the benefits of skilled labour migration; not recognizing prior learning compromises migrants’ and refugees’ ability to get decent work or further education and training. In OECD countries, on average one in three tertiary-educated migrants are over-qualified, which is about 12 percentage points greater than for the native-born population. However, only about one-fifth of the differences in over-qualification rates between foreign- and native-born workers can be explained by observed skill differences as measured by the Programme for the International Assessment of Adult Competencies (PIAAC). But recognition systems are often too underdeveloped or fragmented to meet migrants’ needs. Processes are complex, time-consuming and costly, so often only a minority apply.

Distance and cost of training (both direct and opportunity cost) are barriers to participation in skills development programmes. In a household survey in Punjab, Pakistan, roughly one-fourth of infra-marginal respondents identified lack of money as a barrier to acquiring skills. Other important obstacles were loss of income due to participation in training (57 per cent), and the inability to attend to domestic work (two-thirds of the respondents). In the case of female participation in training, the number of households reporting domestic work as a low obstacle increases from 38 per cent in the case of non-local training to 53 per cent in the case of local training, which suggests that the constraints of distance matter most for women. Cost of transport was another major obstacle cited by two-thirds to three-fourths of the respondents. Similarly, in Colombia, Dominican Republic and El Salvador, participants emphasized that transport costs were driving the dropout rates of their programme’s beneficiaries.

**WEAK SKILLS DEVELOPMENT SYSTEMS**

The quality and relevance (demand-responsiveness) of skills development systems is a significant constraint to developing job-relevant skills of young people. In many countries, skills training programmes are still supply-driven and not aligned with labour market, industry and employer needs. The misalignment in skills needs was evident from the McKinsey & Company survey carried out in nine advanced and emerging economies; while surveyed employers identified the top five skills sought in new recruits as being work ethic, teamwork, local language, oral communications and hands-on training in the discipline, for the training providers, the top five skills they perceived as being sought by employers were work ethic, teamwork, oral communications, written communications, and computer literacy. The misalignment was also evident in the diverging perceptions between employers and training providers on the skill levels of youth entering the workforce, for example the top four skills areas where employers’ perceptions diverged most from training providers were: theoretical and hands-on training in the discipline, problem-solving and computer literacy. In these four skills areas, training providers perception of youth skills were higher than employers’ perceptions. Conversely, employers and training providers were closer in alignment in their perceptions of youth skill levels related to teamwork and work ethic. The misalignment is not surprising – when providers were asked to rank a list of ten priorities, linking trainees to employment opportunities was ranked in the bottom five by providers. Consequently, employers’ perceptions of the
quality and relevance of skills development systems is weak, particularly in several developing countries (Figure 5.14), and likely contributes to the low employer-training provider linkages in recruitment.  

**Figure 5.14: Employers’ perceptions of quality of skills development systems**

(a) Competitiveness of education & training system  
(score between 1-7)

(b) Quality of skills development system as constraint on firm  
operations & growth

Source: (a) Global Competitiveness Index (GCI) 2017-18, WDI; (b) STEP Employer Survey Snapshot 2016  
Notes: Estimates in panel (a) are based on averaging GCI scores on the fifth pillar: Higher Education and Training for 137 countries in different income groups. Country income status based on WDI.

**Weaknesses in skills development systems constrain development of relevant skills for work in LMICs.** Findings from the World Bank SABER Workforce Development (WfD) system diagnostics in 24 developing countries (Figure 5.15(a)) suggest weaknesses in five goal areas across regions, as determined by a score of ‘latent’ or ‘emerging’ in the respective goal areas. These are: efficiency and equity of financing (24/24 countries), diversity and excellence in training provision (24/24 countries), relevance of training programmes (21/24 countries), evidence-based accountability for results (21/24 countries), and diversified pathways for skills acquisition (20/24 countries). Despite limited sample size, there is some evidence to suggest cross-country differences in overall robustness of skills development systems with those in MENA and SSA demonstrating more weaknesses compared to systems in ECA and parts of Asia and Pacific region.

**Further examination of the strengths and weaknesses of skills development systems in 21 countries in Figure 5.15(b) suggests the need for more focused attention on the following systems dimensions:**

- **Policy advocacy:** while many countries have articulated a vision for skills development of their workforce, challenges remain in: enhancing the regulatory environment for WfD via relevant strategies, creating or reforming organizational structures for policy development (15/21 countries rated...
‘established’ or higher), finding high-level government and non-government leaders to articulate and support the strategy through sustained public advocacy (14/21 countries rated ‘emerging’ or below);

- **Employer/industry partnerships**: the sample countries are somewhat better at establishing credible skills assessments for the economy and/or in selected (priority) sectors (9/21 countries scoring ‘established’ or higher) to inform collaboration among stakeholders than at forging effective engagement with employers. While a number of countries scored ‘established’ or higher (9/21) for outreach (meaning the involvement of employers in formulating strategy and developing policy), employer engagement in the form of incentives for workforce training (meaning offering financial incentives and monitoring them for impact), is rare (Malaysia being the only exception). Mobilizing industry partnerships for resource mobilization is another area that needs to be reinforced as only 7 of the 21 countries had formalised the processes to establish such partnerships. Meanwhile, nine other countries had taken some (ad-hoc) steps to facilitate partnerships with employers to tap these resources, while six other countries had not made any such effort. Lastly, almost all the public training institutions in the sample countries had established some relationships with industry, mainly to support training delivery, but such relationships were ad-hoc, limited and/or informal in many, with 13 out of 21 countries in the sample scoring ‘emerging’ or below in this sub-dimension. This is consistent with poor perceptions regarding market-relevance of many training programmes in LMICs.

- **Strategic coordination**: the SABER WfD diagnostics suggest that roles and responsibilities for WfD are generally clearer for government stakeholders than non-government stakeholders in the sample countries; however, coordination and implementation of strategic WfD initiatives at the leadership level is weak in 16 out of 21 countries. In fact, several countries achieved low scores for strategic coordination and implementation despite having high scores for clarity of roles and responsibilities.

- **Equitable financing**: countries in the sample tend to focus more on the efficiency of public funding for WfD than on its equity. This relationship holds true for initial vocational education and training (IVET), continuous vocational education and training (CVET), and active labour market programmes (ALMPs), with more than half of the sample countries rated ‘latent’ for equity on 2 out of 3 training categories (i.e. IVET, CVET, ALMPs). A common issue is that in almost all sample countries there are information gaps on the performance of publicly funded programmes, partly because reviews for impact on efficiency or equity are rarely conducted.217

- **Standards, pedagogy and assessment**: regarding standards, formal qualifications frameworks and/or competency standards for occupations exist in some form in all sample countries (except two where the sub-dimensions are rated ‘latent’), but they vary widely in robustness and scope with only 6 out of 21 countries having formalised a qualifications framework with any significant occupational coverage. In fact, in most of the sample countries, competency standards are defined for only a few occupations and are used only by some training providers.218 Trainer/teacher quality also receives modest attention among the sample countries. For both the heads of such institutions and instructors, most countries are rated ‘emerging’ or below (17/21 and 19/21 countries respectively), with few opportunities for professional development, especially opportunities that would increase exposure to the state-of-the-art in their relevant industries. It is alarming that in a small but not negligible set of countries, ensuring that instructors have relevant experience in teaching or industry receives no attention at the policy level.219 Lastly, regarding skills certification, many countries have established testing for some occupations, but establishing a broader system of competency-based testing is more challenging with 15 out of 21 sample countries scoring ‘emerging’ or lower.
• **Diversified pathways for skills acquisition:** regarding pre-employment vocational education and training (i.e. IVET), sample countries do well in establishing open pathways for skills acquisition (albeit in the formal education and training space), but few address public scepticism about IVET (17/21 countries scoring ‘emerging’ or below) and the lack of programme articulation (15/21 countries scoring ‘emerging’ or below). While few governments create formal obstacles to progression, they also do not take active steps to facilitate it. Most of the sample countries also struggle with building a strong system of CVET, particularly with regard to the recognition of prior learning (RPL), whether non-formal or informal, with 17 out of 21 countries scoring ‘emerging’ or below. Provision of systematic support for career development to the general public also needs further strengthening; while the majority of countries engage in some form of career development support, only 3 out of 21 score ‘established’ or higher, describing a situation in which services are available, but are provided through disparate stand-alone centres rather than through an integrated network benefiting from pooled resources and connectivity. Regarding programmes for the disadvantaged (i.e. ALMPs), the majority of countries see the provision of ALMPs as a core aspect of their mandate; this commitment in provision is not always matched by rigour in confirming the equity of such targeted programmes, as suggested by the scores on equity of funding.

• **Management and oversight:** a pervasive challenge is putting in place regulations, incentives and monitoring to ensure that training providers, both public and private, are accountable for and manage to achieve results in the job market. Although countries in the sample have put in place a regulatory framework for accreditation and designated an agency for setting and enforcing accreditation standards, with 14 out of 21 countries rated ‘emerging’ or lower for clarity of the relevant standards and protocols, and 15 out of 21 countries rated ‘emerging’ or lower for incentivizing and supporting training providers to meet these standards, this aspect of the system remains poorly developed. In particular, there is a vibrant market of non-state training providers in most of these LMICs; however, less attention is being paid to quality assurance of non-state providers (13/21 countries scoring ‘emerging’ or lower) as well as the use of performance-enhancing strategies, such as incentives and performance targets (17/21 countries scoring ‘emerging’ or lower).

• **Use of data and evidence for management:** the SABER WiD diagnostics suggest that LMICs make scant use of data for monitoring and improving system performance (21/21 countries scoring ‘emerging’ or lower). Around half of the countries regularly collect and maintain administrative data from both public and private providers in a centralized database; for the rest, data reporting by providers is fragmented or incomplete. When administrative data are collected, few countries require providers to report on indicators such as job placement rates, earnings of graduates, or client feedback. The McKinsey survey for instance, shows that on average, a third of educational providers in advanced and emerging markets were unable to estimate job placement rates; those who did estimated optimistically – 74 per cent of employers said that over half of their graduates found jobs within 3 months, as compared with 54 per cent of youth who did find jobs who said it took them 3 months. Furthermore, few countries supplement the administrative data they collect with in-depth analyses, special surveys, or studies.
Figure 5.15: Assessment of skills development systems in selected LMICs

(a) Comparison of skills development systems by system dimension (N=24)

(b) Weakest sub-dimensions of skills development systems (N = 21)
(defined as > 60% of countries scoring ‘latent’ or ‘emerging’ on the given sub-dimension)

Source: Calculations based on data from World Bank’s SABER Workforce Development (WfD) systems diagnostics
Notes: IVET = initial vocational education and training, CVET = continuous vocational education and training, ALMPs = active labour market programmes. SABER WfD scores national WfD systems along 9 dimensions and 41 associated sub-dimensions on a 4-point scale – Latent, Emerging, Established, Advanced. Latent = limited engagement, Emerging = some instances of good practice, Established = systemic good practice, Advanced = good practice meeting global standards.
UNDERINVESTMENT IN SKILLS DEVELOPMENT

There is relative underinvestment in technical and vocational training. Compared to their levels of education, spending on TVET (both public and overall) is a relatively small proportion of education sector spending, in the magnitude of two to five per cent (Figure 5.16). But how we spend the money also matters, and links in the spending-skills development chain are weak, as evidenced by SABER WfD findings referenced above. There is also underinvestment by firms in training, with fewer than 30 per cent of formal sector firms covered by the World Bank’s enterprise level surveys in MENA, SSA and SAR reporting having offered formal training. According to these surveys, larger firms are also more likely to provide formal training than smaller and medium-sized firms.

UNINFORMED STUDY CHOICES

Inadequate awareness of labour market demand, career pathways and prospects lead youth to make uninformed study choices. In a 2012 McKinsey & Company survey, youth across nine surveyed countries (Brazil, Germany, India, Mexico, Morocco, Saudi Arabia, Turkey, United Kingdom and United States) said they were not well informed about the availability of jobs or the level of wages associated with their course of study (Figure 5.17). Some 40 per cent of youth also reported that they were not familiar with the market conditions and requirements even for well-known professions such as teachers or doctors. Finally, a large number of students do not know what they do not know; in Brazil and Saudi Arabia for example, those surveyed believed they had a good grasp of potential careers. However, when asked about specific occupations they proved not to be particularly well informed: for instance, only 46 per cent of youth in Saudi Arabia and 58 per cent of youth in Brazil reported understanding the skills required and wage levels for school teachers. Without this understanding, many students end up choosing courses without knowing whether there will be a demand for their qualifications upon graduation – not surprisingly, fewer than half of the youth surveyed were sure that if they had to do it again, they would study the same subject.
IN BRIEF

- Young people face significant obstacles in their search for work. As a result, the job search process can be protracted. Based on school-to-work transition surveys in 23 LMICs, the average time for young people in low and middle-income countries to find the first job is 17 months and 53 months to find their first stable employment. Young women and those with lower education have considerably longer search durations.
- The underlying factors that affect young people in connecting to productive and decent jobs is their lack of work experience, informal recruitment practices of firms, lack of information and networks to connect to jobs, inadequate employment services, constraints in access to capital, cost of transportation, social and culture norms, and access to social protection.

IS IT EASY FOR YOUNG PEOPLE TO CONNECT TO PRODUCTIVE AND DECENT WORK OPPORTUNITIES?

Young people may have skills, but for a variety of reasons may not be able to offer them to the labour market. Unused human capital represents a waste of skills and of initial investment in those skills. As the demand for skills changes, unused skills can become obsolete; and skills that are unused during inactivity are bound to atrophy over time. Conversely, the more individuals use their skills and engage in complex and demanding tasks, both at work and elsewhere, the more likely it is that skills decline due to aging can be prevented. The NEET rate (discussed in chapter 2) is one measure of labour market exclusion; however, youth who are NEET are a diverse group that results from different determinants and responds to different policies. Here, a distinction needs to be made between those who are not seeking work (inactive) and those who seek productive and decent work (unemployed). For instance, youth that are inactive may be so because of disability, family responsibilities, not knowing how or where to look for jobs, or are discouraged (i.e. available but not looking for work because they do not believe there are jobs available or were unable to find jobs in previous searches), among other reasons. Meanwhile, youth that are actively seeking work may have been searching work for a short-time (which is normal) while others may have been looking for a long time but are not able to find work that matches their aspirations. On the other hand, many
youth, especially from low-income households and countries with inadequate social safety nets, may find themselves taking up jobs out of necessity that do not provide decent livelihoods or a decent work environment.

**Inactivity is the main driver of high female labour market exclusion compared to young men.** As seen in Figure 6.1, female inactivity comprises the large share of NEET among young women – the gap begins to emerge in late adolescence and widens in their 20s. Despite their aspirations for employment, female economically inactive non-student youth often remain "stuck" in inactivity, whether they move directly from school to economic inactivity or work for a period of time before leaving the labour force. In the SWT survey countries, one third of economically inactive female youth (33 per cent) had no prior work experience, indicating they moved directly into economic inactivity, compared to just 18 per cent of currently economically inactive non-student male youth. On the other hand, NEET rates among young men are as likely (if not more) to be driven by unemployment.

**Figure 6.1: Decomposing youth participation in education and employment**

![Figure 6.1: Decomposing youth participation in education and employment](image)

Source: Charts extracted from technical appendix of IMF report (2019)

**For young people seeking work in LMICs, the job search duration is protracted.** Modelled estimates that take into account the sample of individuals who have not yet transitioned into work suggest that the average (median) time to find the first job for young people aged 15–29 in low and middle-income countries is 17 months and 53 months to find their first stable employment. There are significant regional differences (Figure 6.1). For instance, time to find first employment (also first stable employment) is shortest in Asia and Pacific (includes EAP and SAR). Time spent to find a first job is longest in MENA while time to find first stable employment is highest in sub-Saharan Africa. Young men, those with higher levels of education and those with work experience
while in school are more likely to ever find employment than early school leavers, pointing to the role of early human capital accumulation and education in shaping transitions. Among youth aged 15–29 who have had a job across 33 low- and middle-income countries surveyed, the average age at first job was 19 years – lower than the average for those in low and lower-middle income countries, those from rural areas, and those with only primary education.

The top three obstacles being perceived by young people in their job search are lack of available jobs, not being able to meet job requirements, and lack of work experience (Figure 6.2). Lack of available jobs was cited as one of the top 3 obstacles by youth aged 15–29 in 20 out of 22 SWT survey countries. This was perceived as a more serious obstacle in MENA and ECA compared to other regions. The second most frequently cited obstacle was lack of work experience (in 17 out of 22 countries) followed by an inability to meet job requirements (in 13 out of 22 countries), low wages in available jobs (5 out of 22 countries – and mainly an ECA phenomenon), and not knowing how to look for work (top 3 in 3 out of 22 countries). While discrimination and prejudice were mentioned by a small share of respondents in most countries, in Madagascar, Tanzania and Zambia, more than 5 per cent of respondents cited this as an obstacle.

![Figure 6.2: Obstacles to finding work by youth 15-29 (% of respondents)](image)


**WHAT ARE THE UNDERLYING FACTORS THAT AFFECT YOUTH ACCESS TO PRODUCTIVE AND DECENT WORK?**

**LACK OF WORK EXPERIENCE**

Young people lack work experience which affects their chances of being hired. Among employer surveys undertaken by ILO in eight countries, work experience emerged as one of the top two criterion used by employers in all countries (Benin, Liberia, Malawi, Nepal, Tanzania, Tunisia, Vietnam, Zambia) for...
making hiring decisions. In the same vein, in the six low- and middle-income countries where STEP employer surveys were undertaken, difficulty in finding experienced workers features as the top constraint in five countries (Azerbaijan, China (Yunnan province), Georgia, Sri Lanka, Vietnam), with the exception of Armenia (where this was the second topmost constraint). Data from school-to-work transition surveys in 22 countries also pointed to lack of work experience as one of the top 3 obstacles for youth aged 15–29 in finding a job. This could suggest further dissatisfaction with the level of skills the workforce currently possesses as well as indicating a potential unwillingness to provide employees with training upon hiring.

**LACK OF INFORMATION AND SOCIAL NETWORKS**

Young people in developing countries rely on informal social networks to search for jobs. Young people use multiple job search strategies, but the most common strategy is to rely on personal social networks (Figure 6.3). Among the 9 countries for which STEP survey data was analyzed, 8 countries had more than 40 per cent urban respondents citing their social network as the principal job search method. School-to-work transition surveys in 28 countries covering youth aged 15–29 years confirm this trend. Job search through personal networks appears more common amongst the less educated – data from 15 LAC countries suggested that between those who had primary education or less and those who had post-secondary education, the difference in use of informal job search methods ranged from less than 10 per cent (Mexico) to 50 per cent (Brazil), depending on the country. Reliance on who one knows is likely to be inefficient as it limits the pool of potential workers available to employers and limits the number of potential positions available to the worker. Informal networks tend to be localized as well, reducing the pool of firms and workers to those within a limited area. Informal job search is limiting for disadvantaged or low-income workers who have few contacts and whose search is highly restricted to local markets. More than one in three female unemployed youth in the SWTS sample reported a lack of jobs and not knowing where to seek jobs as their main obstacles to employment.

![Figure 6.3: Job search methods used by urban youth (% of respondents)](image)

Source: STEP surveys
WEAK PUBLIC EMPLOYMENT SERVICES

The poor capacity, coverage and limited services by public employment agencies prevent their use in the job search process. Several countries have some form of public employment service (PES). Those in advanced economies tend to offer significantly more services, such as individualized guidance, than those in low- and middle-income countries, where activities tend to be limited to the traditional employment office model which provides only basic referral services. Levels of utilization in most developing countries and the numbers of individuals actually placed through them remain low. In many countries this is because these programmes suffer from a significant lack of resources, being poorly funded and inadequately staffed. For example, in Syria, Morocco, and Lebanon, the ratio of registered job seekers to PES staff was found to be very high at 14,000:1, 1,500:1 and 1,200:1, respectively; the services rarely covered informal sector employers, even where the informal sector was the main source of employment, and were rarely found outside urban centres. In addition, evidence indicates that most firms do not believe that public employment services have the capacity to effectively match supply and demand.

INFORMAL AND UNFAIR RECRUITMENT PRACTICES

Recruitment practices of employers in developing countries make it difficult for young people to connect with jobs. According to employer surveys in 9 developing counties, informal channels and social ties, and media advertisements were the two most common methods for recruitment. Enterprises most frequently used advertisements for recruiting higher skilled workers, while informal channels and social ties were more important for the recruitment of lower-skilled workers. Larger firms were also more likely to advertise than smaller firms who relied more on informal channels. Contacts between employers and education/training institutions for recruitment purposes were found to be weak in almost all countries reviewed. Lack of meritocratic recruitment is also a concern in some countries, particularly MENA. A 2013 Gallup poll in MENA countries showed that between 20 and 35 per cent of surveyed youth in Syria, Jordan, Yemen, Lebanon and Iraq believed that the main constraint behind why they could not get jobs was that jobs are only given to connected people (“wasta”, i.e. the Arabic equivalent of having a personal connection in high level places through family and friends). In the same poll, more than 60 per cent of respondents in all MENA countries, with the exception of Qatar, agreed that knowing people in high positions is critical to getting a job (“wasta”). Lebanon and Jordan particularly stood out with almost 90 and 85 percent agreement rates, respectively.

INADEQUATE ACCESS TO CAPITAL

Lack of financial capital significantly affects youth entrepreneurship and self-employment but youth access to finance is weak. Access to finance for youth (15–24 years) is more limited than for older adults (over 25 years) even though they have similar savings behaviours (41 per cent and 44 per cent). In developing countries, 53 per cent of youth have a bank account compared to 66 per cent for older adults, and 37 per cent had any borrowings in the past year compared to 46 per cent of older adults. Age-level differences in financial access are also prominent within different youth cohorts; the proportion of youth aged 15–19 years old with access to personal finance (including both formal and informal providers) is almost half of that for youth aged 20–24 and nearly three times less than 25- to 29-year-olds. Young people are also more likely to access finance through informal channels; in sub-Saharan Africa, the share of youth accessing financial services from informal providers is larger than that of youth accessing services from formal providers, although the gap decreases with age.
The reasons for this lack of support to the youth market are diverse. Among the most common are policy and regulatory barriers that set minimum age and proof of identity requirements for opening accounts. An estimated 70 per cent in least developed countries do not have birth certificates or registration documents thus regulatory requirements make it particularly difficult for socially disadvantaged youth to access formal financial services. Most countries require youth under the age of majority to have an adult co-signatory, thereby limiting their ability to conduct transactions and leaving them vulnerable to exploitation by unscrupulous adults. Another reason why financial service providers (FSPs) fail to serve more youth clients is that many of their products are not suitable for or attractive to youth. Market studies in multiple countries have identified several characteristics of the youth segment that pose challenges to FSPs, including small and irregular income flows, and equally irregular and small deposits. Youth are sensitive to price, and existing products may require opening or minimum balances or charge fees that are too high for them. Youth are also harder to reach through traditional channels and, in rural areas especially, may have to travel some distance to access formal financial services – a situation that raises safety issues, particularly for girls. These business case barriers have led FSPs to perceive youth as a risky option rather than as a bankable market segment requiring specific and adapted financial services that take their unique needs and vulnerabilities into consideration.

**GENDERED ROLES AND RESPONSIBILITIES**

Early marriage and motherhood remain stubborn impediments to female access to education and labour market participation in many developing countries. The shares of female adolescents (aged 15–19) who are already mothers are especially high among countries in the Middle East and North Africa (37.8 per cent, on average) and sub-Saharan Africa (15.9 per cent). Having children serves as a push factor towards employment for young men but has the opposite impact for young women. Fewer than one in two
(45.9 per cent) young mothers work, compared to more than four in five (83.6 per cent) young fathers. With a few exceptions, the majority of countries show that young women who dropped out of the labour market continued in their inactivity.

Unpaid care and housework responsibilities take up a lot of women’s time and affect their participation in the labour market. A large number of women never seek work in the first place due to household responsibilities. School-to-work transition surveys suggest that the most commonly cited reason among young women for not looking for work was household responsibilities. Data on time use of working-age men and women from a number of LMICs further lend credence to how gendered roles and responsibilities can contribute to lower labour force participation: although women tend to work overall more hours than men, the time they spent on unpaid household work is much higher compared to men. The differences range from about 50 per cent more in Cambodia and Sweden to about three times more in Italy and six times more in Iraq. But in no country do women invest as many hours as men in market work. In Sweden, women spend about 70 per cent of the time men spend on market activities, while in Pakistan this proportion is around one-eighth. Similar patterns have been documented by others for other middle- and low-income countries.

DISTANCE AND TRANSPORTATION COSTS
Transportation costs affect the chances of many young people in conducting a job search and of getting to the job. In Ethiopia, the mobility constraints for job-seekers living outside the city were addressed by providing a four- to five-month subsidy which they collected in the city centre. The subsidy significantly affected exit from self-employment, which was prevalent in the control group. In the United States, small subsidies, in the form of farecards, generated large short-run increases in search intensity, and translated into shorter durations of unemployment. In Jordan, the Youth for the Future (Y4F) programme observed that transport costs were a challenge causing many beneficiaries who secured a job to keep it for less than 6 months. Furthermore, the literature on gender makes it clear that young women bear a substantial burden from transport costs, and that their limited mobility is a significant constraint to their labour force participation. Women have shorter, more frequent, and more complex journeys, and are especially constrained by the level of security on transport.

ACCESS TO SOCIAL PROTECTION
Inadequate social protection coverage for young people leaves them vulnerable to risks and shocks that disrupt their labour market integration. Although few social protection schemes formally exclude youth, most of the programmes available to young people require contributory payments. Because of their age and their high participation in informal employment, young people may find themselves excluded from these schemes. In Latin America and the Caribbean, for instance, only 55 per cent of young people in formal employment were effectively covered under a health-care scheme in 2013, compared with 71 per cent of wage-earners aged 25 years and above. In principle, young people may have access to tax-financed (non-contributory) schemes where available, including unemployment assistance and minimum income benefits or health care. However, health coverage is much less common in low-income countries, leaving many young people without access to comprehensive health care. In addition, cash transfer programmes for children and families often elude young people, either because of their age (benefits are typically cut off after a certain age) or because they no longer live with their parents. In Africa, a region where the youth cohort is the largest, most non-contributory social protection programmes are targeted at
other groups, and young people are relegated to third place from last (Figure 6.5). Given that a large number of young people are in the informal sector and therefore are not eligible for contributory benefits, the only social service they are able to receive is non-contributory. Unemployment protection plays a key role in providing income security to workers and their families and in preventing impoverishment. Yet only 20 countries provided unemployment benefits for first-time jobseekers worldwide as of 2013. In 82 of the 98 countries that provide unemployment protection, periodic cash benefits are provided through contributory social insurance schemes, for which young people may not meet the minimum contributory periods.

**Figure 6.5: Targeting of non-contributory social protection programmes in Africa**

Source: Cirillo and Tebaldi (2016)
Unpacking School-to-Work Transition: Data and evidence synthesis
07
Evidence and trends in programming for youth transitions to work

IN BRIEF

- The evidence base around the impact of programmes to strengthen school-to-work transition have a mixed record in terms of increasing employment and earnings.
- The ‘how’ matters more than the work. Amongst evaluated programmes, specific design and implementation features are consistently associated with higher effectiveness. These include: comprehensive programmes that provide a diversified package of interventions that corresponds to the multiple constraints of the beneficiaries; programmes that are designed around and target the specific needs and contexts of beneficiaries, as well as provide individualized follow-up, counselling and monitoring; programmes that link payments to beneficiary outcomes (e.g. labour market outcomes). However, significant evidence gaps still exist around issues such as impact of soft-skills training, long-term and general equilibrium impacts and cost-effectiveness.

WHAT IMPACT EVALUATIONS TELL US ABOUT WHAT WORKS

There have been a number of meta-analytical and evidence reviews in the area of youth employment. For this reason, this section only summarizes the main messages and forward-looking lessons emerging from existing studies. Further details can be found in the original studies which are referenced in the endnotes.

On average, only 30 per cent of youth employment impact evaluations had a positive and statistically significant impact on employment outcomes, but skills-building and entrepreneurship promotion interventions have performed better. The main takeaways from impact evaluations and meta reviews of impact evaluations on the relative effectiveness of various interventions are as follows:
Entrepreneurship promotion programmes that combine entrepreneurial skills training, access to finance and/or technical advice tend to show the highest effects on employment and earnings, although there is still limited evidence of their effectiveness. Business plan competitions show promise to spur young growth entrepreneurs. These aim to select potential growth entrepreneurs – youth and non-youth – and offer winners a combination of training, mentoring, and funding. The evidence base is still emerging, but a number of studies across different countries in Latin America and Africa show promising results in terms of their impact on venture creation and survival, job creation, and earnings/profitability.

Training and skills development also show positive effects on employment outcomes albeit smaller in magnitude than entrepreneurship programmes. Several evaluations for LAC have consistently shown impacts on employment quality, as well as in behaviours, expectations and non-cognitive skills in some programmes.

Employment services interventions show modest and short-term results on employment outcomes. Evidence is limited for emerging economies but evaluations from Mexico and Colombia have shown positive impacts on employment.

Subsidized employment interventions show mixed impact but overall positive effects on employment. No effects are found on earnings. In the case of public employment programmes, the effects are negligible or negative.

Cost effectiveness: even though there are no extensive cost-benefit analyses on youth employment programmes, the evidence so far suggests that skills training does not appear to be cost effective. For example, the Adolescent Girls’ Initiative in Liberia was successful in improving employment and earnings of participants, but it would take 12 years for participants to recoup the costs of the job skills training provided. Meanwhile, employment services, despite low impacts, seem to match investments with faster results due to lower costs.

Considerable evidence gaps still remain. Evidence gaps exist in our understanding of the transmission mechanisms and optimal design features; what works to enable young entrepreneurs (and start-ups) to grow; impact of soft-skills training; long-term impacts; and cost-effectiveness. Although growing in popularity, there is also an evidence gap around integrating youth entrepreneurship in supply/value chains, supporting their market linkages, and social entrepreneurship.

Context matters in determining programme effectiveness. Contextual factors that contributed to higher impacts are:

- Labour market flexibility: youth programmes have a lower likelihood of having a positive impact in countries where labour markets are not flexible. If protective employment rules create barriers for entrants, active labour market policies may not be effective.

- Vulnerability of beneficiaries: job search assistance is more successful for disadvantaged participants, while training and wage subsidies can assist the long-term unemployed.

- Income level: skills training has been more successful in lower income countries. These investments are especially helpful in low-income country contexts where the baseline skill levels of participants are lower, compared to wealthier country contexts where baseline levels are higher.
• **Business cycle**: active labour market policies (ALMPs) tend to have larger impacts in periods of slow growth and higher unemployment. Training programmes are more cyclically sensitive than job search ones.\(^{265}\)

• **Urban versus rural**: there is suggestive evidence that interventions implemented in urban areas may be slightly less successful than interventions implemented in rural areas.\(^{266}\)

There is no magic bullet and programme design is critical. The heterogeneity in programme impacts of the same type suggests that the ‘how’ matters more than ‘what’.\(^{267}\) Programme characteristics associated with improved effectiveness are:

• **A diversified package of interventions**, that corresponds to the multiple constraints of the beneficiaries works better, such as programmes that combine classroom training, internship/work experience, job search assistance, counselling and life skills training.\(^{268}\) Similarly, for entrepreneurship, programmes that combine skills training with finance and/or mentoring/technical advice perform better.

• **Profiling**\(^{269}\) or designing programmes targeting the specific needs of beneficiaries also seems to boost effectiveness, as well as individualized follow-up, counselling and monitoring.\(^ {270}\) Profiling and screening can be especially pertinent for entrepreneurship programmes.

• **Incentives to providers**, like linking payments to the outcomes of the beneficiaries, (e.g. programme completion or labour market outcomes) appear to improve the magnitude of the impact.\(^{271}\)

• For employment services, having personnel specialized in private sector engagement and the existence of a counselling component all seem to be aspects that boost effectiveness.\(^{272}\)

• For training, the provision of demand-driven training and on-the-job training is found in programmes that yielded positive outcomes.

• Providing incentives to beneficiaries in the form of monetary or in-kind transfer may ensure attendance and programme completion.\(^{273}\)

• It is important that training is integrated into wider life-long learning provision to encourage successful learning.\(^{274}\)

• Successful programmes tend to separate the financing function from provision, as the funder pays the provider according to results.\(^{275}\)

• Participation of private sector providers seems to positively impact the success of interventions.\(^{276}\)

• In terms of programme duration, meta-analysis for the LAC region shows that training programmes tend to yield better results when they last for longer than four months.\(^{277}\)

• The impact of training in socio-emotional skills needs to be better understood (Box 7.1).\(^ {278}\)
BOX 7.1: IMPACT OF SOFT SKILLS TRAINING

While there is considerable research showing the correlation between soft skills and labour market outcomes, there is very little causal evidence of whether stand-alone short-cycle soft skills training has any impact on youth employment outcomes. Typically, soft skills training is bundled with technical skills training, and it is difficult to disentangle impacts of the two components. A recent metanalysis of youth employment interventions finds no particular connection between soft skills and better labour market outcomes. However, when the analysis is only applied to low-income countries, results are mixed. In Jordan, where a group of women were given a voucher to pay for an employment subsidy, while another group was given soft-skills training, results showed that soft-skills training had no effect on employment outcomes. It is also not evident if these skills actually developed over these short periods and, lacking any follow-up or reinforcements, persist. The sparse evidence base and mixed results call for further research on the role of soft skills in employment outcomes.

WHAT ARE THE EMERGING TRENDS IN SKILLS AND EMPLOYABILITY PROGRAMMING?

We identify the following established and emerging trends in design of programmes that address youth transition to employment, based on a review of approved projects in 2017 and 2018 by major development organizations (Figure 7.1).

- In recent decades, most youth employment programmes have evolved towards more holistic solutions. These have combined different types of interventions, following the results of impact evaluations that have highlighted the positive effect of comprehensive solutions.

- Another established trend has been the inclusion of non-technical skills in training packages, as well as a growing emphasis on on-the-job training. This reflects employers' demand and attention to these abilities and experiences. In the case of on-the-job training, this is an essential part of the training and education systems in advanced countries, and is highly valued by employers.

- The active participation and leadership of employers in the skills development and jobs agenda is another established trend. The design of new programmes frequently includes private sector involvement in the definition of training content to ensure content is demand-driven and in the provision of on-the-job training.

- Globalization has also influenced the way youth programmes are designed. The integration of youth-led businesses into value chains of local and multinational firms is gaining ground because these large, frequently multinational firms require reliable local supply and distribution networks,
such as the Global Services Skills Project in Jamaica and the programme to support Chile’s export sector (both Inter-American Development Bank – IDB).

Figure 7.1: Trends in youth interventions

- **Impact sourcing has also been a powerful tool to boost youth employment.** This is an inclusive employment practice through which companies, usually operating in global value chains, intentionally employ high-potential, disadvantaged youth in available jobs; examples are Digital Jobs Africa (Rockefeller Foundation) and Digital Divide Data.

- **Support employment opportunities for youth in outsourcing services and the digital economy are also growing.** These types of jobs frequently offer higher and more stable salaries for youth in fields like coding, gaming, design and cybersecurity, also offering flexibility, an important aspect for millennials. Examples include the Global Services Skills Project in Jamaica (IDB), the programme to support Chile’s export sector (IDB), Madhya Pradesh Skills Development Project in India (ADB) and Laboratoria (IDB LAB).

- **Some programmes have also explored sports- and arts-based activities.** These are generally suited for providing confidence and developing skills like team-building, creative thinking and values such as dedication, leadership, and perseverance. Examples are Sociocultural and Productive Integration of At-risk Youth (Multilateral-Investment Fund, currently IDB LAB), and the A Ganar programme in LAC (Multilateral-Investment Fund, IDB and USAID). There is also a rapid adoption of “edutainment”.

- **Social entrepreneurship,** a form of entrepreneurship promotion intervention, has been used for youth living in under-served communities. The idea behind this concept is for youth to use innovative thinking to develop solutions in providing goods or services that would improve their surroundings, such as the UPLIFT (UNICEF) initiative.
Conclusions and proposed theory of change

School-to-work transition is a critical juncture in the lives of young people and has consequences for future employment, well-being and social peace. This transition involves a move from more known, predictable environments, and more clearly defined pathways, into new open, less controlled and less certain and predictable terrain. The first years on the labour market set the precedent for lifelong employment and earnings prospects, future happiness, mental health and subjective well-being, and for social connectedness and cohesion. In many developing countries, a large share of the population is young and seeking to enter the labour market. If this young cohort is met with an economy that offers opportunities for productive and decent work, they will be able to contribute to the development of their societies. Limited economic prospects on the other hand, are leading to high rates of youth migration to urban areas or other countries, with ensuing humanitarian risks.

Trends in labour market outcomes of youth in low- and middle-income countries point to weak trajectories from school to productive and decent work. A substantial number of young people in LMICs are not in education, employment or training, with three out of four young women falling into this category. Even when youth are employed, their quality of employment remains poor – they are more likely to be in informal employment with high rates of working poverty and poor conditions of service. On average, young women, young people with lower education and from poorer households, those in lower income and FCV contexts are disproportionately affected.

Successful transition from school-to-work in LMICs requires young people to succeed in a “double transition”. The first hurdle young people in LMICs face is acquiring the skills, competencies and credentials demanded by the labour market, which is then followed by the extra hurdle of having to position yourself in the labour market to access meaningful work opportunities that make effective use of their skills and improve their livelihoods. In particular, disadvantaged groups – based on gender, poverty, disability, location, educational attainment, migration and FCV context – find it disproportionately harder to make these transitions.

“We take on education we did not choose, that do not match the market demand, and for jobs we will not get because of Wasta [nepotism].”

UNICEF Youth Consultation in Jordan, April 2017
A binding constraint to successful transitions is the insufficient number of good jobs in the economy to absorb the rapidly growing labour force. The structure of the labour market in many LMICs is tilted towards high levels of informality and low productivity employment, while the rate of new job creation is not keeping pace with the growth in youth population. Constraints to setting up and growing businesses that will be innovative and productive hinder the creation of new jobs. The labour market structure is changing – there seems a trend toward premature de-industrialization and labour shifts from agriculture to service jobs. The projected increase will not necessarily be in higher value-added service sector activities but also in lower productivity service sector activities, characterized by informality and vulnerable employment.

Changes in the world of work can have serious implications for young people's transitions from school to work now and in the future. There are a number of key issues confronting policy-makers in addressing the challenges posed by digitalization, automation, artificial intelligence and other disruptive/emerging technologies, which need to be considered in the broader context of demographic, environmental and economic megatrends. These include in particular labour market disruption, distributional impacts, skills mismatch, the technological divide between developed and developing countries, growing diversity of forms of employment, the role of social protection systems and governance and norms.

POLICY IMPLICATIONS

Investments in developing strong skill foundations beginning in early childhood are critical to acquisition of higher-order transferable and technical job-specific skills later in life. Skills development is a cumulative process. Without access to quality ECD and basic education early in life, young people preparing to enter the labour market will lack critical foundations (in terms of both foundational and transferable skills) on which higher order transferable and job-specific skills can be built. The payoffs are highest when investments in building these skill foundations are initiated in early childhood and reinforced during childhood and adolescence when young people are in primary or secondary education. Skill deficits that emerge early tend to widen over time and it becomes more expensive and difficult to remediate these gaps the older one gets.

Ensure an equity focus in investments for helping young people to transition to work. Young women, those with lower education, young people from lower income and fragile contexts find themselves especially disadvantaged in accessing opportunities to develop marketable skills for work and in making the transition. There is a need for better targeted programmes and approaches that address the constraints for disadvantaged groups in participation and to ensure that they are not left behind.

Provide comprehensive package(s) of interventions tailored to the local context and the constraints that beneficiaries face. Skills development on its own is not sufficient if young people are not able to access jobs. Holistic interventions that provide wrap-around services – job search assistance, access to finance and markets, counseling and mentoring – in conjunction with skills development have shown to have the greatest impact.

Foster skills development systems that are demand-driven and market-relevant. System-level reforms will be required to enhance the market relevance, quality and efficiency of skills development
systems. This also requires strengthening multi-stakeholder collaborations and intensifying private sector engagement at different levels of the skills development systems (governance, skills anticipation, curriculum and standards, skills delivery, financing, etc.). Project-based approaches are fundamentally unsustainable; system-level reforms are particularly pertinent in the context of an uncertain future of work where there is need for continuous skill adjustments and upgrading.

Enable more productive self-employment/micro-entrepreneurship opportunities for young people. Depending on the local context, there might not be sufficient wage jobs available in the economy to absorb the workforce. In these contexts, holistic interventions that prepare young people to navigate, grow and thrive in productive self-employment/micro-entrepreneurship opportunities have shown some results. Building an entrepreneurial mindset is critical to shaping young people’s entrepreneurial intentions and for future success. Ideally, investments in building such a mindset should begin early. Combining non-cognitive training with traditional entrepreneurship skills should be considered. Having said that, youth entrepreneurship programming should recognize that approaches to growth-oriented vs. livelihoods-oriented entrepreneurship promotion are different from each other. They differ in terms of the job problem they are trying to solve, their objectives, the kinds of jobs they create, the kinds of beneficiaries they target, and how they respond to policy incentives.

Investments to stimulate creation of more and better jobs are critical. It is not possible to substantially improve youth employment outcomes if there are too few jobs available. This means strengthening growth entrepreneurship, firm/farm level investments to improve productivity and competitiveness, and an enabling business environment. At the same time, these investments can be designed and implemented using a gender- and youth-sensitive lens to ensure that the benefits can be more equitably accrued by women and youth.

Significant research gaps remain. There are significant gaps in our understanding of what works. A first research gap relates to our understanding of how the future of work would look in different country contexts and the implications for different beneficiary groups, as much of the research has been centred on developed country contexts. A second research gap pertains to our understanding of what works. A series of gaps in this area relate to the transmission mechanisms and optimal design features, what works to enable young entrepreneurs (and start-ups) to grow, impact of soft-skills training, long-term impacts, and cost-effectiveness. Although emerging in popularity, there is also an evidence gap around integrating youth entrepreneurship in value chains, supporting their market linkages, and social entrepreneurship. A third research gap relates to standardized and robust measurement of different types of skills (particularly transferable skills).

**PROPOSED THEORY OF CHANGE FOR UNICEF**

Drawing on the evidence and data synthesis in the report, a theory of change framework is proposed to help inform UNICEF’s thinking on school-to-work transition (Figure 8.1). The framework focuses on young people aged 15 and above; it is intended to be multi-sectoral and holistic and reflects both the demand and supply sides. In this context, demand-side refers to typically firm/farm level interventions that support the creation of new and better jobs in the economy and are not typically youth-specific. Meanwhile, supply-side refers to measures which are youth-focused and are intended to develop market-relevant skills for work in youth and help them connect to productive and decent work opportunities. UNICEF’s operations
and mandate suggest a far bigger potential role on the supply-side but informed by dynamics on the demand-side.

The theory of change (ToC) framework is built on five pillars with the direct objective of smoothing the transition of young people (aged 15–24) to work. In this framework, the outcome of interest is the transition to productive and decent work, as measured by NEET rates, job search times, and work outcomes (including quality of employment). The five pillars are:

(i) access to opportunities to develop skills for work;
(ii) development of market-relevant skills for work (including technical skills);
(iii) strengthening the quality and relevance of skills provision;
(iv) access to productive work opportunities; and
(v) eco-system strengthening.

The theory of change is accompanied by a comprehensive inventory of interventions and approaches (Figure 8.1), which are further elaborated in the Technical Note by the Education team. Given the holistic nature of the framework, a comprehensive inventory of interventions is provided based on mapping of established and emerging trends in the area of school-to-work transition (chapter 7). This does not mean that all these approaches ought to be implemented by UNICEF but is intended to introduce readers to the array of approaches and entry points that have been tried elsewhere. The Technical Note prepared by the Education team in UNICEF’s Programme Division further elaborates on these pillars and the associated interventions.

To reiterate, successful transition from school to work builds on strong skill foundations and investments made earlier. The success of school-to-work transition, as conceptualised below, depends on strong skill foundations and investments laid in early childhood and through the system of basic education. As noted before, skills are cumulative – if investments in building foundational and transferable skills are not made beginning in early years and during the sensitive developmental periods, developing the whole suite of skills demanded by the labour market from scratch in later years, when the brain is less plastic, is much more difficult. This means that a strong ECD and basic education system that is oriented towards quality (not just quantity) is an essential prerequisite for any operationalization of this proposed framework. From this perspective, this framework is not a substitute but builds on and extends the life course perspective on skills development.
Figure 8.1: Theory of change and intervention matrix

**Impact: Youth transition to productive work is smooth**
- Reduced NEET
- Reduced time to find employment
- Better quality of employment
- Improved retention in employment
- Increased earnings

**Supply-side**

**Outcome: Youth possess market-relevant skills needed to secure, retain and thrive in productive and decent work and adapt to the evolving economy**
- Promote equitable access to skills development opportunities
  - Financial assistance
  - Transport and childcare options
  - Mentoring, positive role models
  - Social mobilization and outreach
  - Information and awareness-raising
  - Service provider incentives and targets
  - Modular delivery, community-based delivery, online/distance learning
  - Flexible learning hours
  - Flexible (alternative) learning pathways
  - Certification, recognition, equivalency
  - SP linkages
  - Expanded supply (state, non-state)

**Develop market-relevant skills via multiple pathways and modalities**
- Integrated package of job-relevant skills: demand-driven technical and vocational skills combined with transferable (or life) skills, where apt, foundational skills bridging, digital, entrepreneurship skills
- Apprenticeships (certified)
- Career awareness and exploration - e.g. career academies, career clubs, job-shadowing, internships, information on career options and pathways
- Pathways: General upper secondary and post-secondary education, formal upper secondary and post-secondary TVET, non-formal education and TVET (including second-chance), on the job
- Modular: curricular, co-texta-curricular, school-based (in-school, after-school), work-based, online, community-based, self-study, distance, blended, full-time, part-time, modular

**Strengthen quality and market-relevance of skills provision**
- Profiling, screening, targeting
- Market demand scoping
- Curricula, pedagogy, TLM (demand-driven, competency-based)
- Competency-based assessment, RPL
- Teacher professional development (initial and continuous)
- M&E, MIS, tracer studies
- CoEs, twinning
- Employer/industry partnerships
- PPPs
- Performance based contracts
- School-based management
- Teacher management
- Quality assurance
- Use of technology

**Facilitate access to productive and decent work opportunities**
- Employment facilitation - includes career counseling, career planning, job fairs, job matching, job search and placement assistance
- Mentoring, support networks
- Employer incentives - e.g. wage subsidies, tax credits, vouchers
- Apprenticeships
- Transport subsidies
- Linkages - including integration in value chains/supply chains, impact sourcing, leveraging role of anchor firms
- Entrepreneurship and self-employment - e.g. access to finance, mentoring, advice, incubation, networks (also peer groups)
- Social entrepreneurship
- Costing and budgeting
- Safeguards - e.g. against hazardous work

**Policy, Planning and Advocacy**
- Education and skills policies and plans
- Youths policies
- Social protection and social insurance policies
- Skills / labour market intelligence
- Integrating youth voices and applying youth-employment sensitive lens in other policies and strategies - e.g. in labour and employment; sectoral (e.g. agri, tourism, industrial, etc.); industrial, area development; migration; financial inclusion; SME development policies and plans
- Costing and budgeting
- Safeguards - e.g. against hazardous work

**Governance and Co-ordination**
- NSDCs, SSCs (employer/industry led)
- NQFs, NVQFs (with employer/industry inputs), esp. articulation and pathways between TVET and general education, and between non-formal and formal TVET
- Skill standards (with employer/industry input)
- Competency-based certification, including RPL and apprenticeships, employer/industry participation in certification
- Registration, accreditation, licensing of service providers
- Multi-sector coordination and convergence, eco-system linkages
- Integrated information systems
- Oversight and accountability (state and non-state actors)
- Mutual recognition agreements, Portable certification

**Financing**
- SDFs, competitive funds
- Taxes, employer levies
- Private sector financing, cost-sharing - also includes CSR, inclusive business models, PPPs
- User fees and service charges - also includes price segmentation, zero-rated services
- Innovative financing - social impact bonds, crowdfunding
- Donors
- Financial assistance - both cost-subsidization (e.g. CCTs, stipends, vouchers, fee subsidies) and cost-recovery alternatives (e.g. loans, human capital contracts)
- Performance-based financing
- Stimulating private provider markets
- Cost-effective delivery models

**Demand-side**

**Outcome: Youth connect easily to productive and decent work aligned with their skills**

**Outcome: An enabling eco-system for youth transition to productive work is developed**

**Fundamentals: Macroeconomic stability, Rule of law, Regulatory environment, Peace and security, Infrastructure**

**Outcome: More and better jobs created in the labour market (outside UNICEF remit)**
- Stimulating (high) growth entrepreneurship
- Agglomeration – special economic zones (SEZs), industrial parks, cluster development
- Other firm- and farm-level policies and programmes to improve productivity growth and competitiveness (e.g. access to finance, technical assistance and advisory services, training, technology and R&D, value chain development, business linkages, export promotion activities, etc.)
- Policies to support development of employment-intensive sectors
Notes: Figure 8.1

1 Integrated means that the specific skills training is not intended to be offered stand-alone but as part of an integrated package of skills (e.g. vocational+transferable skills, or vocational+transferable+entrepreneurship skills, vocational+digital+transferable, or vocational+transferable+entrepreneurship+foundational skills). Stand-alone accelerated/catch-up/bridging education and soft-skills programmes, those offered at primary levels, and those that do not have an explicit objective of improving transition to work are outside the scope of this framework, and are the focus of other UNICEF frameworks and guidance (e.g. Global Skills Framework, Second Decade, Secondary Education, STEM, OOSC).

2 In addition to the skills in the Global Skills Framework, transferable skills also include work-oriented soft skills like resumé-writing, interviewing, searching for jobs.

3 These are demand-side approaches for productivity growth and structural transformation of the economy that will create new wage-earning jobs within the economy and are targeted at mostly older (non-youth) age groups. These areas are also outside UNICEF’s remit. For example, UNICEF cannot design and deliver demand-side programmes on value chain development, private sector development, or special economic zones, but UNICEF can link up with these programmes to ensure youth benefit from these emerging developments, e.g. integrating youth in value chains; building youth networks in chambers of commerce; encouraging anchor companies to incentivize their suppliers or vendors to hire youth e.g. through contract preference, assigning value to a number/percentage of young employees in bidding and procurements; partnering with SEZs to help young people get relevant skills and connect them to new jobs in SEZs, etc.

4 The word ‘teacher’ in this framework is used in a very broad sense – it includes classroom teachers, principals, trainers, master craftsmen, counselors, and mentors.

5 Abbreviations: CCT = conditional cash transfer, CoE = centre of excellence, CSR = corporate social responsibility, M&E = monitoring and evaluation, MIS = management information systems, NEET = not in education, employment or training, NQF = national qualifications framework, NSDC = National Skills Development Council, NVQF = national vocational qualifications framework, PPP = public-private partnership, R&D = research and development, RPL = recognition of prior learning, SDF = Skills Development Fund, SEZ = special economic zones, SP = social protection, SSC = Sector Skills Councils, TLM = teaching and learning materials, TVET = technical and vocational education and training.
Endnotes

CHAPTER 1


8 Ibid


11 Ibid

12 Ibid. Based on 194 LMICs and high-income countries.


17 Ibid


20 Hagan Jr., Joseph F., Judith S. Shaw, Paula M. Duncan, *Bright Futures: Guidelines for the Health Supervision of Infants, Children, and Adolescents*, American Academy of Pediatrics (AAP), Elk Grove Village, IL, 2008; Hardin, Amy P., Jesse Hackell, *Age Limit of Pediatrics, Policy Statement from the AAP*, Pediatrics, Vol. 140(3), Sep 2017. While the Bright Futures guidelines recommended coverage of pediatric care services until age 21, the new policy statement of the AAP in Hardin and Hackell (2017) goes further, recommending that age limits on pediatric care by health care providers should be discouraged; i.e. instead of terminating supportive services at age 21, they ought to be continued outside this age range based on patient needs and the ability of the health care provider.

21 Sawyer et al., *Age of Adolescence*.

23 Diamond, Adele, Executive Functions, Annual Review of Psychology, Vol. 64:1, pp. 135–68, 2013. According to Diamond (2013), executive functions (EFs) make possible mentally playing with ideas; taking the time to think before acting; meeting novel, unanticipated challenges; resisting temptations; and staying focused. Core EFs are inhibition (including self-control – resisting temptations and resisting acting impulsively, and interference control – selective attention and cognitive inhibition), working memory, and cognitive flexibility (including creatively thinking “outside the box,” seeing anything from different perspectives, and quickly and flexibly adapting to changed circumstances).

24 ILO, Global Employment Trends for Youth 2017: Paths to a Better Working Future, ILO, Geneva, 2017. Young persons aged 15 to 29 who had not transited to work and those held a first job but not a first transited job (in stable wage employment or satisfactory temporary or self-employment) are excluded from ILO’s calculations.

25 ibid. The age at which this cohort started the job search process is calculated as subtracting job search time from age at first employment. According to the ILO, the average time to find first employment amongst this cohort was 6.8 months in LICs, 12.4 months in LMCs, and 15.4 months in UMCs. Note that the ILO measures transitions from the date of exit from schooling. Direct transitions from school to first job are included with a duration of zero. When a first job overlaps with schooling, a duration of zero is used.

26 Manacorda, Marco, et al., Pathways from School to Work in the Developing World, IZA DP No. 9456, 2015. Data on duration of school-to-work transition in footnotes 25 and 26 are right-censored as individuals who have not transited to stable employment by the time of the survey might do so in the future. To circumvent this problem, Manacorda et al. (2015) fit a duration model with covariates (e.g. gender, urban/rural, age at leaving education, father’s education, etc.) to the data from ILO SWT surveys separately by country (23 countries). In order to account for the possibility that many inactive youth will never transit to employment, Manacorda et al. (2015) employ a split-population (also sometimes referred to as split-cure) model. except for Brazil for which estimates are derived from a standard proportional Weibull hazard model. The split-cure model provides a simultaneous estimate of the duration of the transition to employment among those who are expected to transit as well as the probability of never transiting. As recommended by Manacorda et al. (2015), median estimates for the duration of the transition are reported in the text.


CHAPTER 2


31 Mehran, Farhad, Can We Measure the School-to-work Transition of Young Persons with Labour Force Surveys? A Feasibility Study, Work4Youth Technical Brief No.8, ILO, Geneva, 2016. According to Mehran (2016), a stable job is a job with a written contract of duration of at least 12 months or an oral agreement likely to hold over the next 12 months. A satisfactory job may be satisfactory self-employment in which the young self-employed person does not want to change job or a satisfactory temporary job where the young employee has a written contract of duration less than 12 months and does not want to change job, or has an oral agreement, not certain to keep the job over next 12 months, but does not want to change job.


33 Laterite, Background Paper on Preparing Youth for Transition to Work.

34 ibid

35 Busso, Matias, et al., Learning Better: Public Policy for Skills Development, IADB, 2017. In Busso et al. (2017), individual skills to outperform others in tasks is not interpreted as skills for work if it is not related to productivity in the economic sense – i.e., the individual can produce more output, keeping constant all other factors and society values the additional output related to the individual’s higher capacity. For example, playing videogames is not a skill for work, except if these individuals are professionals in their field or if those abilities are valued by the market.


40 Levin, Victoria, Carola A. Gruen, Ximena V. Del Carpio, Measuring the Quality of Jobs in Turkey, World Bank, Washington, DC, 2017.

training, and labour market activities. This framework has been adapted into Figure 2.1, while making more explicit the life course perspective which is of interest to UNICEF.

42 Hillage, Jim, Emma Pollard, Employability: Developing a Framework for Policy Analysis, Labour Market Trends, Vol. 107, pp. 83–84, 1998; Quaid, Ronald W., Colin Lindsay, The Concept of Employability, Urban Studies, Vol. 42(2), pp. 197–219, 2005; ILC, Report of the Committee on Human Resources, Training and Development – Submission, Discussion and Adoption, 88th Session, Geneva, 30 May–15 June 2000. Hillage and Pollard (1998) define employability in terms of an individual’s ability to gain initial employment, maintain employment, move between roles within the same organization, obtain new employment if required and secure suitable and sufficiently fulfilling work. At the 88th session of the ILC, the Committee on Human Resources and Development adopted a broad definition of employability in terms of a person’s ability to secure and retain a job, to progress at work and to cope with change throughout their working life.

43 ibid. While the narrower supply-side (skills) focus is of valuable in its generation of a set or sets of skills, and supporting national and institutional policies and practices, a broader, interactive approach permits the additional consideration of vital demand, personal circumstances and other factors that influence the employability of people in a particular labour market, or at a particular time, and so are fundamental to those people gaining or changing employment.


45 Busso et al., Learning Better.

46 ibid. Intrinsic motivation is the desire to learn the skill for its own sake. Extrinsic motivation is the desire to learn the skill because it will allow the learner to achieve a certain objective (e.g. a good grade or certification needed for a job).

47 ibid. Intrinsic motivation is the desire to learn the skill for its own sake. Extrinsic motivation is the desire to learn the skill because it will allow the learner to achieve a certain objective (e.g. a good grade or certification needed for a job).


50 Busso et al., Learning Better. Certain tasks are learned naturally with experience because they generate automatic feedback. But in many other instances, feedback is not automatic, appropriate or correct. This general point also applies to learning-by-doing. Workers in firms may receive infrequent feedback or they may receive feedback in ways that are not conducive to improving performance.


CHAPTER 3

53 ibid
54 ibid
55 Global Employment Trends for Youth 2017
57 ILOSTAT. Youth comprise 24% of active labour force in SSA and less than 17% in the other regions mentioned. Calculations based on regional ILO modeled estimates for 2018 on number of unemployed and number in active labour force for two age groups (15–24 and 25+).
58 ILOSTAT; World Bank. Most recent year data between 2010–2018 was used. Only LMICs were retained in the sample. LMIC status determined based on World Bank country classification.
59 ibid
60 World Development Indicators (WDI). The values refer to 2018 estimates.
61 ILOSTAT, WDI. Youth unemployment rates for 2018 were obtained from ILOSTAT while the list of FCS was obtained from WDI.
63 Global Employment Trends for Youth 2017
64 ibid
GEM administers an adult population survey to track the entrepreneurial attitudes, activity and aspirations of individuals. It is administered to a minimum of 2,000 adults in each country. For the purpose of this analysis, we relied on global individual-level survey data from 2015 (downloadable from https://www.gemconsortium.org/data/sets?id=aps) and limited analysis to observations from 28 LMICs present in the data (namely, Argentina, Botswana, Brazil, Bulgaria, Burkina Faso, Cameroon, China, Colombia, Ecuador, Egypt, Guatemala, India, Indonesia, Iran, Kazakhstan, Lebanon, Macedonia, Malaysia, Mexico, Morocco, Peru, Philippines, Romania, Senegal, South Africa, Thailand, Tunisia, Vietnam). Total sample size for 28 LMICs is 74,648 adults (18+) while the sub-sample of 18–24-year-olds comprises 14,910 individual observations.

Improvement-driven opportunity entrepreneurs are defined as those opportunity-driven entrepreneurs who indicate that the opportunity is linked to either earning more money or being more independent, as opposed to maintaining income.

Global Employment Trends for Youth 2017. 2018 estimates were used.


ILOSTAT, WDI. Time-based underemployment rates for 15–24-year-olds for latest year between 2012–2018 was extracted from ILOSTAT while the list of LMICs was obtained from WDI. In all, indicator values for 77 LMICs was available for analysis. Time-based underemployment is defined by ILO as persons in employment, who satisfy the following three criteria: a) are willing to work additional hours; b) are available to work additional hours; and c) worked less than a threshold number of hours based on national circumstances.


OECD, Youth Aspirations and the Reality of Jobs in Developing Countries: Mind the Gap, OECD, Paris, 2017

OECD, Youth Aspirations and the Reality of Jobs in Developing Countries: Mind the Gap, OECD, Paris, 2017

OECD, Pathways from School to Work in the Developing World

Manacorda et al., Pathways from School to Work in the Developing World

OECD, Youth Aspirations and the Reality of Jobs in Developing Countries: Mind the Gap, OECD, Paris, 2017

Chapter 4
Informal jobs (or informal employment) = Employment in the informal sector + informal employment outside the informal sector (i.e. informal employment in the formal sector + informal employment in households).

Women and Men in the Informal Economy. The remaining 4 per cent are in household enterprises.


ibid


ILOSTAT, 2018 estimates.

Women and Men in the Informal Economy.


ILOSTAT


ILOSTAT; Women and Men in the Informal Economy.

ILOSTAT. 2018 estimates

ibid. Based on data for LMICs only. Meanwhile, share of wage employment in northern Africa and LAC is 63.9 and 63.1 per cent, respectively.


Women and Men in the Informal Economy. According to this source, the informal sector refers to unincorporated enterprises not constituted as separate legal entities independently of their owners that produce part or all of their goods for the market, are registered with national authorities, and maintain some official accounts. The opposite of this is referred to as the formal sector. Employees in the informal sector are considered to be in informal wage employment. Meanwhile informal wage employment in the formal sector refers to employees in the formal sector not covered by employer contributions to social security, or if the employees in the formal sector are not entitled to benefits such as paid annual leave and paid sick leave.

Women and Men in the Informal Economy.

ilostat

Women and Men in the Informal Economy.

i.e. they started their businesses because they had no better option for work.

GEM, GEM 2018/19 Global Report, GEM, 2019. Despite these lower averages, there are still economies with high necessity motives in the latter two groups. For example, 40% of entrepreneurs in Russia (a middle-income economy) report necessity motives.


UNICEF, Entrepreneurship: Concepts and Evidence, UNICEF, New York, NY, Feb 2019. Traditional measures to identify growth entrepreneurship are ex-post, but a growing body of research is testing approaches – e.g., psychometric screening, peer feedback, competitions with expert judges and/or face-to-face interviews, youth-friendly aptitude tests – to ex-ante identify entrepreneurial potential which could then be unlocked via targeted support. However, while it is easier to discriminate between growth and subsistence entrepreneurs and predict success among the latter, it is much harder to predict success among growth entrepreneurs using these methods.


ILOSTAT.


WDI.


ibid

ibid

ibid

The examples of Bolivia and Vietnam in Table A2 (1-2) show low interpersonal and analytical skill use in job tasks performed by agricultural workers.


Meanwhile, the standard deviation of routine/manual skills intensity across occupations is more similar across countries at different levels of development.

Lo Bello, Salvatore, Maria L.S. Puerta, Hernan J. Winkler, From Ghana to America: The Skill Content of Jobs and Economic Development, WPS No. 8758, Washington, DC, World Bank, 2019;

ILOSTAT


ILO, World Employment and Social Outlook 2017: Sustainable Enterprises and Jobs: Formal Enterprises and Decent Work, ILO, Geneva: ILO, 2017; Ayyagari, Meghana, Asli Demirgüç-Kunt, Vojislav Maksimovic, Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth, WPS No. 5631, World Bank, Washington, DC, 2011. The capacity of SMEs to generate job growth, relative to large firms, increases with income per capita. In developing economies, the rate of job creation among SMEs is similar to that for large firms, but in emerging and developed economies, employment growth is higher among SMEs than large firms. Ayyagari, Demirgüç-Kunt and Maksimovic (2014) found that SMEs grew faster than large firms across all income groups, including low-income economies. However, the size classification they used is based on the base year. As documented in Davis, Haltiwanger and Schuh (1998) and Haltiwanger, Jarmin and Miranda (2013), this firm size classification method is prone to suffer from the “regression to the mean” effect. In particular, the latter documentary that the use of base year category yields upward biased attribution of employment growth to the small category. The analysis conducted for this report uses the size category based on the average number of employees between the latest fiscal year and three years prior in order to circumvent the regression to the mean effect. Ayyagari et al (2014) argue that SMEs are the main contributors to net job growth in most developing economies. Of the 104 countries in their sample, 85 have positive net job growth rates. Among these, in the median country, firms employing 5 to 99 individuals account for about 75% of the total net jobs created.


Goswami, Arv G., Denis Medvedev, Ellen Olafsen, High-Growth Firms: Facts, Fiction, and Policy Options for Emerging Economies, World Bank, Washington, DC, 2019. These high growth firms tend to be young but not necessarily small and are found across all types of sectors and locations. The evidence on vertical spillovers is stronger. In the two countries where this book was able to follow HGF spillovers, being a buyer from or a supplier to an HGF improved a firm’s performance across a wide range of indicators in Hungary and also, in some cases, in Turkey.

The Global Entrepreneurship and Development Institute, Global Entrepreneurship Index Data 2018. Downloadable from https://thegedi.org/downloads/; WDI. Country income status is based on WDI meta-data.


Ibid, https://www.enterprisesurveys.org/Custom-Query. The statistic in the main text is based on share of large enterprises citing access to finance as a major constraint being lower than the than the share of either small- AND medium-sized enterprises reporting the same. Meanwhile, in 89 out of the 113 LMICs, the share of large enterprises citing access to finance as a major constraint was lower than the share of either small- OR medium-sized enterprises reporting the same.


CHAPTER 5

158 High Level Commission on Programmes, UN Strategy on the Future of Work, prepared by the High-Level Committee on Programmes under the leadership of ILO, 2019.

159 For example, while there are workers providing digital services through online platforms, like the examples of Malaysia and Bangladesh, the gig economy can also take the form of more traditional work. In South Africa, the Domestly platform links customers to cleaning services. In Nigeria, the Lynk platform offers food, cosmetics, and clothing produced by artisanal crafters. The occupations may be traditional, but the gig economy is expanding markets and communications. The conclusion from observing the diverse employment opportunities in the gig economy is that the skills demand must also be varied. This can be easily seen from observing the different virtual job platforms. While the Upwork global platform requires at least mid-level skills for jobs in technical writing, web and mobile design, digital marketing, legal and financial services, among others, platforms like Domestly or Amazon’s Mechanical Turk are capturing skills demand for less-qualified workers (in Mechanical Turk, demand is typically for very small, low-skill tasks). In Africa for example, suggestive evidence points at jobs in the gig economy as being more centred around a low-skilled workforce: https://scitechafrica.com/2018/12/11/africas-informal-economy-is-basically-a-gig-economy/

160 World Bank (2018), WDR


163 Hallward-Driemeier and Nayar, Trouble in the Making.

164 ibid


166 ibid


168 Manpower Group, 2018 Talent Shortage Survey: Brazil, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Costa Rica, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Colombia, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: India, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Mexico, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Peru, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Romania, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Turkey, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: Guatemala, Manpower Group, 2018; Manpower Group, 2018 Talent Shortage Survey: South Africa, Manpower Group, 2018. Country-level estimates on per cent of employers having difficulty filling jobs in 2018 were compiled from individual country level reports.

169 Manpower Group, Top Drivers of Talent Shortage, https://go.manpowergroup.com/talent-shortage-2018#leveragingtheresearch. Country level estimates were compiled by filtering and extracting individual country-level estimates from the referenced website.

170 Bassi, Vittorio, Aisha Nansamba, Information Frictions in the Labor Market: Evidence from a Field Experiment in Uganda, GLM-LIC Working Paper No. 29, 2017. Given stealing by employees was considered as the top constraint by the SME owners, we can presume that honesty is likely the most critical soft skill valued by employers.


173 ibid


ibid


Foundational skills include not just basic literacy but also basic numeracy. Data on youth literacy rates is obtained from WDI.


International Telecommunications Union, *Country ICT Data*, downloadable from xxx; GSMA, *GSMA Mobile Connectivity Index 2017*, downloadable from xxx

UIS.Stat, downloadable from: http://data.uis.unesco.org/

ibid

WDR 2018

As per UNESCO, ISCED 4 (or post-secondary non-tertiary education) refers to learning and educational activities building on secondary education preparing for both labour market entry as well as tertiary education, and typically target students who have completed upper secondary (ISCED 3). ISCED 5 refers to short-cycle tertiary education. Typically, they are practically based, occupation-specific and prepare students to enter the labour market. However, these programmes may also provide a pathway to other tertiary education programmes.


ibid


*Annual Status of Education Report 2017.*

ibid

[209] *ibid*
[211] Moursched, Farrell, Barton *Education to Employment*.
[212] *ibid*
[213] *ibid*
[215] World Bank, *SABER Workforce Development Ratings and Data*, http://saber.worldbank.org/index.cfm?index=8&pd=7&sub=1. The 24 LMICs for which data was synthesized and analyzed using the referenced database include Armenia, Bulgaria, Chad, China (Xinjiang), Egypt, Georgia, Grenada, Iraq, Ireland, Jordan, Korea Republic of, Macedonia FYR, Malaysia, Moldova, Morocco, Romania, Singapore, Solomon Islands, Sri Lanka, St. Lucia, Tanzania, Timor-Leste, Tunisia, Turkey, Uganda, Vietnam, West Bank and Gaza, Yemen.
[216] *Ibid*; Tan, Jee-Peng, et al., *Workforce Development in Emerging Economies: Comparative Perspectives on Institutions, Praxis, and Policies*, Directions in Development, World Bank, Washington, DC, 2016. The 21 sample LMICs are same as those mentioned in the endnote above, excluding Grenada, Iraq and Uganda. The narrative explanation in Jee-Peng et al. (2016) is used to substantiate and supplement (where appropriate) the arguments based on the data analysis on sub-dimension ratings.
[218] *ibid*
[219] *ibid*
[220] *ibid*
[221] *ibid*
[222] *ibid*
[226] *Ibid*
[227] *ibid*
[228] *Ibid*
[229] *Ibid*

CHAPTER 6

[234] *ibid*
[239] *ibid*
[241] Sykes at al., *Exploring the Linkages Between Youth Financial Inclusion and Job Creation*.

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CHAPTER 7


255 E.g. Chile Joven, Juventud y Empleo in the Dominican Republic, Jovenes en Accion in Colombia, and Proyecto Joven in Argentina.


258 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes; Card, Kluve and Weber, What Works.

259 Firms may be placing limited value on these experiences. There may be stigmatization of beneficiaries.


261 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes.

262 Eichhorst, Werner, Ulf Rinne, An Assessment of the Youth Employment Inventory and Implications for Germany’s Development Policy, IZA Research Report No. 67, 2015.


264 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes; Card, Kluve and Weber, What Works; Eichhorst and Rinne, Assessment of Youth Employment Inventory.


266 Eichhorst and Rinne, Assessment of Youth Employment Inventory.

267 Kluve et al., Interventions to Improve the Labour Market Outcomes of Youth.

268 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes.

269 A programme is considered to profile if it uses information to assign participants specific services among an array of services offered or to determine the intensity of services.

270 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes.

271 Ibid


273 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes.

274 Sector Framework Document.

275 Kluve et al. Do Youth Employment Programs Improve Labor Market Outcomes.
Unpacking School-to-Work Transition: Data and evidence synthesis

276 ibid
281 Based on information from operations catalogues at: worldbank.org, iadb.org, afdb.org; adb.org
283 In Kluve et al. (2016), almost half of the interventions reviewed combined skills training with one or more additional intervention types and about two-thirds of entrepreneurship interventions combine business skills training, business advisory services (including mentoring), and access to finance.
286 Gaming platforms that offer youth engaging, interactive, and social learning and skills-training products.

CHAPTER 8