

International Labour Organization

WORLD EMPLOYMENT SOCIAL OUTLOOK



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TRENDS FOR YOUTH 2016

International Labour Office • Geneva

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Executive summary

In a climate of renewed concerns about global economic growth, youth unemployment is on the rise after several years of improvement...

Global economic growth in 2016 is estimated to stand at 3.2 per cent, 0.4 percentage points lower than the figure predicted in late 2015. The downward revision is a result of recessions that were deeper than expected in some key emerging commodity-exporting countries, including Argentina, Brazil and the Russian Federation. In addition, growth in developing countries, at only 4.2 per cent in 2016, is at its lowest level since 2003. Despite anticipation of a slight improvement in global growth for 2017, global investment and hiring decisions remain subdued in the face of the uncertainty generated by a rapidly changing environment.

Consequently, the global youth unemployment rate is on the rise after a number of years of improvement, and is expected to reach 13.1 per cent in 2016 (from 12.9 in 2015). This is very close to its historic peak in 2013 (at 13.2 per cent) and where it is expected to remain in 2017. As a result, after falling by some 3 million between 2012 and 2015, the number of unemployed youth globally will rise by half a million in 2016 to reach 71 million and will remain at this level in 2017.

The deterioration is particularly marked in emerging countries where the unemployment rate is predicted to rise from 13.3 per cent in 2015 to 13.7 per cent in 2017 (a figure which corresponds to 53.5 million unemployed in 2017, compared to 52.9 million in 2015). The youth unemployment rate in developing countries is expected to remain relatively stable, at around 9.5 per cent in 2016, but in terms of absolute numbers it should increase by around 0.2 million in 2016 to reach 7.9 million unemployed youth in 2017, largely due to an expanding labour force. Finally, in developed countries, the unemployment rate among youth is anticipated to be the highest globally in 2016 (14.5 per cent or 9.8 million) and although the rate is expected to decline in 2017, the pace of improvement will slow (falling only to 14.3 per cent in 2017).

...and job quality, especially in emerging and developing countries, remains a major concern for youth...

Unemployment figures understate the true extent of youth labour market challenges since large numbers of young people are working, but do not earn enough to lift themselves out of poverty. In fact, roughly 156 million youth in emerging and developing countries live in extreme poverty (i.e. on less than US\$1.90 per capita per day) or in moderate poverty (i.e. on between US\$1.90 and US\$3.10) despite being in employment. Moreover, youth exhibit a higher incidence of working poverty than adults: 37.7 per cent of working youth are living in extreme or moderate poverty in 2016, compared to 26 per cent of working adults.

Meanwhile, in developed countries with available information, youth are more at risk of relative poverty (defined here as living on less than 60 per cent of median income) despite having a job. For example, the share of employed youth categorized as being at risk of poverty was 12.9 per cent in the EU-28 in 2014, compared to 9.6 per cent of working adults, i.e. aged 25–54. In addition to low pay, young people frequently work involuntarily in informal, part-time or temporary jobs. For example, in the EU-28, among youth employed in part-time or temporary positions in 2014, approximately 29 per cent and 37 per cent, respectively, are doing so involuntarily.

...leading to an increased willingness to migrate.

Facing the prospect of unemployment, working poverty and/or vulnerable forms of employment, young people tend to look abroad for better education and employment opportunities. In 2015, almost 51 million international migrants were aged between of 15 and 29, more than half of whom resided in developed economies. Additionally, in 2015, 20 per cent of the global youth population in this age range were willing to move permanently to another country. At the regional level, the willingness to migrate among youth is highest in sub-Saharan Africa and Latin America and the Caribbean, at 38 per cent in 2015, followed closely by Eastern Europe at 37 per cent. The percentage of young people willing to move remains high, at 35 per cent, in Northern Africa, as well as in the Arab States where this rate grew from 21 per cent in 2009 to 28 per cent in 2015. The lowest average inclinations to move are instead found in Southern Asia and Northern America where only 17 per cent and 15 per cent of youth respectively are willing to leave their country (data for Northern America refer to 2014). Within each region, and especially in sub-Saharan Africa and Northern, Southern and Western Europe, cross-country differences remain sizable, with youth in poorer countries typically showing the highest propensity to migrate.

Progress has been made in terms of educational attainment, but too many young people are neither employed, nor in education or training...

Global labour force participation rates of youth are following a long-term downward trend, from 53.6 per cent in 2000 to 45.8 per cent in 2016. The increasing opportunity to pursue upper secondary education, with a global gross enrolment rate of close to 75 per cent, is the main driver for falling participation rates among 15–19-year-olds and should hence be seen as a positive development that allows them to expand their skill sets and knowledge in anticipation of better jobs in the future. Nevertheless, a significant proportion of youth, especially in developing countries, is unable to enrol in education (e.g. due to the economic necessity to work and to supplement their household incomes), thereby running the risk of remaining trapped in poverty through lack of access to better jobs.

For young people between 20 and 29 years of age, the lack of viable employment opportunities is often the primary factor discouraging their participation in the labour market. As youth unemployment rates remain persistently high and transitions from education into work become increasingly difficult, a growing share of youth are neither employed, nor in education or training (NEET), a status which carries risks of skills deterioration, underemployment and discouragement. Survey evidence for some 28 countries around the globe shows that roughly 25 per cent of the youth population aged between 15 and 29 years old are categorized as NEET. Results also show how dramatically the NEET rate increases as a young person ages. This issue is particularly severe in developed countries, where, despite widespread access to tertiary education opportunities, NEET rates for youth above the age of 20 years old are consistently higher, and by a wide margin, than those for youth aged 15–19.

...while persistent gender gaps undermine social progress.

Across most labour market indicators, wide disparities exist between young males and females, underpinning and giving rise to wider disparities during the transition to adulthood. Such disparities can represent inequalities of opportunity and reflect deep-rooted socio-economic and cultural challenges that tend to disproportionately disadvantage women.

While some modest improvements have been made in a number of areas and regions, progress is slow. In 2016, for instance, the labour force participation rate for young men stands at 53.9 per cent, compared to 37.3 per cent for young women – representing a gap of 16.6 percentage points. This compares to a gap of around 17.8 percentage points in 2000 (62 per cent for young men versus 44.2 per cent for young women). The challenge is particularly acute in Southern Asia, the Arab States and Northern Africa, where female youth participation rates are, respectively, 32.9, 32.3 and 30.2 percentage points lower than those of male youth in 2016.

Young women are also confronted by higher unemployment rates globally than young men. In 2016, 13.7 per cent of young women in the labour force are unemployed – a full percentage point higher than their young male counterparts. The Arab States and Northern Africa exhibit the largest gaps in unemployment rates between males and females aged 15–24 – at 27.6 percentage points and 20.3 percentage points, respectively, in 2016 – despite the rising educational attainment of young women in these regions.

Female unemployment rates are not, however, uniformly higher than those of males. For instance, in 2016, in a number of regions (i.e. in Northern, Southern and Western Europe, Eastern Asia and Northern America) unemployment rates among female youth are lower than those of their male counterparts.

Looking forward, the achievement of the Sustainable Development Goals (SDGs) depends on addressing decent work deficits and labour market inequalities, especially for youth, as they are both proxies and consequences of wider inequalities.

Improving outcomes for youth is fundamental to building inclusive and sustainable societies.

The 2030 Agenda for Sustainable Development provides a unique opportunity to incorporate youth policies into comprehensive sustainable development strategies. After all, improving outcomes for youth through appropriate youth employment and social policies is fundamental to inclusive and sustainable societies and to the achievement of the SDGs. In this regard, the four strategic objectives of the ILO Declaration on Social Justice for a Fair Globalization, adopted in 2008 and evaluated in 2016, can help to develop and shape national strategies for youth employment, combat decent work deficits for youth, address poverty and inequality and equip youth with the means to achieve a more equitable and prosperous future.

Introduction

Young people's integration into the labour market, their education and skills development are all crucial to the realization of a prosperous, sustainable and equitable socio-economic environment worldwide. Youth – following the United Nations' definition as those aged between 15 and 24 years old – represent an important resource for society and account for over 18 per cent of the world's population as well as more than 15 per cent of the world's labour force. Accordingly, addressing labour market and social challenges faced by youth is imperative, not only for the well-being of our young people but also to ensure sustainable and inclusive growth and improved social cohesion worldwide.

The difficulties faced by youth were brought to the fore with the onset of the global financial crisis in 2008, which had a disproportionate impact on young people, especially across much of the developed world. The enduring effects of the crisis and the ever-weakening economic outlook continue to weigh on the prospects of young people. In 2016, youth are estimated to account for over 35 per cent of the unemployed population globally, while more than one-third of youth in the emerging and developing world live in extreme or moderate poverty despite having a job, underscoring the high incidence of poor-quality jobs among young employed people.

Understanding how the uncertain economic outlook is affecting young people's labour market and social outcomes is central to being able to shape institutional and policy responses, especially following the adoption of *Transforming Our World: The 2030 Agenda for Sustainable Development*, which includes 17 Sustainable Development Goals (SDGs). This report tries to shed light on the current and future challenges faced by young people throughout the world. In particular, section 1 looks at recent developments and the outlook for a number of labour market indicators, including youth unemployment, working poverty and employment quality. Section 2 discusses the barriers and inequalities in opportunities affecting youth labour market prospects, notably the gaps between young men and women. Finally, section 3 provides some concluding remarks.

Youth labour market conditions and outlook

The fragile economic outlook is putting further pressure on the already weak labour market prospects of youth around the globe. The global economy is expected to expand by 3.2 per cent this year, some 0.4 percentage points below the rate predicted in late 2015. The worsening outlook is largely attributable to deteriorating economic prospects in emerging and developing countries. In particular, a number of key commodity exporters among emerging countries, such as Argentina, Brazil and the Russian Federation, have experienced economic recessions that were deeper than anticipated. Growth in developing countries, at only 4.2 per cent in 2016 (the smallest expansion since 2003), is being hampered by continued volatility in commodity markets and weak demand from trade partners. The slowdown in emerging and developing countries has contributed to dampening the already timid signs of recovery across developed countries where growth is predicted to remain fragile at 1.5 per cent in 2016, more than half a percentage point below the projections of late 2015.

While global economic growth is expected to pick up in 2017 to 3.5 per cent, the rapidly changing external environment is adding uncertainty to financial markets and investment decisions, not least following the apparent inevitability that the United Kingdom will leave the European Union (EU) as a result of the national referendum held in June of this year. A successful rebalancing of China's economy, a swift recovery of key emerging countries and greater investments in developed countries will be crucial for the projected 2017 pick-up in growth to materialize (IMF, 2016).

Against this backdrop, the outlook for the global labour market remains troubled and likely to worsen as we enter the last months of 2016.¹ The prospects are particularly worrying for youth, who are expected to see their unemployment rate reach 13.1 per cent in 2016 (up from 12.9 per cent in 2015) after the moderate signs of improvement registered between 2013 and 2015 (ILO, 2015a). This translates into an estimated 71 million² unemployed youth worldwide in 2016 – half a million more than the previous year. In addition, it is estimated that some 156 million employed youth, or 37.7 per cent of working youth, in emerging and developing countries are living in extreme or moderate poverty in 2016 (i.e. living on less than US\$3.10 per day).³

Lowering youth unemployment by improving access to stable work opportunities remains the key objective in developed countries, where the youth unemployment rate is expected to remain at the highest level in global terms – at 14.5 per cent in 2016 and 14.3 per cent in 2017 – despite continuing its downward trend, which started in 2013 when youth unemployment was close to 17.5 per cent. The youth unemployment rate in emerging countries is set to rise from its 2015 level to reach 13.6 per cent in 2016 and 13.7 per cent in 2017 – translating into an additional 0.6 million unemployed youth compared to 2015. In developing countries, the rate is expected to increase modestly to 9.5 per cent in 2016 and then drop the following year to its 2015 level. However, given the growing cohort of young people entering the labour market, the number of unemployed youth in developing countries will increase by half a million between 2015 and 2017.

^{1.} See also ILO, 2016a.

^{2.} This figure is not comparable to the one published in *Global Employment Trends for Youth 2015* (ILO, 2015a) given that as with previous editions of *Trends* reports, global and regional unemployment levels and rates have been revised to take into account new information on unemployment rates as well as revisions to labour force and economic growth historical data and projections. However, the overall trends and changes in unemployment levels and rates remain consistent. For more information, see Appendix B of ILO, 2016a, p. 71.

^{3.} Extreme poverty is defined as living on less than US\$1.90 per capita per day and moderate poverty on between US\$1.90 and US\$3.10, measured in 2011 purchasing power parity (PPP) terms.

	Unemployme	Unemployment rate, 2007–17 (percentages)			Unemployed youth, 2015–17 (millions)		
	2007–14	2015	2016	2017	2015	2016	2017
World		12.9	13.1	13.1	70.5	71.0	71.0
Developed countries		15.0	14.5	14.3	10.2	9.8	9.6
Emerging countries		13.3	13.6	13.7	52.9	53.5	53.5
Developing countries	~~	9.4	9.5	9.4	7.4	7.7	7.9
	Working pove	Working poverty rate, 2007–17 (percentages)		Working poverty, 2015–17 (millions)			
	2007–14	2015	2016	2017	2015	2016	2017
Total emerging and developing		38.4	37.7	36.9	159.9	156.0	152.2
Emerging countries		31.2	30.2	29.3	107.3	102.7	98.4
Developing countries		73.3	72.2	71.0	52.6	53.3	53.8

Youth unemployment and working poverty trends and projections to 2017

Note: Throughout this report figures for 2016 and 2017 are projections. The working poverty rate is defined as the share of employed population in extreme or moderate poverty, i.e. with per capita income or consumption of less than US\$3.10 per day.

Source: ILO calculations based on October 2015 update of the model in Kapsos and Bourmpoula (2013) and ILO Research Department's Trends Econometric Models, April 2016.

The fact that youth unemployment rates in emerging and developing countries are lower than the corresponding rates in developed countries does not reflect more favourable labour market conditions in those regions; instead, it indicates that young people in these countries must often work, typically in poor-quality and low-paid jobs, in order to provide the basic necessities of life for themselves and their families (see table 1). This issue is particularly acute in developing countries, where almost three-quarters of all employed youth (close to 54 million in 2017) are living below the moderate poverty threshold of US\$3.10 per day. The number of young people in working poverty is even expected to increase in these countries, mainly as a result of the growing numbers of youth in working poverty in sub-Saharan Africa. The fundamental challenge in emerging and developing countries therefore remains to improve the quality of work available for the majority of young people who are already working but are underemployed or engaged in informal jobs.

Altogether, available estimates suggest that, in 2016, over 40 per cent of the world's active youth population is expected to be either unemployed or living in poverty despite being employed. Given this situation, the current outlook presents a number of challenges to achieving the SDGs (see box 1), highlighting the need to gain a clear picture of youth labour market conditions and prospects across a range of dimensions. The following subsections discuss the extent and nature of youth labour market challenges in different areas of the world and forecast their short-term evolution in light of the current economic outlook.

Box 1

Youth and the Sustainable Development Goals

Against the backdrop of the current employment outlook for the 15–24-year age group, achievement of the SDGs will rely on improving the labour market and social outcomes of youth. Accordingly, it is critical that the youth outlook improves in order to facilitate inclusive and sustainable growth. In particular, the trends outlined in this outlook will impact significantly on the goals that relate to poverty (SDG 1), gender equality (SDG 5) (see section 2), decent work and inclusive growth (SDG 8) and reducing inequality (SDG 10).

To begin with, a high incidence of youth working poverty has direct negative implications for poverty alleviation (SDG 1), which, in turn, suppresses growth potential, particularly for emerging and developing countries. In developed countries, high levels of unemployment and discouragement have long-term consequences for the earnings potential of youth, educational attainment, skills acquisition and future opportunities, all of which ultimately inhibits the development of human capital and innovation in an economy, thus jeopardizing the achievement of SDG 8.

These effects, in conjunction with slower growth, are likely to contribute to widening global inequality as wage growth is suppressed and disparities, particularly in tertiary education, continue to grow. Indeed, facilitating access to tertiary education (contained in SDG 4) for increasing numbers of youth will be a critical factor as the labour market undergoes structural change with the decline in middle-skilled jobs and growing demand for higher skills.

1.1 Regional trends in youth unemployment

Global youth unemployment is again on the rise, largely due to a significant economic slowdown in some major emerging countries

The global youth unemployment rate is expected to reach 13.1 per cent in 2016, an increase of 0.2 percentage points in comparison to 2015 values (and the number of unemployed youth is projected to rise by half a million to 71 million). The upturn in the youth unemployment rate represents a return to a level close to the 20-year peak of 13.2 per cent, which was observed in 2013 (table 2). However, a closer look at the global picture reveals considerable heterogeneity in youth unemployment trends across regions, in terms of both rates and levels. In particular, much of the increase in the 2016 global figures appears to be due to growing youth unemployment in Latin America and the Caribbean, Central and Western Asia and South-Eastern Asia and the Pacific. In most of the other regions, youth unemployment rates have remained relatively stable, with some evidence of a decline in rates in Europe and Northern America. Individual regions are considered separately below.

Africa

- Northern Africa: The incidence of unemployment among youth in the region is expected to remain elevated at 29.3 per cent in 2016, representing the second highest rate across all regions. The slight improvement in the regional figures during 2016 stems from improvements in Egypt and Tunisia, two countries that experienced recent declines but where youth unemployment rates still remain high. A further decline in the regional youth unemployment rate is expected in 2017, when it should reach 29.2 per cent.
- Sub-Saharan Africa: The youth unemployment rate in sub-Saharan Africa is expected to continue
 on its downward trajectory, which began in 2012, reaching 10.9 per cent in 2016 and decreasing
 slightly to 10.8 in the following year. However, the unemployment outlook for youth in major countries
 of the region remains quite mixed. In South Africa, more than half of all active youth are expected
 to remain unemployed in 2016, representing the highest youth unemployment rate in the region.

Americas

- Latin America and the Caribbean: The region is expected to show the largest increase in the youth unemployment rate, which is estimated to reach 16.8 per cent in 2016, up from 15.7 per cent in 2015 this compares with a low of 13.8 per cent achieved in 2008. It is expected to climb further to 17.1 per cent in 2017, implying an increase in the regional tally of unemployed young people of about 0.8 million in comparison to 2015 figures. The impact of the uncertain economic situation in Brazil is a major factor in the overall regional estimates for 2016, together with growing youth unemployment rates in Argentina (which are only partially offset by declining rates in Chile and Mexico).
- Northern America: The youth unemployment rate in the region is likely to decrease slightly to 11.5 per cent in 2016 from 11.8 per cent in 2015. This reduction is driven by declining youth unemployment in the United States. Conversely, in 2017, a slight rise in the regional unemployment rate to 11.7 per cent is anticipated.

Arab States

 The youth unemployment rate in the Arab States will remain the highest globally, at 30.6 per cent in 2016 (although a slight improvement to 29.7 per cent by 2017 is anticipated). Oil-exporting countries – notably Oman, Qatar and Saudi Arabia – are projected to see an increase in the youth unemployment rate in 2016, mainly as a result of a slowdown in growth and tighter fiscal policy (ILO, 2016a). Geopolitical tensions will continue to weigh on youth employment prospects in other countries of the region.

Asia

• **Eastern Asia**: The youth unemployment rate is expected to edge up slightly to 10.7 per cent in 2016, from 10.6 per cent in 2015, continuing the upward trend that has been evident since 2011. However, the number of unemployed youth in the region is expected to decrease to 11 million in 2017, down from 11.9 million in 2015 (due to a decline in the number of youth participating in the labour market and remaining in education instead).

Youth unemployment trends and projections to 2017, by region

Region	Unemployment rate, 2007–17 (percentages)			Unemployed youth, 2015–17 (millions)			
	2007–14	2015	2016	2017	2015	2016	2017
World	/	12.9	13.1	13.1	70.5	71.0	71.0
Africa							
Northern Africa		29.4	29.3	29.2	3.7	3.7	3.7
Sub-Saharan Africa	\sim	10.9	10.9	10.8	11.1	11.3	11.6
Americas							
Latin America and the Caribbean	\sim	15.7	16.8	17.1	8.5	9.2	9.3
Northern America		11.8	11.5	11.7	3.0	2.9	2.9
Arab States	\sim	30.6	30.6	29.7	2.6	2.7	2.6
Asia							
Eastern Asia	\sim	10.6	10.7	10.9	11.9	11.4	11.0
South-Eastern Asia and the Pacific		12.4	13.0	13.6	7.4	7.7	8.0
Southern Asia		10.9	10.9	10.9	13.7	13.8	13.9
Europe and Central Asia							
Central and Western Asia	\sim	16.6	17.1	17.5	2.1	2.1	2.2
Eastern Europe		17.1	16.6	16.2	2.0	1.8	1.7
Northern, Southern and Western Europe		20.6	19.7	18.9	4.5	4.3	4.1

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

- Southern Asia: The share of unemployed youth in the region should remain stable at 10.9 per cent in 2016 and 2017. Consequently, the total number of unemployed youth representing nearly 20 per cent of unemployed youth worldwide will remain just below 14 million. The youth unemployment rate in the region's largest economy, India, is expected to remain slightly below the regional average in 2016. Youth unemployment rates in Pakistan and Bangladesh are expected to decline, though remaining slightly above the average rate.
- South-Eastern Asia and the Pacific: The region is expected to show a steady increase in the youth unemployment rate over the coming years: rising from 12.4 per cent in 2015 to 13.0 per cent in 2016 and reaching 13.6 per cent in 2017. This means that, by 2017, more than half a million youth will have joined the pool of unemployed in the region. This increase is largely driven by adverse developments in Indonesia, where youth unemployment is currently above 20 per cent and expected to rise considerably over the next two years.

Europe and Central Asia

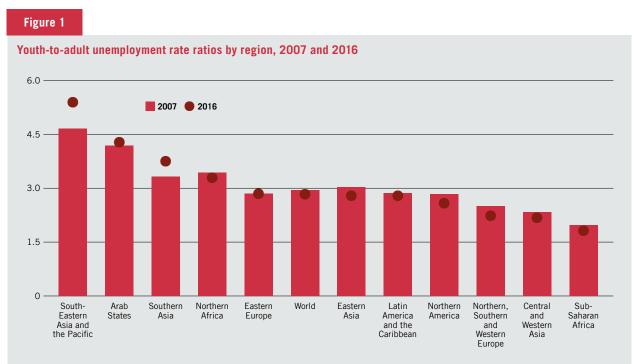
- Eastern Europe and Central and Western Asia: Youth unemployment is expected to decline in Eastern Europe despite the recent adverse economic developments in the Russian Federation. Youth unemployment in the region is projected to reach 16.6 per cent in 2016, half a percentage point lower than 2015 estimates, with a further decrease to 16.2 per cent expected in 2017. In Central and Western Asia, however, youth unemployment is expected to rise to 17.1 per cent in 2016, from 16.6 per cent in 2015.
- Northern, Southern and Western Europe: The incidence of unemployment among youth will remain a pressing issue in Northern, Southern and Western Europe, despite some signs of normalization beginning to emerge. Indeed, the youth unemployment rate is projected to decline from 19.7 per cent in 2016 to 18.9 per cent in 2017. A large proportion of this reduction is due to developments in certain high-unemployment countries, such as Italy, Portugal and Spain, which are expected to see sizeable reductions in their youth unemployment rates during 2017. Overall, the youth unemployment rate in the EU-28 is expected to reach 19.2 per cent in 2016 and 18.4 per cent in 2017, down from 20.3 per cent in 2015. This means that the number of unemployed youth in the region is expected to decline by half a million, from 4.7 million in 2015 to 4.2 million in 2017.

Young people are overrepresented among the unemployed, a trend which has strengthened in several regions

As of 2016, youth accounted for over 35 per cent of unemployed people globally, despite representing just over 15 per cent of the world's labour force and 21 per cent of the global working-age population. In regions such as Southern Asia, Northern Africa and the Arab States, youth comprise more than 40 per cent of the total unemployed population despite constituting only 17 per cent or less of the labour force within their respective regions. To a lesser degree, in Europe youth represent around 20 per cent of the total unemployed and around 10 per cent of the total labour force.

As such, these data show how much more likely it is for young, economically active people to find themselves in unemployment in comparison to the rest of the population. The ratio of the youth-to-adult unemployment rate globally is estimated at 2.9 in 2016. This remains comparable to the 2007 ratio, with considerable heterogeneity across regions. For instance, as of 2016, youth unemployment rates are five times higher than those of adults in South-Eastern Asia and the Pacific (figure 1). Meanwhile, in the Arab States, Southern Asia and Northern Africa, the ratio is between 3.5 and 4.3. The youth-to-adult unemployment ratio is comparatively lower in sub-Saharan Africa and Central and Western Asia as well as in Europe and Northern America.

In addition to the high youth unemployment rates, the growing duration of unemployment spells among young workers is of equal concern, especially in many of the developed countries. For instance, across the Organisation for Economic Co-operation and Development (OECD) countries, more than two out of every ten unemployed youth have been without work for a year or more in 2015 (in the EU-28 this share reached almost one-third of unemployed youth in 2015). While the incidence of long-term unemployment among youth is lower than among the prime-age unemployed, i.e. aged 25–54 (37.3 per cent in the OECD countries in 2015), extended periods of unemployment for young workers can lead to skills deterioration, hinder efforts to gain relevant labour market experience and result in growing discouragement, especially among those young workers seeking their first job. This can have long-lasting negative repercussions on young people's future employability and earning capacity as well as on aggregate productivity and economic growth.



Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

1. Youth labour market conditions and outlook

1.2 Working poverty and quality of employment

Extreme and moderate working poverty continues to have a disproportionate effect on youth in emerging and developing countries

The share of working youth living in poverty has steadily declined over the past couple of decades, though at a slightly slower pace than in the adult working population. For instance, the percentage of employed youth living in extreme or moderate poverty is estimated to have declined by almost 37 percentage points since 1991 – from 73.9 per cent to 37.7 per cent in 2016 – whereas the corresponding share among adults fell by over 40 percentage points since 1991 to reach 26 per cent in 2016.⁴

As a result, youth continue to exhibit consistently higher working poverty rates than their adult counterparts, and the gap between the two groups has widened since the early 1990s. In particular, an estimated 17.1 per cent of employed youth in emerging and developing countries in 2016 are living below the extreme poverty threshold – this compares to around 10.9 per cent of employed adults (figure 2). This translates into around 70 million young workers living in extreme poverty, which rises to 156 million if the threshold is raised to include those also living in moderate poverty. A closer look at the global figures reveals that youth working poverty rates and the extent to which they differ from those of adults vary considerably across regions, as detailed below.

Africa

- Northern Africa: Almost one in every four working youth in the region is estimated to be living in
 extreme or moderate poverty in 2016. This represents a considerable improvement over the 1991
 figure when almost half of all employed youth were living in poverty. However, since 2012 there have
 been virtually no signs of a reduction in this rate, although the gap between youth and adult working
 poverty rates remains relatively slight.
- **Sub-Saharan Africa:** The region continues to report the highest youth working poverty rates globally, at almost 70 per cent in 2016. Although this rate has declined by some 10 percentage points since 1991, it is important to bear in mind that the number of poor working youth has increased by as much as 80 per cent since that date. This is coupled with the fact that young workers in the region have one of the highest probabilities of living in poverty in comparison to adults.

Arab States

 Almost 39 per cent of the working youth in the region live on less than US\$3.10 per day compared to some 35 per cent of employed adults. The share of young workers in poverty has increased by over 3 percentage points since 2007, whereas the corresponding share among employed adults has remained rather stable.

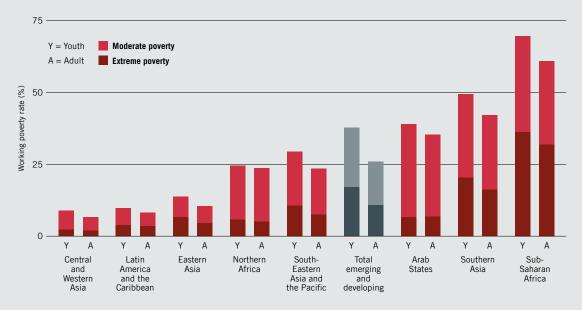
Asia

- **Eastern Asia**: Youth working poverty rates in the region continue to decline steadily, reaching an estimated 13.8 per cent in 2016, down from over 87 per cent in 1991 and 33 per cent in 2007. Although working youth are expected to continue to fare worse than their adult counterparts in 2016, past trends suggest that youth working poverty rates may soon approach the lower rates shown for employed adults.
- Southern Asia: The region will continue to record the second highest percentage of youth in working poverty, after sub-Saharan Africa, at close to 50 per cent in 2016. On a more positive note, and unlike the majority of regions, the pace of poverty reduction has been relatively sustained since 2007, when youth working poverty was close to 70 per cent, and it is expected to continue to decline over the next couple of years. However, considering that the working poverty rates of adults have fallen at a consistently faster pace than those of youth over the past couple of decades, it appears unlikely that the gap in the incidence of working poverty between the two age groups will close any time soon.

^{4.} It is important to bear in mind that poverty is multidimensional in nature and its implications for youth go beyond the concepts of income or consumption. Young people's experiences of poverty are not only driven by lack of employment or poor working conditions but they are also crucially influenced by structural issues, including access to health services, electricity, potable water and sanitation (ILO, 2016b; UNICEF and WHO, 2015).

Figure 2





Note: The chart displays the share of the employed youth (adult) population living in extreme and moderate poverty. The extreme working poverty rate is defined as the share of the employed population with per capita income or consumption of less than US\$1.90 per day. The moderate working poverty rate refers to the share of the employed population with per capita income or consumption of between US\$1.90 and US\$3.10 per day. Source: ILO calculations based on October 2015 update of the model in Kapsos and Bourmpoula (2013) and ILO Research Department's Trends Econometric Models, April 2016.

 South-Eastern Asia and the Pacific: Extreme and moderate working poverty will continue to affect almost one-third of working youth in 2016. Although this share remains considerable, it is noteworthy that youth working poverty rates in the region have dropped by some 44 percentage points since 1991 – the second largest reduction after Eastern Asia – and that half of this decline has taken place since 2007.

Central and Western Asia

 Youth working poverty rate in the region remains the lowest globally, at 8.9 per cent in 2016, with only 2.4 per cent of youth living on less than US\$1.90 per day. This represents a significant improvement with respect to 2000 and 2007, when more than 33 per cent and 19 per cent of youth, respectively, were in extreme or moderate poverty. Compared to adults, youth in the region remain slightly more likely to be in working poverty, a gap that, after widening considerably between 2000 and 2007, has steadily narrowed thereafter.

Latin America and the Caribbean

 As of 2016, the region shows the second lowest youth working poverty rate globally, at less than 10 per cent – very close to the rate for employed adults. In fact, since 1991, the region has been able to effectively tackle youth working poverty by more than halving its incidence and closing the gap between youth and adults. However, the pace of reduction in youth working poverty appears to have slowed down considerably: the share of working youth is estimated to have fallen by less than 1 percentage point between 2012 and 2016.

The higher incidence of working poverty among youth in comparison to adults in virtually all regions analysed is partly a reflection of the fact that youth are considerably more likely to work in the informal economy, especially in emerging and developing countries. For instance, in Brazil, South Africa and Turkey, 40 per cent of employed youth are informal workers (compared to 20 per cent of working adults). The proportion of informal workers among employed youth rises to over 60 per cent in Mexico and 80 per cent in India, two countries where the incidence of informality is some 20 percentage points lower among employed adults (OECD and ILO, 2014).

It is important to note that the higher incidence of working poverty and informality among youth is associated with the high proportions of youth who are engaged in domestic service and unpaid family work, especially in developing countries (ILO, 2013a). For instance, across 14 Latin American countries, the share of young contributing family workers in total youth employment exceeded the corresponding share of adult workers in all the countries analysed (ILO, 2015b).

In developed countries, in relative terms, poverty has a greater effect on youth than adults

In developed countries, there is growing evidence over the past couple of decades of a shift in the age distribution of poverty, with youth taking the place of the elderly as the group at greatest risk of living in poverty (ILO, 2016b; OECD, 2015). Similarly, employed youth show a greater tendency to be at risk of poverty – measured here as earning less than 60 per cent of the median income – than their adult counterparts. For instance, in 2014, the share of young workers in the EU-28 categorized as being at risk of poverty was 12.9 per cent, compared to 9.6 per cent of working adults, i.e. aged 25–54. The challenge is particularly acute in Greece, Spain and Romania where the at-risk-of-poverty for young workers exceeds 20 per cent (see figure 3, panel B). Even where the overall at-risk-of-poverty rates are relatively low, such as in Denmark and Sweden, young workers can be as much as three times more likely to be at risk of poverty than their adult counterparts.

Youth are over-represented in temporary and part-time employment, often on an involuntary basis

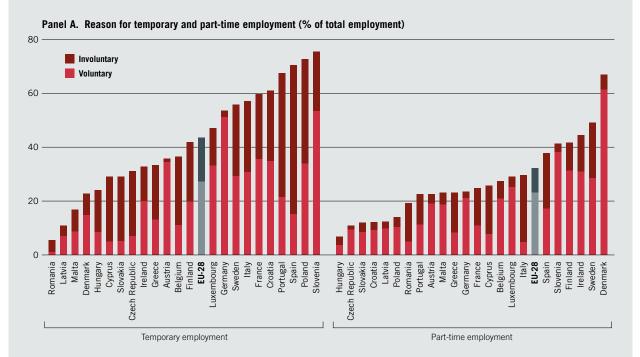
High rates of working poverty among youth in developed countries could be a reflection of the greater probability of youth being in temporary or part-time employment relationships in comparison to adults. These forms of employment are often associated with lower wages, limited access to training, slow career advancement and lower levels of social protection, all of which combine to undermine youth prospects in the labour market and their income potential (OECD and ILO, 2014; OECD, 2015). Across OECD countries, 25.0 per cent of youth were in temporary employment in 2015 in comparison to 9.5 per cent of prime-age employees (i.e. aged 25-54). In the same year, 30.0 per cent of young workers had a part-time employment contract compared to 11.9 per cent of prime-age workers.⁵

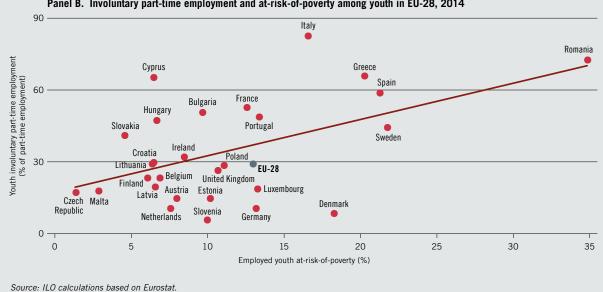
While there is some evidence that, in many countries, part-time and temporary employment can serve as a "stepping stone" to more stable and better-paid jobs, there is limited evidence that this type of job improves young people's chances of transitioning to full-time open-ended employment (OECD, 2015). Instead, in several developed countries, the large majority of young people take up part-time and temporary jobs because of the lack of full-time or permanent employment opportunities (figure 3, panel A). For example, as of 2015, more than one-third of youth in the EU-28 were in temporary employment because they could not find a permanent job (figure 3, panel A). Meanwhile, involuntary temporary employment accounts for around half, or more, of youth with temporary jobs in Portugal (67.9 per cent), Greece (60.5 per cent), Poland (53.3 per cent), Finland (52.2 per cent) and Italy (46.1 per cent). Moreover, in countries such as Cyprus, Romania, Slovakia and Spain, the incidence of involuntary temporary employment is close to 80 per cent or higher. At the same time, the share of involuntary part-time employment in total part-time employment was above 70 per cent in Italy and Romania and around 60 per cent in Greece and Spain. Such high incidence of involuntary part-time employment is closely linked to the fact that youth in this form of employment are more likely to live in poverty despite having a job (figure 3, panel B).

^{5.} OECD statistics on part-time and temporary employment.

Figure 3

Youth employment and working conditions





Panel B. Involuntary part-time employment and at-risk-of-poverty among youth in EU-28, 2014

1.3 Desire to migrate

The willingness of youth to migrate is driven in part by decent work deficits

An elevated unemployment rate, increased susceptibility to working poverty and a lack of good quality job opportunities are key factors shaping young people's decision to migrate abroad permanently. Of course, there is also a growing number of youth who migrate for, among others, humanitarian reasons, related to the presence of armed conflicts, natural disasters, geopolitical tensions and persecution of cultural minorities in their countries of origin. As of 2015, there were almost 28 million international migrants aged between 15 and 24 years old around the globe (UN DESA, 2015). This number rises to over 51 million if those young people in the age range 25–29 are included, accounting for over 21 per cent of the 243 million migrants worldwide. More than 52 per cent of youth between the ages of 15 and 29 who have left their country of origin reside in developed countries.

Over the next decade, this number could increase further, as a larger pool of youth from emerging and developing countries cross international borders in search of education and employment opportunities. Globally, the share of young people between 15 and 29 years old who are willing to move permanently to another country stood at 20 per cent in 2015, remaining relatively stable since 2009. Over this period, this share has nevertheless increased in most regions, with the sole exception of Southern Asia, where it fell by 5 percentage points and, to a lesser extent, Northern Africa and Northern America, where it decreased only slightly (figure 4, panel A). Since 2009, the largest increases (in the order of 7 percentage points) took place in Central and Western Asia, the Arab States and Eastern Europe, and also in Latin America and the Caribbean, which saw the biggest increase in youth propensity to migrate since 2007.

In terms of overall willingness, the highest inclination to move abroad, at 38 per cent, is found in sub-Saharan Africa and Latin America and the Caribbean, followed closely by Eastern Europe at 37 per cent. The lowest inclination to migrate exists in Northern America, where only 15 per cent of youth are willing to move abroad permanently.⁶

Within each of the regions analysed, cross-country differences in young people's intention to migrate remain considerable. For instance, among sub-Saharan African countries, the percentage of youth willing to migrate ranges from 77 per cent in Sierra Leone to 11 per cent in Madagascar. A similarly wide spectrum of variation can also be seen across countries in Latin America and the Caribbean as well as in Northern, Southern and Western Europe and Central and Western Asia.

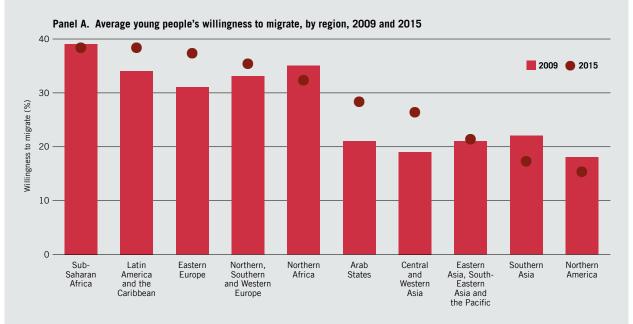
Large cross-country variations appear to be mainly driven by differences in economic development, with poorer countries within the region showing the highest propensity to migrate among youth. In particular, analysis conducted for this report⁷ shows that a 1 percentage point increase in extreme working poverty raises the willingness to migrate by 0.54 percentage points in emerging and developing countries, while a 1 percentage point increase in the youth unemployment rate is linked to a 0.23 percentage point rise in the willingness to move.

Across developed countries, youth unemployment rates play a greater role in explaining youth intention to migrate: a 1 percentage point increase in the youth unemployment rate is related to a half a percentage point increase in the willingness to move. These results are supplemented by Mayda (2010), who estimates that a 10 per cent increase in the level of GDP (used as a proxy of labour-related income) per worker in a destination country, would result in a 19 per cent increase in the overall immigration rate. This is particularly the case in countries with increasingly high numbers of highly educated young people but where a depressed labour market offers limited job prospects at home, such as in Eastern Europe and Latin America and the Caribbean.

^{6.} Regional figures report the average share of youth willing to migrate in each country of the region. As such, these cannot be interpreted as the propensity of youth to migrate out of the region, but rather as the average young people's tendency to move abroad across countries in the region.

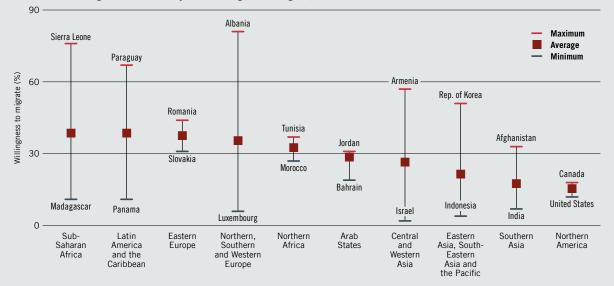
^{7.} Panel regression analysis, see Appendix C for details.

Figure 4



Willingness to migrate abroad permanently among youth aged 15-29, by region and country (percentage of respondents)

Panel B. Regional variation in youth's willingness to migrate, 2015



Note: The question asked was: "Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?". The graph includes the percentage of respondents that answered "Would like to move to another country". Regions are aggregated using the unweighted mean. Data for Northern America refer to 2014.

Source: ILO calculations based on Gallup Analytics, 2015.

2 Inequalities in opportunities

The preceding section presented a snapshot of the labour market conditions for youth worldwide, paying particular attention to the range of challenges faced by young people. However, the decision to participate in the labour market, with or without a job, is closely tied to socio-economic factors, including household economic circumstances and cultural norms – many of which reveal major inequalities in opportunities, often determined by gender. Accordingly, this section will examine some of the potential drivers of inequalities in labour market opportunities, which, in the case of youth, are closely associated with educational enrolment and school-to-work transitions. Importantly, it will also focus on gender gaps and how socio-cultural factors can potentially undermine social progress.

2.1 Drivers of inequalities in labour market opportunities

Participation rates of youth in the labour market worldwide – that is, the share of youth that are either employed or unemployed – continue to follow a long-term downward trend: from 53.3 per cent in 2000 to 45.8 per cent in 2016. Of course, the 2016 global average sits amid a wide spectrum of regional labour force participation rates, ranging from 30.4 per cent in the Arab States to 54.2 per cent in sub-Saharan Africa (table 3).

The reality is that young people's decision to participate (or not) in the labour market is a complex issue, which depends on a number of economic and social factors, each potentially shaping their decisions to pursue an educational pathway or participate in the labour market. In general, young people face a trade-off between, on the one hand, investing in their education, thereby increasing their likelihood of finding quality employment in the future and, on the other hand, entering the labour market immediately after the end of the compulsory education period, so contributing to the accumulation of house-hold income but possibly reducing their earnings potential and future chances of career advancement.

Of course, the extent to which youth are willing to remain in education instead of seeking employment is also closely linked to demand-side factors. For instance, expanding employment opportunities in high-skilled occupations may incentivize young people to remain in education. In contrast, during periods of economic depression, young people may prefer to continue in education rather than seek employment because they are discouraged due to weak employment demand. Similarly, higher wages being offered for unskilled jobs may discourage further participation in education.

For certain groups of the population, in particular for women, the decision to stay in education or enter the labour market is influenced by a number of social, cultural or political barriers, in addition to the purely economic factors. Moreover, factors that determine youth participation rates are often closely interrelated, making it difficult to isolate the impact of any one factor. For instance, socio-cultural factors that keep young women from participating in the labour market are also likely to correspond to reduced access to education for women. Nevertheless, the purpose of this subsection is to draw out a number of major trends that could explain the heterogeneity in participation rates among youth.

Table 3

Youth labour force participation rate by age group, 2007-16 (percentages)

Region	15-2	4	15–19	20–24	
	2007–15	2007–15 2016		2016	
World		45.8	30.1	61.3	
Developed countries	\sim	45.1	23.6	64.7	
Emerging countries		43.4	27.2	59.2	
Developing countries		63.3	54.7	73.4	
Africa					
Northern Africa		31.9	18.9	44.9	
Sub-Saharan Africa	\sim	54.2	45.2	64.8	
Americas					
Latin America and the Caribbean	~~~	49.6	33.3	66.3	
Northern America	\sim	52.7	31.4	71.5	
Arab States	\sim	30.4	17.3	44.1	
Asia					
Eastern Asia		52.5	29.4	70.6	
South-Eastern Asia and the Pacific		51.3	32.6	70.1	
Southern Asia		37.2	24.4	50.6	
Europe and Central Asia					
Central and Western Asia		37.2	24.4	50.6	
Eastern Europe	\sim	36.3	9.3	57.6	
Northern, Southern and Western Europe	\sim	44.4	24.3	63.1	

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Access to education is a primary underlying factor in the decision not to participate in the labour market for 15–19-year-olds

Many of the world's young people typically attend formal education between the ages of 15 and 19 years old. At upper secondary levels of education, for which the entrance age is usually around 15 or 16 years old, the global gross enrolment rate is close to 75 per cent. As such, relatively low (roughly one-third globally) and decreasing labour market participation rates for this age group can usually be interpreted as a positive economic and societal development, signalling that large shares of adolescents do not need to work to earn a living and may instead continue to develop their skills and educational attainment with the potential prospect of enhanced employment opportunities in the future.

However, regional variations in the labour force participation rate of youth in this age group remain considerable and reflect a range of challenges and opportunities. In regions where almost all young people aged between 15 and 19 years old go to school (see Appendix E), labour force participation rates are close to or below the world average, ranging from 9.3 per cent in Eastern Europe to 31.4 per cent in Northern America (table 3). Moreover, in regions with higher income per capita, such as Northern America, youth labour force participation encompasses a number of situations in which education and labour market participation overlap (e.g. summer jobs between school years or part-time jobs during evenings or at weekends), rather than permanent dropouts from the education system.

In regions at a lower stage of economic development, however, adolescents are often called upon to supplement household income, which in turn may force them to leave education and take up any employment opportunity, usually in poorly paid, low-quality jobs. For instance, participation rates of youth in the age cohort 15–19 years old remain particularly elevated, by international standards, in South-Eastern Asia and the Pacific (at 32.6 per cent in 2016) and sub-Saharan Africa (at 45.2 per cent) – two regions where gross enrolment rates in upper secondary education are relatively low, at around 68 per cent and 38 per cent, respectively, and working poverty rates are among the highest globally (see subsection 1.2).

The major challenge for young people aged 20–24 and 25–29 is the lack of decent opportunities

While for the 15–19-year-old age group, a low labour market participation rate combined with high enrolment rates is arguably a positive signal from a country's development perspective, interpreting the trade-off between participating in the labour market and continuing education is less straightforward for youth in the 20–24-year range. Youth in this age group are normally out of compulsory education, and often also out of vocational training, so they have to choose between participating in the labour market, pursuing tertiary education or following neither pathway. Their choice will typically depend on a number of personal circumstances, such as the family's income and educational background, as well as a range of labour market and education factors, including the expected demand for high-skilled workers and the quality and diversity of curricula offered in tertiary education.

At the global level, labour market participation rates for youth aged between 20 and 24 years are estimated to be just above 61 per cent in 2016 (table 3). The highest participation rates for this age group, estimated at above 70 per cent in 2016, can be found in Eastern Asia and South-Eastern Asia and the Pacific, two regions where the average regional enrolment rate in tertiary education remains relatively low at 39 per cent and 34 per cent, respectively. Similarly, high labour market participation rates can also be found in Latin America and the Caribbean (at 66.3 per cent in 2016) and sub-Saharan Africa (64.8 per cent), where gross enrolment rates are again relatively low, below 40 per cent and 10 per cent, respectively.

However, not every region with low enrolment in tertiary education has relatively high labour market participation of youth aged 20–24 years old. For instance, the participation rate of youth in this age cohort is estimated to be almost 45 per cent in Northern Africa and just above 50 per cent in Southern Asia – two regions where enrolment rates in tertiary education are among the lowest globally, at 31 per cent and 20 per cent, respectively. A similar picture can be seen in Eastern Asia and Central and Western Asia, where the share of active youth in the 20–24-year-old age range remains low by international standards, despite educational enrolment in tertiary education being below the world average. This suggests that young people's decision to participate in the labour market is not always determined by their educational choices but, crucially, it may depend on the availability of adequate employment opportunities.

Indeed, regardless of whether young people between the ages of 20 and 24 years old leave schooling or continue with tertiary education, the lack of viable employment opportunities is often a main factor discouraging their participation in the labour market. For instance, econometric analysis shows that the labour force participation rate in that age cohort is 0.3 percentage points lower when the youth unemployment rate is 1 percentage point higher.⁸ As youth unemployment rates remain persistently high and transitions from education into work become increasingly difficult, a growing share of youth fall into the category of neither employed, nor in education or training (NEET), with the attendant risks of skills deterioration, underemployment and discouragement. Survey evidence for some 28 countries around the globe shows that roughly one-quarter of the youth population aged between 15 and 29 years old are categorized as NEET (Elder, 2015). Results also show how dramatically the NEET rate increases as a young person ages. This issue is particularly severe in developed countries, where, despite widespread access to tertiary education opportunities, NEET rates for youth over the age of 20 are consistently higher, and by a wide margin, than for youth aged 15–19 (box 2). Unemployment seems to be the main driver of NEET rates, as, for example, in Europe only 6 per cent of youth in the NEET category are discouraged (Eurofound, 2016).

Access to high-quality education, the prevailing labour market conditions and the potential labour market outcome from human capital accumulation are all interlinked factors which ultimately shape young people's decision on whether or not to participate in the labour market. Yet, these factors on their own do not explain why youth participation rates vary so considerably across regions. Indeed, a number of long-standing cultural factors continue to play a crucial role in explaining why participation rates for certain groups in some regions remain extremely low. Persistent gender disparities in several regions, such as the Arab States and Northern Africa – discussed in more detail in the next section – are arguably one of the main drivers of cross-regional variation in youth labour force participation rates.

^{8.} This result is based on a cross-country regression of developed countries in 2016, using the labour force participation rate of 20-24-year-olds as the dependent variable and the youth unemployment rate plus intercept as the independent variable. The total number of observations = 65. R² = 0.13. Source: ILO Research Department's Trends Econometric Models, April 2016.

NEET rates: An indicator of young people's difficulties in securing employment

The NEET rate is defined as the share of the youth population that are neither employed, nor in education or training, and is a highly relevant indicator for summarizing a number of youth challenges, ranging from unemployment, early school leaving and labour market discouragement. As such, the NEET rate is expected to play a central role in benchmarking the discussion on SDG 8 to "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all".

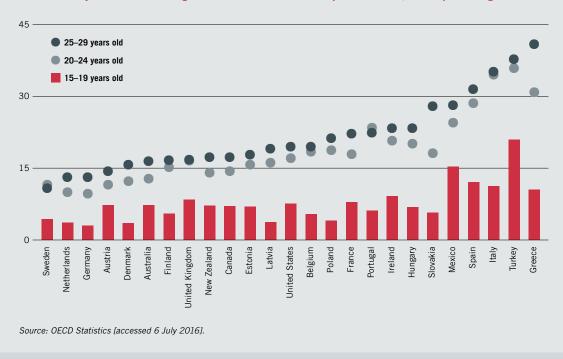
Given the multidimensionality of the indicator, NEET rates can help to shed light on the nature of the challenges facing youth from different age cohorts. Across the OECD countries, an average of 7 per cent of youth aged 15–19 years old are classified as NEET. This share is particularly high in some countries with relatively low per capita income and elevated dropout rates from education (figure 5). For instance, in Mexico and Turkey the NEET rate for the 15–19-year-old age group was 15 per cent and 21 per cent, respectively, in 2014. However, NEET rates for this group are also high (above 10 per cent) in Greece, Italy and Spain.

When the 20–24-year-old age group is considered, the average NEET rate rises considerably, to over 18 per cent. The highest percentage of NEETs within this age group is found in Turkey (36 per cent), followed by Italy (35 per cent) and Greece (31 per cent). This reflects the limited job opportunities available for low-skilled youth as well as youth dropping out of tertiary education and encountering barriers to the transition into employment.

The average NEET rate rises further, up to almost 21 per cent, when the 25–29-year-old age group is considered. Again, Southern European countries are those which report the highest NEET rates, peaking at 41 per cent in Greece. However, relatively high NEET rates for youth aged 25–29 are also found in the United Kingdom (17 per cent), United States (19.8 per cent), Poland (21.6 per cent) and France (22.5 per cent). The fact that NEET rates are particularly high for youth aged 25–29 years old suggests that inactivity affects not only low-skilled youth with low educational attainment but also young graduates attempting to enter the labour market.

Figure 5

NEET rates for youth in different age cohorts in selected developed countries, 2014 (percentages)



2.2 Persistent gender gaps undermine social progress

Across labour market indicators, such as unemployment rates, labour force participation and employment figures, wide disparities exist between young men and women. Such disparities can represent inequalities in opportunities and reflect deep-rooted socio-economic and cultural challenges that tend to disproportionately disadvantage women and non-binary gender types, thus hampering their engagement at all economic, social and political levels. Gender gaps in the labour market are just one component, but they represent an important proxy for gauging wider gender-based inequalities in society. In this regard, achievement of the SDGs will rely heavily on the ability to combat gender inequality and, in order to do this, addressing gender gaps in the labour market is an imperative step.

Reductions in gender disparities have been evident in a number of regions over the past decade. However, these gaps still characterize the labour market in much of the world, particularly in the Arab States, Northern Africa and Southern Asia, as indicated by persistently high female youth unemployment figures and low female labour force participation rates. Underlying factors are found to hinder young women in their attempts to find work and have a detrimental effect on their perceptions of future opportunities (Elder, 2015; Elder and Kring, 2016).⁹

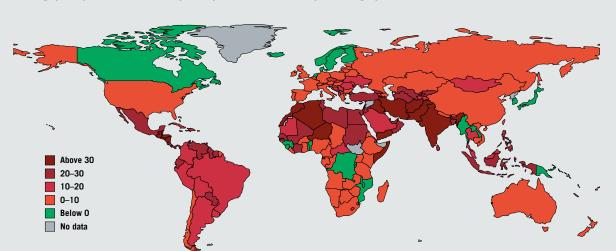
There are wide gender gaps in labour force participation in some regions

As mentioned in subsection 2.1, youth labour force participation has been following a downward trend in recent decades. However, the gap between young male and female rates has persisted. In 2016, for instance, the labour force participation rate for young men stood at 53.9 per cent, while that for young women was 37.3 per cent – thus representing a gap of 16.6 percentage points. This compares to a gap of around 17.8 percentage points in 2000 (62 per cent for young men versus 44.2 per cent for young women). The degree to which gender differences in labour force participation have narrowed in different regions reflects different degrees of progress in terms of changing attitudes and lowering barriers to female labour force participation as well as female enrolment in education (see also box 3).

The largest gaps between young male and female labour force participation rates in 2016 are in Southern Asia, the Arab States and Northern Africa, where female youth participation rates were, respectively, 32.9, 32.3 and 30.2 percentage points lower than those of young males (figure 6). As a result, these regions also display the lowest overall youth labour force participation rates globally. In Southern Asia, the Arab States and Northern Africa, female youth labour force participation was recorded at 20 per cent, 13.5 per cent and 16.6 per cent, respectively, compared to 53 per cent, 45.8 per cent and 46.8 per cent for their male counterparts.

The trends in these three regions have been largely attributed to socio-cultural factors (ILO, 2015b; Teignier and Cuberes, 2014; Gebel and Heyne, 2014). Indeed, for women, gaining a higher level of educational attainment does not necessarily improve their chances of making a successful transition into the labour market, particularly in the Arab States and Northern Africa. In these regions, rates of female tertiary enrolment exceed those of men, but this higher educational attainment has, at least to date, failed to translate into improved labour market attachment. Meanwhile in other regions, including Eastern Asia, South-Eastern Asia and the Pacific, Eastern Europe and Central and Western Asia, low household incomes and limited access to education have prompted higher rates of male youth labour force participation, which has only widened the gap between the participation rates of young men and women.

^{9.} Recent evidence suggests that there is not enough demand for skills, despite improvements in education in the region (Tzannatos, 2014). Unemployment in Northern Africa and the Arab States affects not only those in lower income households and those with lower educational levels but also groups that are considered to be highly educated.



Gender gaps in youth labour force participation rates, 2016 (percentage points, male-female)

Notes: The map shows the gap in the labour force participation rate between young males and young females for each country studied. Green indicates that female labour force participation rates are higher than male participation rates while orange and red indicate, to varying degrees, that they are lower (see figure legend).

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Box 3

Drivers of female youth inactivity: Results from school-to-work transition surveys

Recent ILO school-to-work transition surveys indicate that different regions have common reasons for female inactivity. For instance, in Latin America and the Caribbean and in Central and Western Asia, family responsibilities and pregnancy were cited as the most common reasons for inactivity among young women. In Southern Asia, inactivity was mainly attributed to lower levels of educational attainment and to the disproportionately large burden that women bear in the household in terms of family responsibilities and housework. Meanwhile, in Northern Africa and the Arab States, family responsibilities/housework and having no desire to work were the most commonly cited reasons for inactivity among young women. However, early marriage and motherhood remain the biggest factors limiting female access to education and the labour market in these regions.

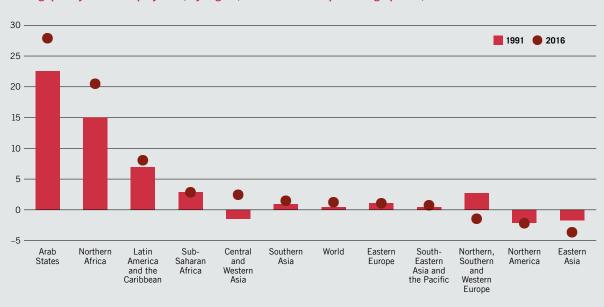
Source: Elder and Kring, 2016.

Young women are also more likely than males to be unemployed and to be in poor-quality jobs

Besides lower rates of female labour force participation, young women also tend to exhibit higher unemployment rates and lower employment rates. Gender trends tend to be common across labour market indicators owing to the same obstacles that hinder female labour force participation affecting other indicators of labour market integration. Moreover, even when employed, female youth are more likely to be in informal and vulnerable employment, largely due to the higher share of female workers in unpaid family work, which is a component of vulnerable employment. As a result, gender gaps across labour market indicators may not always be captured fully, thereby introducing the potential for over- or underestimation of measured gaps (UN Women, 2013).

In terms of unemployment rates, the Arab States and Northern Africa again exhibit the largest gaps between males and females – at 27.6 percentage points and 20.3 percentage points, respectively, in 2016 (figure 7). Despite improvements in access to education and the growing presence of educated women in the labour force, female youth are still far more likely than their male counterparts to be unemployed in these regions. To a lesser extent, Latin America and the Caribbean records the third largest gap, of 7.8 percentage points, with the unemployment rate of young males standing at 13.7 per cent and that of young females at 21.6 per cent.

Figure 7



Gender gaps in youth unemployment, by region, 1991 and 2016 (percentage points, male-female)

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Female youth unemployment rates are not, however, uniformly higher than those of their male counterparts. For instance, in 2016, in a number of regions (i.e. in Northern, Southern and Western Europe, Eastern Asia and Northern America) unemployment rates among female youth were lower than those of their male counterparts. However, in some instances, the situation reflects a worsening of male youth unemployment rates rather than improving female rates. In Eastern Asia, for instance, male youth unemployment has been persistently higher than female unemployment for the past two decades, while in Northern, Southern and Western Europe, male youth unemployment rates rose rapidly during the global economic crisis and have remained higher than the corresponding female rates since 2008. For European countries in particular, the recent crisis may have had a specifically gendered effect by hitting hardest those cyclically dependent sectors, such as industry and construction activities, that have traditionally been male-dominated (UN Women, 2013; Elder and Kring, 2016).

Employment rates by gender tend to reflect similar unemployment and labour force differentials owing to the characteristics of the labour market barriers facing young women. Table 4 shows that the largest differences in employment rates among youth range from 28.0 to 29.7 percentage points in the Arab States and Southern Asia, while the smallest ones found in Northern America and Eastern Asia at 0.8 and 0.4 percentage points, respectively. The gaps appear to be most pronounced among emerging countries, at 18 percentage points, while developed and developing countries have a gap of 3.5 and 7.3 percentage points, respectively.

As mentioned above, female youth are more likely to be in informal and vulnerable employment owing to their higher propensity to be engaged in unpaid family work. In terms of working poverty – another indicator or proxy for job quality – the difference is less marked. Nonetheless, on aggregate, there is a modest gender gap of around 1 percentage point in emerging and developing countries (see table 1E.5 of Appendix E). The global gap is driven by higher working poverty among young women in the Arab States, Southern Asia and Eastern Europe. The gap is particularly pronounced in the Arab States, where the level of female youth working poverty is 7.1 percentage points higher than the male youth rate of 37.9 per cent. In the remaining regions, however, working poverty rates for male youth are slightly higher than for female youth.

Table 4

Gender gaps in the employment rate (percentage points, male-female)						
Region	2007–14	2015	2016	2017		
World	~	14.8	14.9	15.0		
Developed countries	\sim	3.4	3.5	3.5		
Emerging countries		17.9	18.0	18.1		
Developing countries	\sim	7.2	7.3	7.4		
Africa						
Northern Africa	\sim	26.2	26.3	26.3		
Sub-Saharan Africa		5.6	5.7	5.8		
Americas						
Latin America and the Caribbean		19.6	19.7	19.6		
Northern America	\sim	0.7	0.8	0.8		
Arab States		28.2	28.0	28.2		
Asia						
Eastern Asia		0.3	0.4	0.4		
South-Eastern Asia and the Pacific	\sim	12.8	12.8	12.8		
Southern Asia		29.9	29.7	29.5		
Europe and Central Asia						
Central and Western Asia	\sim	18.6	18.4	18.2		
Eastern Europe	\sim	7.9	8.0	7.9		
Northern, Southern and Western Europe	\sim	2.8	3.1	3.3		

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Combating gender inequality in the labour market has the potential to yield substantial gains across the SDG spectrum

Gender gaps in the labour market are not only detrimental at an individual level, but they also represent an impediment to growth and an obstacle to reducing inequality and poverty, all of which fall within the purview of the SDGs. Therefore, it will be critical to ensure that the gender gaps in the youth labour market are addressed in order to achieve the SDGs.

In this regard, there is evidence that greater gender equality in employment can contribute to economic growth and poverty alleviation. Through both direct and indirect effects, gender gaps in employment are likely to have a significant impact on growth by reducing the average quality of human capital and aggregate productivity (ILO, 2016c). It is estimated that raising the female labour force participation rate to the country-specific male level would have the potential to reduce poverty and increase growth by lifting per capita income by up to 34 percentage points (Aguirre et al., 2012).¹⁰

Meanwhile, disparities in male and female participation rates may also cause distortions in the economy by hindering human capital accumulation. Reductions in technological adoption, innovation and entrepreneurship (Teignier and Cuberes, 2014) and even suppressed investment (Klasen, 1999) have each been associated with gender inequality. Furthermore, increasing productive opportunities for females, for example, may lead to women gaining greater intra-household bargaining power, which frequently translates into increased investment in their children's education – particularly in developing countries with low levels of female school enrolment.¹¹

^{10.} Projected increases in GDP are estimated as follows: United States: 5 per cent; Japan: 9 per cent; United Arab Emirates: 12 per cent; India: 27 per cent; Egypt: 34 per cent.

^{11.} Women are demonstrably more likely than men to invest their household income in the education of their children (Klasen, 1999).

3 Concluding remarks

This report has highlighted the fact that, following some improvements in youth labour market outcomes between 2012 and 2015, the recent slowdown in global economic activity is having an adverse effect on the prospects for youth. As the first part of the report has emphasized, the challenge concerns not just the quantity of jobs available, but also their quality.

Importantly, the overarching objective of employment, in terms of both quantity and quality, needs to be embedded within a more comprehensive framework, one that provides youth and their households with adequate and appropriate social protection, economic security and equal opportunities (ILO, 2013b and 2015a).

In this regard, the ILO's "Call for Action in youth employment", adopted by representatives of governments, employers' organizations and trade unions at the 101st International Labour Conference (ILC) in June 2012 (ILO, 2012), provided a set of guiding principles and policy measures to help shape national employment strategies for youth. Five distinct policy areas directly addressed precisely those youth labour market challenges, some of which that have been detailed in this report, including unemployment, poor working conditions, inequalities of opportunity and the potential repercussions.

Additionally, the ILO's Declaration on Social Justice for a Fair Globalization, adopted in 2008, was revisited and progress evaluated at the 105th ILC in June 2016 (ILO, 2008, 2016d and 2016e). The Declaration stipulates four strategic objectives, each of which highlights how social justice is synonymous with improved youth labour market and social outcomes. It underscores the fundamental role of youth in achieving inclusive and sustainable development, both as recipients and partners, and as actors of change.

Appendix A. Regional, country and income groupings

Africa

Northern Africa Algeria

Egypt Libya Morocco Sudan Tunisia Western Sahara

Sub-Saharan Africa

Angola Benin Botswana Burkina Faso Burundi Cameroon Cabo Verde Central African Republic Chad Comoros Congo Congo, Democratic Republic of the Côte d'Ivoire Djibouti Equatorial Guinea Eritrea Ethiopia Gabon The Gambia Ghana Guinea Guinea-Bissau Kenya Lesotho Liberia Madagascar Malawi Mali Mauritania Mauritius Mozambique Namibia Niger Nigeria Réunion Rwanda Sao Tome and Principe Senegal Seychelles Sierra Leone Somalia South Africa Swaziland Tanzania, United Republic of Togo Uganda Zambia Zimbabwe

Americas Latin America

and the Caribbean

Antigua and Barbuda Argentina Bahamas Barbados Belize Bolivia, Plurinational State of Brazil Chile Colombia Costa Rica Cuba Dominica Dominican Republic Ecuador El Salvador French Guiana Grenada Guadeloupe Guatemala Guyana Haiti Honduras Jamaica Martinique Mexico Netherlands Antilles Nicaragua Panama Paraguay Peru Puerto Rico Saint Kitts and Nevis Saint Lucia Saint Vincent and the Grenadines Suriname Trinidad and Tobago United States Virgin Islands Uruguay Venezuela, Bolivarian Republic of

Northern America

Canada United States

Arab States

Bahrain Iraq Jordan Kuwait Lebanon Oman Qatar Saudi Arabia Syrian Arab Republic United Arab Emirates West Bank and Gaza Strip Yemen

Asia and the Pacific

Eastern Asia China Hong Kong, China Japan Korea, Democratic People's Republic of Korea, Republic of Macau, China Mongolia Taiwan, China

South-Eastern Asia and the Pacific

Australia Brunei Darussalam Cambodia Cook Islands Fiji French Polynesia Guam Indonesia Kiribati Lao People's Democratic Republic Malavsia Marshall Islands Micronesia, Federated States of Myanmar Nauru New Caledonia New Zealand Palau Papua New Guinea Philippines Samoa Singapore Solomon Islands Thailand Timor-Leste Tonga Tuvalu Vanuatu Viet Nam

Southern Asia

Afghanistan Bangladesh Bhutan India Iran, Islamic Republic of Maldives Nepal Pakistan Sri Lanka

Europe and Central Asia

Northern, Southern and Western Europe

Albania Andorra Austria Belgium Bosnia and Herzegovina Channel Islands Croatia Denmark Estonia Finland France Germany Greece Iceland Ireland Italy Latvia Liechtenstein Lithuania Luxembourg Macedonia, the former Yugoslav Republic of Malta Monaco Montenegro Netherlands Norway Portugal San Marino Serbia Slovenia Spain Sweden Switzerland United Kingdom

Eastern Europe

Belarus Bulgaria Czech Republic Hungary Moldova, Republic of Poland Romania Russian Federation Slovakia Ukraine

Central and Western Asia

Armenia Azerbaijan Cyprus Georgia Israel Kazakhstan Kyrgyzstan Tajikistan Turkey Turkmenistan Uzbekistan

Developed countries (high income)

Andorra Antigua and Barbuda Argentina Australia Austria Bahamas Bahrain Barbados Belgium Brunei Darussalam Canada Channel Islands Chile Croatia Cyprus Czech Republic Denmark Estonia Finland France French Guiana French Polynesia Germany Greece Guam Hong Kong, China Hungary Iceland Ireland Israel Italy Japan Korea, Republic of Kuwait Latvia Liechtenstein Lithuania Luxembourg Macau, China Malta Martinique Monaco Netherlands Netherlands Antilles New Caledonia New Zealand Norway Oman Poland Portugal Puerto Rico Qatar Réunion Saint Kitts and Nevis San Marino Saudi Arabia Seychelles Singapore Slovakia Slovenia Spain Sweden

Switzerland Taiwan, China Trinidad and Tobago United Arab Emirates United Kingdom United States United States Virgin Islands Uruguay

Emerging countries (middle income)

Albania Algeria Angola Armenia Azerbaijan Bangladesh Belarus Belize Bhutan Bolivia, Plurinational State of Bosnia and Herzegovina Botswana Brazil Bulgaria Cambodia Cameroon Cabo Verde China Colombia Congo Cook Islands Costa Rica Cuba Côte d'Ivoire Djibouti Dominica Dominican Republic Ecuador Egypt El Salvador Equatorial Guinea Fiji Gabon Georgia Ghana Grenada Guadeloupe Guatemala Guyana Honduras India Indonesia Iran, Islamic Republic of Iraq Jamaica Jordan Kazakhstan Kenva Kiribati Kvrgvzstan Lao People's Democratic Republic

Lebanon Lesotho Libya Macedonia, the former Yugoslav Republic of Malaysia Maldives Marshall Islands Mauritania Mauritius Mexico Micronesia, Federated States of Moldova, Republic of Mongolia Montenegro Morocco Myanmar Namibia Nauru Nicaragua Nigeria Pakistan Palau Panama Papua New Guinea Paraguay Peru Philippines Romania Russian Federation Saint Lucia Saint Vincent and the Grenadines Samoa Sao Tome and Principe Serbia Solomon Islands South Africa Sri Lanka Sudan Suriname Swaziland Syrian Arab Republic Taiikistan Thailand Timor-Leste Tonga Tunisia Turkey Turkmenistan Tuvalu Ukraine Uzbekistan Vanuatu Venezuela, Bolivarian Republic of Viet Nam West Bank and Gaza Strip Western Sahara Yemen Zambia

Developing countries (low income)

Afghanistan Benin Burkina Faso Burundi Central African Republic Chad Comoros Congo, Democratic Republic of the Eritrea Ethiopia The Gambia Guinea Guinea-Bissau Haiti Korea, Democratic People's Republic of Liberia Madagascar Malawi Mali Mozambique Nepal Niger Rwanda Senegal Sierra Leone Somalia Tanzania, United Republic of Togo Uganda Zimbabwe

Appendix B. Labour market estimates and projections

The source of all global and regional labour market estimates in this *World Employment and Social Outlook* report is the ILO's Trends Econometric Models (TEM), April 2016. The ILO Research Department has designed and actively maintains econometric models, which are used to produce estimates of labour market indicators in the countries and years for which country-reported data are unavailable. These allow the ILO to produce and analyse global and regional estimates of key labour market indicators and related trends.

The TEM is used to produce estimates and projections – disaggregated by age and sex as appropriate – of unemployment, employment and status in employment. The output of the model is a complete matrix of data for 192 countries. The country-level data can then be aggregated to produce regional and global estimates of labour market indicators, such as the unemployment rate and the employment-to-population ratio.

Prior to running the TEM, labour market information specialists in the Research Department, in cooperation with ILOSTAT and specialists in ILO field offices, evaluate existing country-reported data and select only those observations deemed sufficiently comparable across countries using criteria including: (1) type of data source; (2) geographic coverage; and (3) age group coverage.

- With regard to the first criterion, in order for data to be included in the model, they must be derived from either a labour force survey or a population census. National labour force surveys are generally similar across countries, and the data derived from these surveys are more readily comparable than data obtained from other sources. A strict preference is therefore given to labour force survey-based data in the selection process. However, many developing countries which lack the resources to carry out a labour force survey do report labour market information based on population censuses. Consequently, due to the need to balance the competing goals of data comparability and data coverage, some population census-based data are included in the model.
- The second criterion is that only nationally representative (i.e. not prohibitively geographically limited) labour market indicators are included. Observations which correspond to only urban or only rural areas are not included, as large differences typically exist between rural and urban labour markets, and using only rural or urban data would not be consistent with benchmark data such as GDP.
- The third criterion is that the age groups covered by the observed data must be sufficiently comparable across countries. Countries report labour market information for a variety of age groups and the age group selected can have an influence on the observed value of a given labour market indicator.

Apart from country-reported labour market information, the TEM uses the following benchmark files:

- United Nations World Population Prospects, 2015 revision for population estimates and projections;
- ILO Economically Active Population, Estimates and Projections (EAPEP) for labour force estimates and projections;
- IMF/World Bank data on GDP (PPP, per capita GDP and GDP growth rates) from the World Development Indicators and the World Economic Outlook April 2016 database;
- World Bank poverty estimates from the PovcalNet database.

Estimates of labour market indicators

The TEM produces estimates of unemployment rates to fill in missing values in the countries and years for which country-reported data are unavailable. Multivariate regressions are run separately for different regions in the world in which unemployment rates, broken down by age and sex (youth male, youth female, adult male, adult female), are regressed on GDP growth rates. Weights are used in the regressions to correct for biases that may result from the fact that countries which report unemployment rates. tend to differ (in statistically important respects) from countries that do not report unemployment rates.

^{1.} For instance, if simple averages of unemployment rates in reporting countries in a given region were used to estimate the unemployment rate in that region, and the countries that do not report unemployment rates should happen to differ from reporting countries with respect to unemployment rates, without such a correction mechanism the resulting estimated regional unemployment rate would be biased. The "weighted least squares" approach adopted in the TEM corrects for this potential problem.

For 2016, a preliminary estimate is produced, using quarterly and monthly information available up to the time of production of this *World Employment and Social Outlook* report (April 2016). Additional econometric models are used to produce global and regional estimates of working poverty and employment by economic class (Kapsos and Bourmpoula, 2013).

Projections of labour market indicators

Unemployment rate projections are obtained using the historical relationship between unemployment rates and GDP growth during the worst crisis/downturn period for each country between 1991 and 2005, and during the corresponding recovery period.² This was done through the inclusion of interaction terms of crisis and recovery dummy variables with GDP growth in fixed effects panel regressions.³ Specifically, the logistically transformed unemployment rate was regressed on a set of covariates, including the lagged unemployment rate, the GDP growth rate, the lagged GDP growth rate and a set of covariates consisting of the interaction of the crisis dummy and the interaction of the recovery-year dummy with each of the other variables.

Separate panel regressions were run across three different groupings of countries, based on:

- (1) geographic proximity and economic/institutional similarities;
- (2) income levels;4
- (3) level of export dependence (measured as exports as a percentage of GDP).⁵

The rationale behind these groupings is as follows: Countries within the same geographic area or with similar economic/institutional characteristics are likely to be similarly affected by the crisis and have similar mechanisms to attenuate the impact of the crisis on their labour markets. Furthermore, because countries within given geographic areas often have strong World Trade Organization (WTO) and financial linkages, the crisis is likely to spill over from one country to its neighbour (e.g. Canada's economy and labour market developments are intricately linked to developments in the United States). Countries with similar income levels are also likely to have similar labour market institutions (e.g. social protection measures) and similar capacities to implement fiscal stimulus and other policies to counter the crisis impact. Finally, as the decline in exports was the primary crisis transmission channel from developed to developing countries, countries were grouped according to their level of exposure to this channel, as measured by their exports as a percentage of GDP. The impact of the crisis on labour markets through the export channel also depends on the type of exports (the affected sectors of the economy) involved, the share of domestic value added in exports and the relative importance of domestic consumption (for instance, countries such as India and Indonesia, with a large domestic market, were less vulnerable than countries such as Singapore and Thailand). These characteristics are controlled for by using fixed effects in the regressions.

In addition to the panel regressions, country-level regressions were run for countries with sufficient data. The ordinary least squares country-level regressions included the same variables as the panel regressions.

^{2.} The crisis period comprises the span between the year in which a country experienced the largest drop in GDP growth and the "turning point year" when growth reached its lowest level following the crisis before starting to climb back to its pre-crisis level. The recovery period comprises the years between the "turning point year" and the year when growth has returned to its pre-crisis level.

^{3.} In order to project unemployment during the current recovery period, the crisis-year and recovery-year dummies were adjusted, based on the following definition: a country was considered to be "currently in crisis" if the drop in GDP growth after 2007 was larger than 75 per cent of the absolute value of the standard deviation of GDP growth over the 1991–2008 period and/or larger than 3 percentage points.

^{4.} The income groups correspond to the World Bank income group classification of four income categories, based on countries' 2008 gross national income (GNI) per capita (calculated using the Atlas method): low-income countries, US\$975 or less; lower middle-income countries, US\$976–US\$3,855; upper middle-income countries, US\$3,856–US\$11,905; and high-income countries, US\$11,906 or more.

^{5.} The export dependence-based groups are: highest exports (exports \geq 70 per cent of GDP); high exports (exports <70 per cent but \geq 50 per cent of GDP); medium exports (exports <50 per cent but \geq 20 per cent of GDP); and low exports (exports <20 per cent of GDP).

To take into account the uncertainty surrounding GDP prospects, as well as the complexity of capturing the relationship between GDP and unemployment rates for all the countries, a variety of ten (similar) multilevel mixed-effects linear regressions (varying-intercept and varying-coefficient models) are utilized. The main component that changes across these ten versions is the lag structure of the independent variables. The potential superiority of these models lies in the fact that not only is the panel structure fully exploited (e.g. increased degrees of freedom), but it is also possible to estimate the coefficients specifically for each unit (country), taking into account unobserved heterogeneity at the cluster level and correcting for the random effects approach caveat that the independent variables are not correlated with the random effects term.

Overall, the final projection was generated as a simple average of the estimates obtained from the three group panel regressions and also, for countries with sufficient data, the country-level regressions. For a selection of countries (seven out of 192), an average of another set of forecast combinations was made according to judgemental examination in order to represent more realistically the recent trends observed in each country's economic forecast.

Youth labour market indicators

Labour market indicators for the sub-populations youth-female, youth-male, adult-female and adultmale have been estimated using the same regression techniques as the aggregate indicators. However, the estimates are adjusted using the shares in the population implied by the labour force survey estimates so that the implied sum of the sub-populations equals the aggregate rate. This means that country data on sub-populations could differ from reported rates in other sources when the underlying shares of the sub-population in the labour force differ from the ILO's estimates.

Short-term projection model

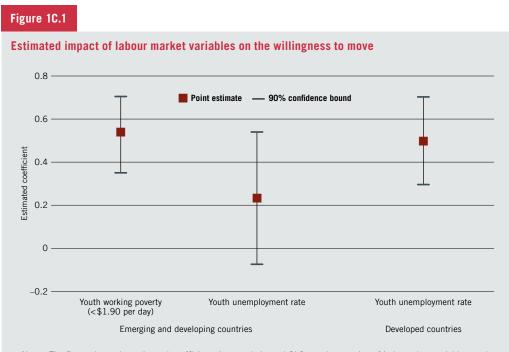
For 41 countries, the preliminary unemployment estimate for 2016 and the projection for 2017 are based on results from a country-specific short-term projection model. The ILO maintains a database on monthly and quarterly unemployment flows that contains information on inflow and outflow rates of unemployment, estimated on the basis of unemployment by duration, following the methodologies proposed by Shimer (2012) and Elsby, Hobijn and Sahin (2013). A multitude of models are specified that either project the unemployment rate directly or determine both inflow and outflow rates, using ARIMA, VARX and combined forecast techniques. The short-term projection model relies on several explanatory variables, including hiring uncertainty (Ernst and Viegelahn, 2014), policy uncertainty (Baker, Bloom and Davis, 2013), macroeconomic forecasts by Oxford Economics and the Manpower Employment Survey Outlook. All estimated models are evaluated on an eight-quarter ahead rolling pseudo out-of-sample forecasting evaluation starting in Q1 2009, among which five models are selected using a weighting of the mean and maximum forecast error. The top five model forecasts are then averaged.

Appendix C. Youth unemployment and willingness to move

Working poverty, youth unemployment and willingness to move

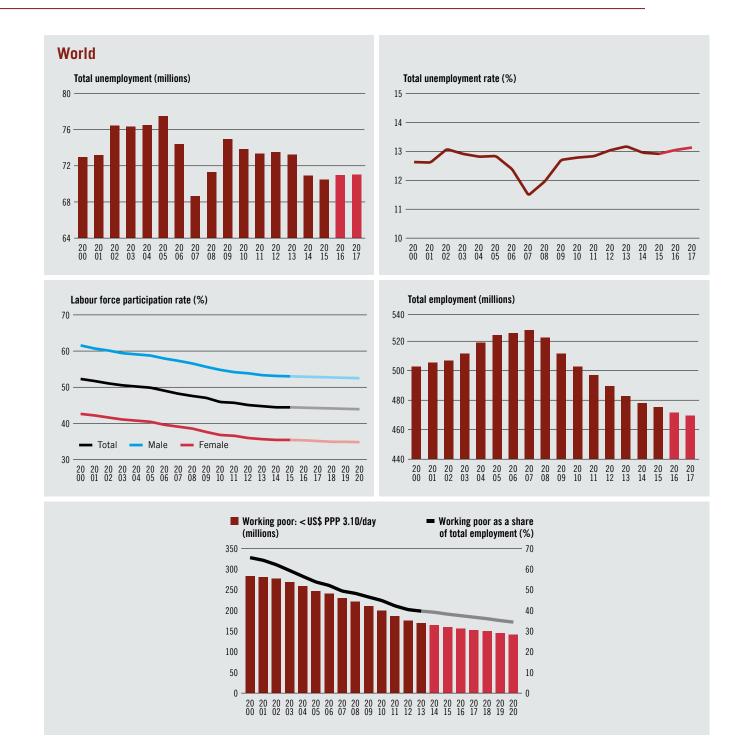
This appendix describes the methodology used to relate working poverty and youth unemployment rates to the willingness to move abroad permanently. Youth extreme working poverty (below US\$1.90 per day) and youth unemployment rates are based on the *Trends Econometric Models*, utilizing both real and estimated data. The willingness to move is taken from the Gallup World Poll. The sample period is from 2007 to 2015.

The sample was split in two. A fixed-effect unbalanced panel estimation regressing youth working poverty and youth unemployment rates on the willingness to move was run for 120 emerging and developing countries. This regression has a total of 821 data points and achieved an R^2 of 0.06. For 38 developed countries, which do not have working poverty data, a second fixed effects panel estimation regressing the youth unemployment rate on the willingness to move was conducted. The analysis makes use of 238 data points, and achieved an R^2 of 0.17. Figure 1C.1 shows the estimated coefficients for both regressions, as well as the 90 per cent confidence intervals.

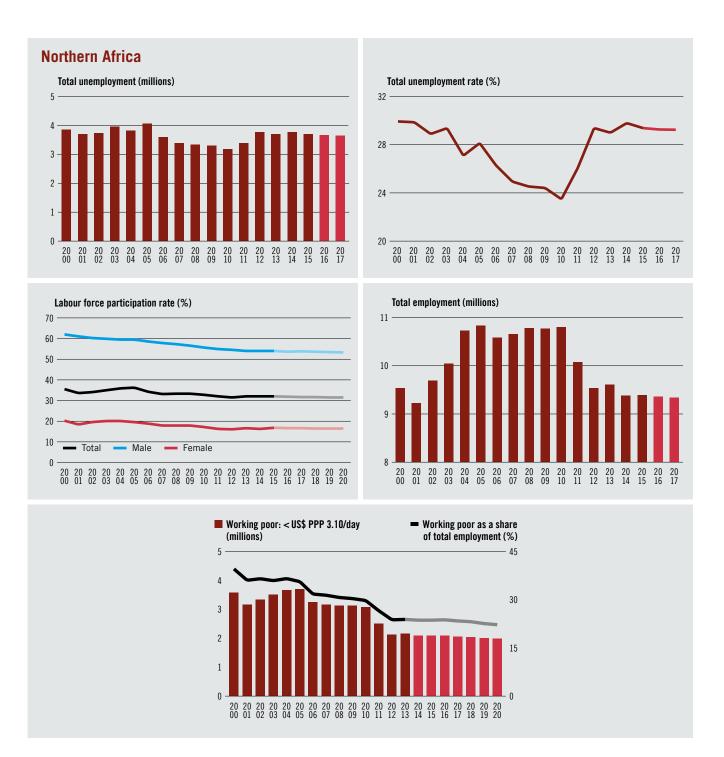


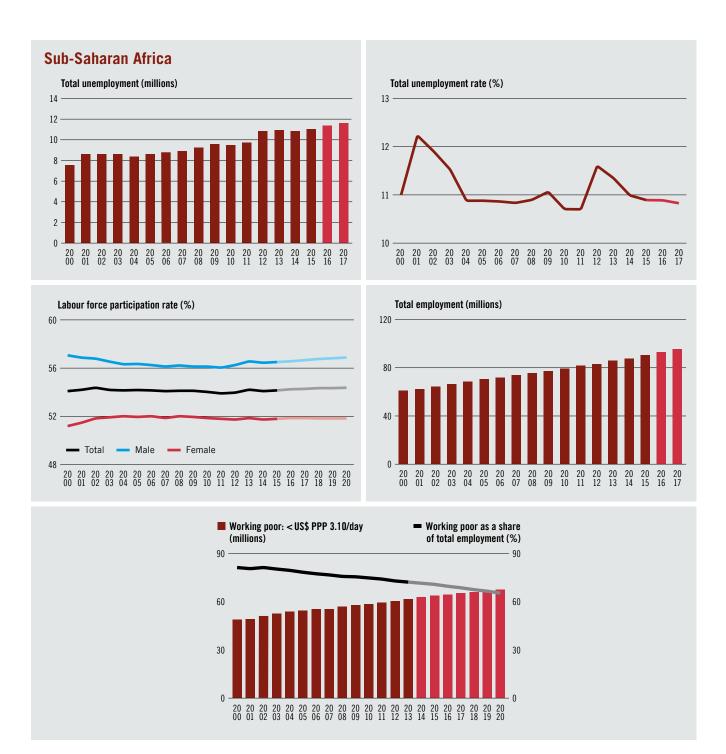
Notes: The figure shows the estimated coefficients in an unbalanced OLS panel regression of independent variables on the willingness to move, including country fixed effects. The sample for emerging and developing countries includes 821 data points for 120 countries. The sample for developed countries includes 238 data points for 38 countries.

Source: ILO calculations based on Gallup Analytics (2016) and Trends Econometric Models, April 2016.



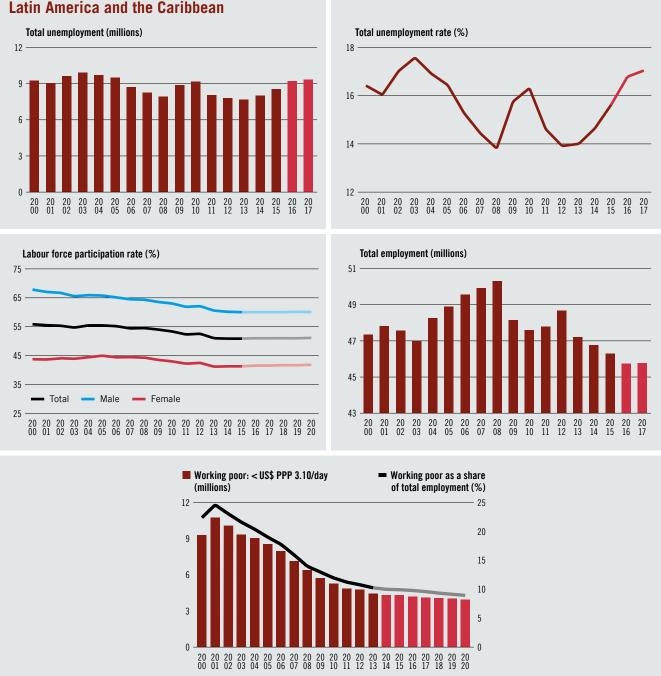
Appendix D. Youth labour market and social statistics by ILO region



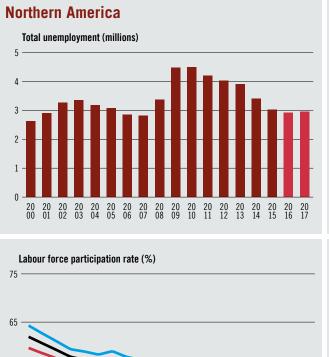


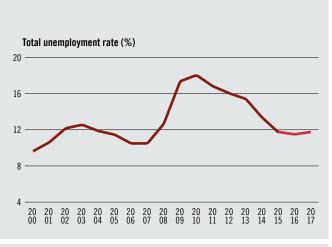
Appendix D. Youth labour market and social statistics by ILO region

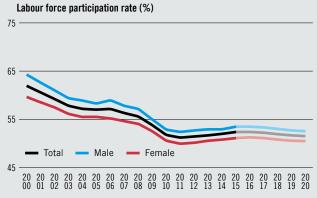
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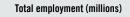


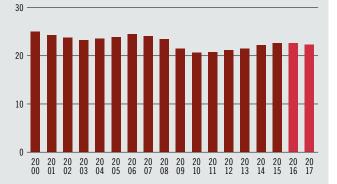
Latin America and the Caribbean

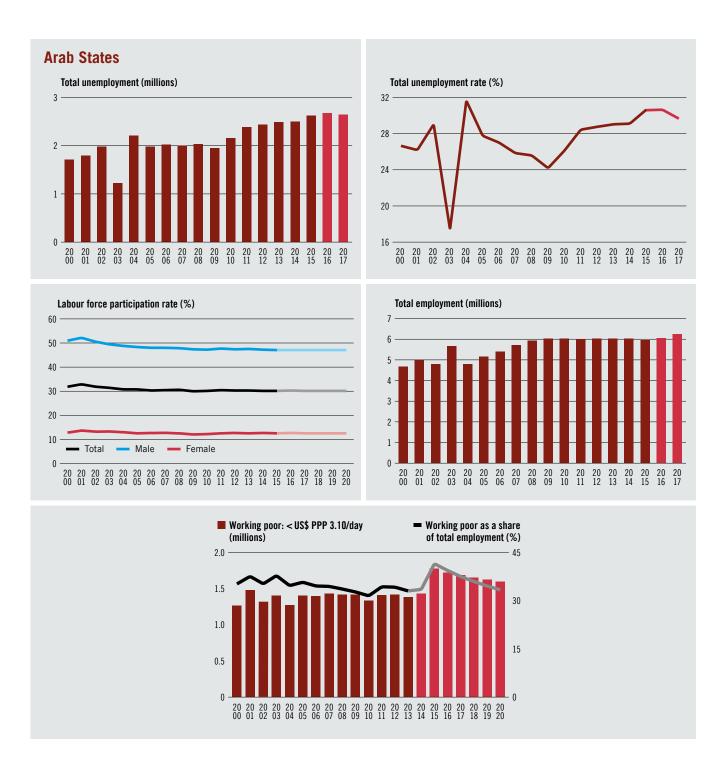


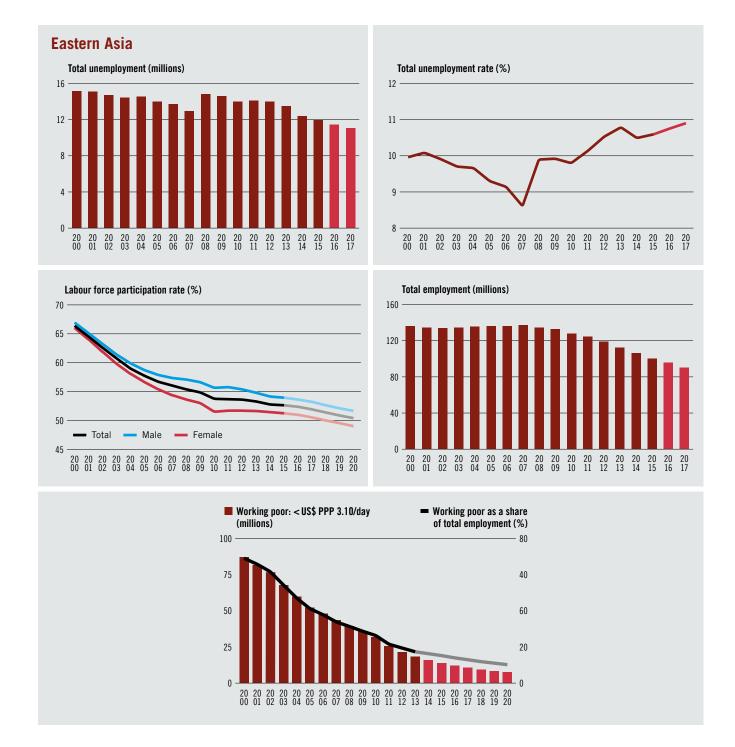


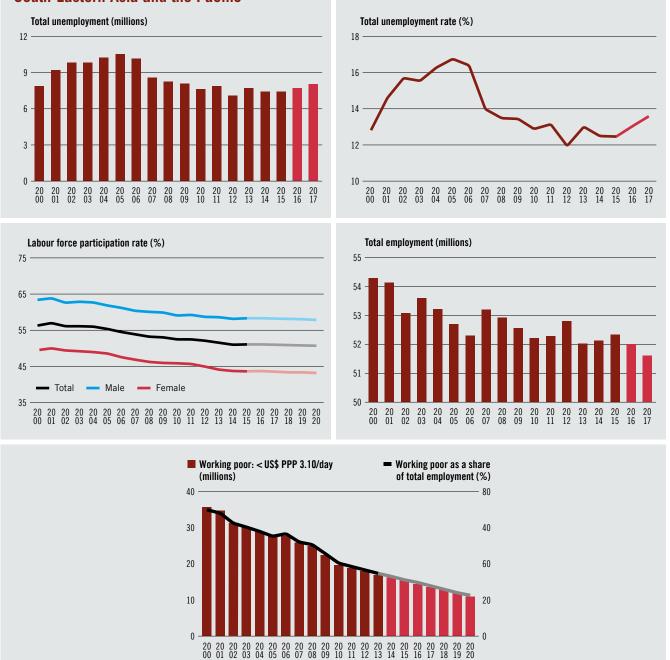




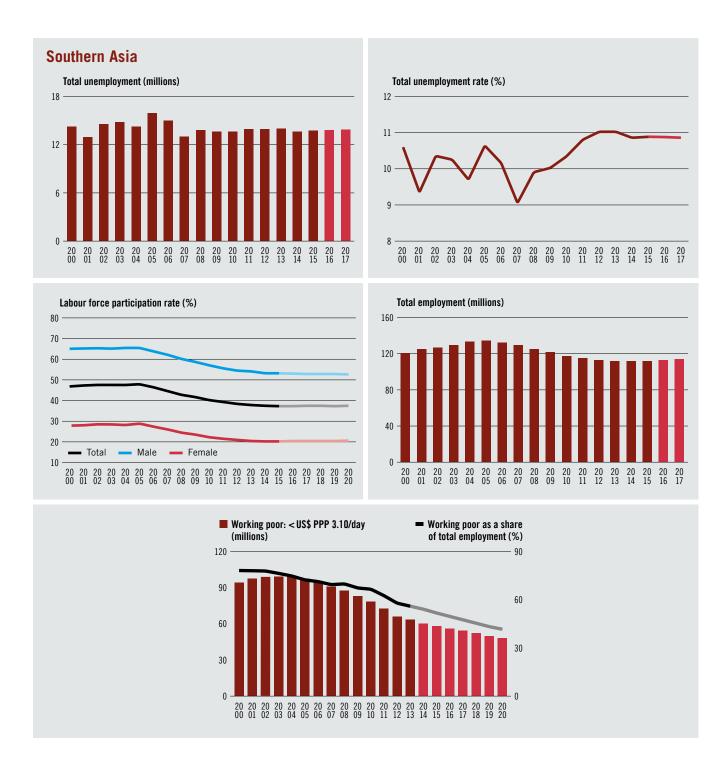




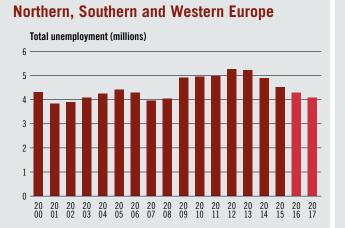


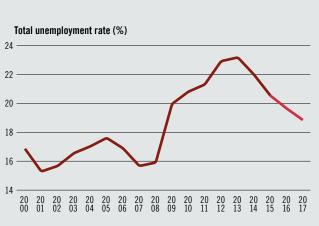


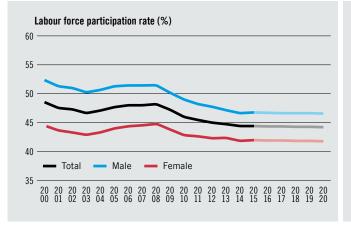
South-Eastern Asia and the Pacific



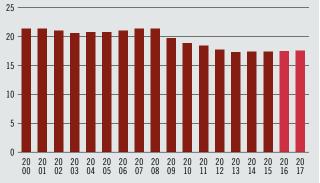
Appendix D. Youth labour market and social statistics by ILO region

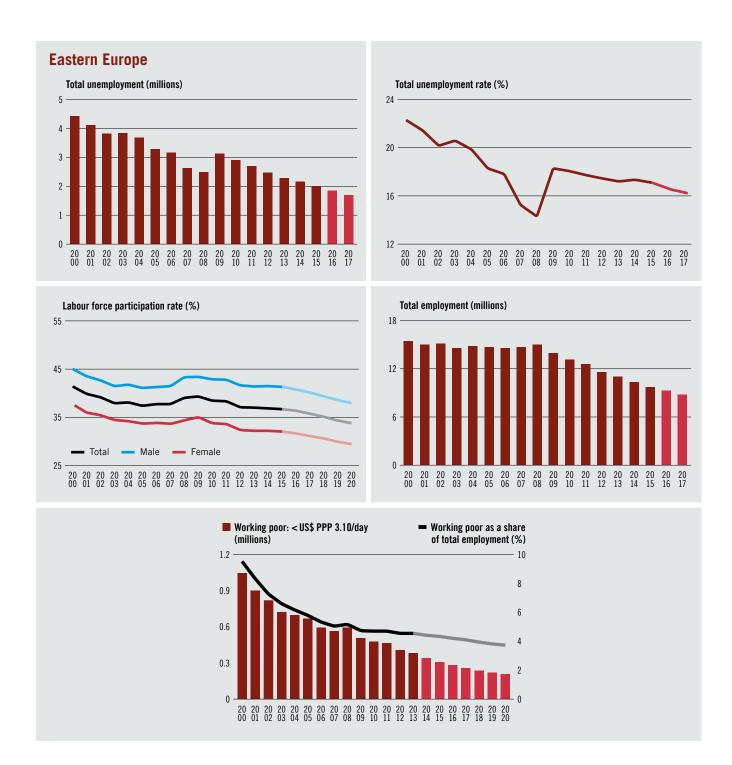


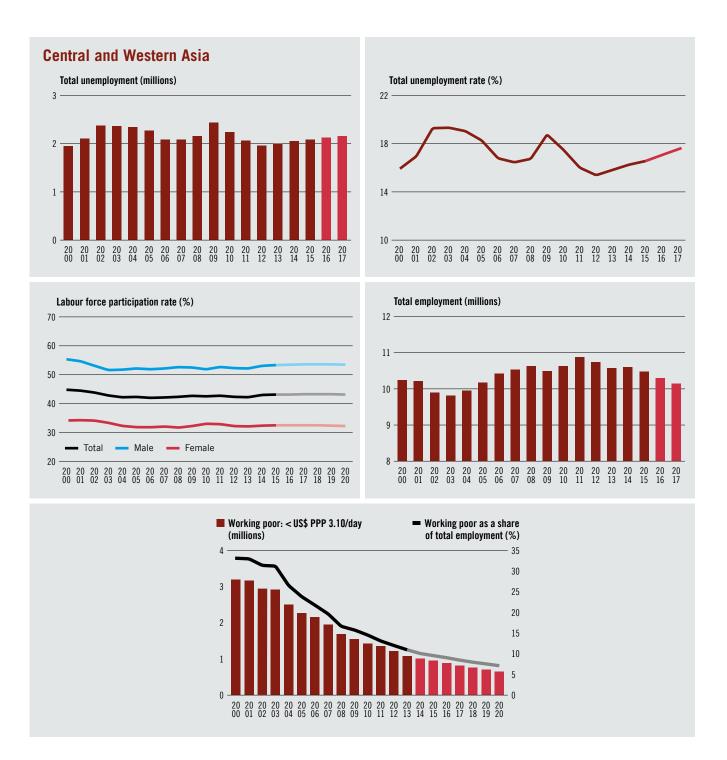












Appendix E. Gender breakdown of key labour market and education indicators of youth

Table 1E.1

Youth unemployment developments (15-24), 2015-17 (percentages)

		1 A A A A A A A A A A A A A A A A A A A		•					
		2015			2016			2017	
Region	Total	Male	Female	Total	Male	Female	Total	Male	Female
World	12.9	12.6	13.4	13.1	12.7	13.7	13.1	12.7	13.8
Developed countries	15.0	15.6	14.2	14.5	15.0	13.9	14.3	14.8	13.8
Emerging countries	13.3	12.8	14.0	13.6	13.1	14.5	13.7	13.1	14.7
Developing countries	9.4	8.4	10.4	9.5	8.4	10.6	9.4	8.5	10.6
G20	13.3	13.3	13.2	13.6	13.5	13.6	13.7	13.6	13.9
G20 Developed countries	14.7	15.7	13.5	14.1	15.0	13.1	13.9	14.7	13.0
G20 Emerging countries	13.0	12.9	13.1	13.4	13.2	13.8	13.7	13.4	14.2
EU-28	20.3	21.0	19.5	19.2	19.7	18.6	18.4	18.7	18.0
EU-19	22.4	23.0	21.7	21.6	21.8	21.2	20.5	20.6	20.4
Arab States	30.6	24.7	52.6	30.6	24.8	52.3	29.7	24.0	51.0
Eastern Asia	10.6	12.4	8.5	10.7	12.5	8.6	10.9	12.7	8.8
Eastern Europe	17.1	16.9	17.3	16.6	16.2	17.1	16.2	15.8	16.8
Central and Western Asia	16.6	15.6	18.3	17.1	16.3	18.5	17.5	16.8	18.7
Latin America and the Caribbean	15.7	12.9	20.0	16.8	13.7	21.6	17.1	13.9	21.8
Northern Africa	29.4	24.4	44.1	29.3	24.1	44.4	29.2	24.0	44.6
Northern America	11.8	13.0	10.5	11.5	12.6	10.2	11.7	12.9	10.5
Northern, Southern and Western Europe	20.6	21.6	19.5	19.7	20.5	18.8	18.9	19.5	18.2
South-Eastern Asia and the Pacific	12.4	12.3	12.7	13.0	12.8	13.3	13.6	13.4	13.9
Southern Asia	10.9	10.5	11.9	10.9	10.5	11.8	10.9	10.5	11.7
Sub-Saharan Africa	10.9	9.7	12.2	10.9	9.7	12.3	10.8	9.6	12.1

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Youth labour force participation rate developments (15–24), 2015–17 (percentages)

		2015			2016			2017	
Region	Total	Male	Female	Total	Male	Female	Total	Male	Female
World	45.9	53.9	37.4	45.8	53.9	37.3	45.7	53.8	37.2
Developed countries	44.4	47.2	41.5	44.4	47.2	41.5	44.3	47.1	41.4
Emerging countries	43.6	53.4	33.1	43.4	53.3	32.8	43.2	53.1	32.6
Developing countries	64.0	67.0	61.0	63.9	67.0	60.9	63.9	66.9	60.8
G20	44.2	52.1	35.6	44.0	52.0	35.2	43.7	51.8	34.9
G20 Developed countries	46.1	47.5	44.6	46.2	47.6	44.7	46.2	47.6	44.7
G20 Emerging countries	43.8	53.1	33.5	43.5	52.9	33.1	43.2	52.7	32.7
EU-28	42.2	44.8	39.4	42.2	44.8	39.4	42.1	44.8	39.4
EU-19	40.3	42.8	37.7	40.3	42.8	37.7	40.3	42.8	37.7
Arab States	30.4	45.9	13.5	30.4	45.8	13.5	30.4	45.9	13.5
Eastern Asia	52.7	54.0	51.3	52.5	53.7	51.0	52.0	53.3	50.6
Eastern Europe	36.7	41.2	31.9	36.3	40.8	31.6	35.7	40.1	31.0
Central and Western Asia	43.1	53.4	32.4	43.2	53.5	32.4	43.2	53.6	32.4
Latin America and the Caribbean	49.6	59.0	39.8	49.6	59.0	39.8	49.6	59.0	39.9
Northern Africa	32.0	46.9	16.5	31.9	46.8	16.6	31.9	46.6	16.6
Northern America	52.7	53.8	51.5	52.7	53.8	51.5	52.5	53.7	51.4
Northern, Southern and Western Europe	44.4	46.7	42.0	44.4	46.7	42.0	44.4	46.7	41.9
South-Eastern Asia and the Pacific	51.4	58.4	44.0	51.3	58.4	44.0	51.3	58.4	43.9
Southern Asia	37.2	53.0	19.9	37.2	52.9	20.0	37.2	52.9	20.1
Sub-Saharan Africa	54.2	56.5	51.8	54.2	56.6	51.8	54.3	56.7	51.9

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Table 1E.3

Education enrolment developments, 2000-14 (percentages)

Region	2000					2	007		2014				
	Upper se	condary	Terti	ary	Upper se	condary	Terti	ary	Upper se	condary	Terti	ary	
	Gross enrolment ratio	Female share											
World	46.8	46.1	20.3	49.7	54.3	47.4	27.1	50.6	75.0	47.8	40.2	52.2	
Northern Africa	52.1	49.3	13.1	48.1	41.1	52.6	23.1	48.0	73.3	48.2	31.1	51.0	
Sub-Saharan Africa	23.2	46.5	2.1	32.3	28.5	43.8	5.0	33.3	38.7	44.7	9.1	36.2	
Latin America and Caribbean	54.7	51.3	27.4	54.8	73.5	53.0	34.5	55.0	74.4	50.9	39.4	52.1	
Northern America	86.8	49.5	67.2	55.8	92.3	48.9	83.0	57.3	93.3	49.4	86.7	56.3	
Arab States	35.7	47.3	19.2	48.0	58.3	47.6	24.0	49.4	103.0	44.3	49.0	51.4	
Eastern Asia	45.0	49.0	13.4	41.2	58.3	48.3	24.8	46.7	88.9	47.8	39.6	51.2	
South-Eastern Asia and the Pacific	43.9	50.4	18.7	49.4	56.2	50.1	23.0	52.0	68.9	47.6	34.0	53.8	
Southern Asia	35.1	40.6	9.6	38.3	40.3	43.3	12.8	41.0	43.5	43.6	20.0	46.3	
Northern, Southern and Western Europe	102.2	49.4	53.4	54.0	102.5	49.0	61.7	55.6	122.2	49.4	67.0	53.4	
Eastern Europe	89.7	49.2	48.6	54.4	90.8	48.2	70.7	56.4	101.8	47.4	75.4	53.6	
Central and Western Asia	72.4	43.6	25.3	50.4	81.5	45.7	31.0	45.2	98.5	49.1	37.7	53.0	

Source: ILO calculations based on UNESCO data.

Table 1E.4

Youth working poverty (15-24), extreme and moderate (<US\$ PPP 3.10/day), 2015-17 (millions)

Region	2015				2016		2017			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Emerging and developing countries	159.9	100.5	59.5	156.0	97.9	58.1	152.2	95.4	56.8	
Emerging countries	107.3	72.3	35.0	102.7	69.3	33.4	98.4	66.4	31.9	
Developing countries	52.6	28.2	24.4	53.3	28.6	24.7	53.8	29.0	24.9	
Arab States	1.8	1.5	0.3	1.7	1.4	0.3	1.7	1.4	0.3	
Eastern Asia	13.5	7.5	6.1	11.9	6.5	5.3	10.4	5.7	4.7	
Eastern Europe	0.3	0.2	0.1	0.3	0.1	0.1	0.3	0.1	0.1	
Central and Western Asia	0.9	0.7	0.3	0.9	0.6	0.3	0.8	0.6	0.2	
Latin America and the Caribbean	4.2	2.8	1.5	4.2	2.7	1.4	4.1	2.7	1.4	
Northern Africa	2.2	1.7	0.4	2.2	1.7	0.4	2.1	1.7	0.4	
South-Eastern Asia and the Pacific	15.2	9.4	5.8	14.4	9.0	5.4	13.5	8.5	5.0	
Southern Asia	58.2	42.8	15.4	56.2	41.3	14.9	54.1	39.7	14.4	
Sub-Saharan Africa	63.6	34.0	29.5	64.4	34.5	29.9	65.2	35.0	30.2	

Note: Figures may not sum due to rounding.

Source: ILO calculations based on October 2015 update of the model in Kapsos and Bourmpoula (2013) and ILO Research Department's Trends Econometric Models, April 2016.

Table 1E.5

Youth working poverty (15–24), extreme and moderate (<US\$ PPP 3.10/day), 2015–17 (percentages)

Region	2015				2016		2017		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Emerging and developing countries	38.4	38.9	37.6	37.7	38.1	37.1	36.9	37.2	36.4
Emerging countries	31.2	32.9	28.1	30.2	31.9	27.3	29.3	30.8	26.5
Developing countries	73.3	73.9	72.7	72.2	72.8	71.5	71.0	71.6	70.2
Arab States	41.2	39.8	48.8	39.0	37.9	45.0	37.1	36.2	42.3
Eastern Asia	14.9	15.3	14.5	13.8	14.1	13.5	12.8	13.1	12.6
Eastern Europe	4.3	3.9	4.8	4.2	3.8	4.7	4.0	3.6	4.6
Central and Western Asia	9.5	10.2	8.3	8.9	9.6	7.8	8.4	9.0	7.3
Latin America and the Caribbean	9.8	10.3	9.1	9.7	10.2	8.9	9.5	10.0	8.7
Northern Africa	24.5	24.7	23.8	24.5	24.7	23.6	24.2	24.4	23.2
South-Eastern Asia and the Pacific	31.1	32.8	28.6	29.4	31.2	26.7	27.6	29.5	24.9
Southern Asia	51.6	50.9	53.8	49.5	48.8	51.5	47.4	46.7	49.3
Sub-Saharan Africa	70.6	70.7	70.5	69.7	69.8	69.5	68.6	68.7	68.4

Source: ILO calculations based on October 2015 update of the model in Kapsos and Bourmpoula (2013) and ILO Research Department's Trends Econometric Models, April 2016.

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