No longer children: What do Young Lives children do when they grow up?

Transitions to post-secondary education and the labour market

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Young Lives
An International Study of Childhood Poverty

The authors

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The images throughout our publications are of children living in circumstances and communities similar to the children within our study sample. © Young Lives 2018

Contents

1. Introduction

The Young Lives study has tracked the lives of two cohorts of children (the 'Younger Cohort' born in 2001-02 and the 'Older Cohort' born in 1994-95) since 2002 in Ethiopia, India (in the states of Andhra Pradesh and Telangana), Peru and Vietnam. Fifteen years later, Young Lives is well-placed to investigate the opportunities that become available for children of the millennium. The 2000s and the first part of the 2010s was a favourable period for the four countries; between 2002 and 2016 (the study period), the average annual GDP growth rate was above 5 per cent in all cases (9.2 per cent in Ethiopia, 7.4 per cent in India, 5.6 per cent in Peru and 6.4 per cent in Vietnam, according to World Bank indicators).[1] In addition, during this period some improvements have been observed across the countries in dimensions relevant for human development, including reductions in the prevalence of stunting among children under the age of 5, and improvements in school enrolment. Despite this positive context, these countries still face structural challenges and substantial inequalities of opportunities. The quality of the education accessible to most of the population is poor, with the possible exception of Vietnam, and marked differences in developmental indicators exist when comparing children from different economic statuses. Moreover, access to good jobs remains elusive in most of these countries, in part related to the level of development of their economies.

It is important to understand the extent to which the positive context observed during the last 15 years has the potential to translate into improvements in the lives of future generations. With this in mind, this report reflects on how the experience of poverty early in life in these four countries affects the opportunities of younger generations, documenting their trajectories from school to the labour market and post-secondary education, and investigating their chances to access meaningful jobs. Young Lives is in a particularly suitable position to contribute in this area, given the longitudinal nature of the data, and as the Older Cohort has just started entering the labour market. The wealth of information collected throughout the life course enables us to understand the importance of investing in human capital at early ages, testing the predictive role of household socio-economic characteristics, educational aspirations, cognitive skills and socio-emotional competencies measured during childhood and adolescence on post-secondary education and labour market choices.

This report is structured as follows. Section 2 provides a brief summary of the changes observed in Young Lives countries in the last 15 years, particularly in the education and labour market sectors. Section 3 describes the main characteristics of the Young Lives data and summarises the information about participation in the labour market observed in this data. Section 4 compares the education trajectories of two recent birth cohorts (the Younger Cohort and the Older Cohort), documents access to post-secondary education for the Older Cohort, and outlines the profile of those that entered post-secondary education versus those that do not. Section 5 characterises the young labour force, what work they do, what job aspirations they had as children and whether they realised them, and investigates the main predictors of labour market participation at age 22. Section 6 concludes.

1 See https://data.worldbank.org/indicator

2. Country context

This section outlines the main changes in the education and labour markets in each Young Lives country in recent years, with a specific focus on young people. The statistics come from a variety of national representative datasets. Similarities and dissonances when comparing these statistics with Young Lives data are highlighted and discussed throughout the report.

2.1. Ethiopia: a decade of growth and the challenges ahead

In the last decade, Ethiopia has experienced very rapid economic growth leading to significant poverty reduction, while inequality has stayed stable over the same period. Between 2004 and 2014, Ethiopia's growth was one of the highest in the world. The real GDP growth averaged 10.9 per cent annually between 2004 and 2014, and poverty significantly declined over this period. In 2000, half of the population was living on less than US$1.90 2011 purchasing power parity (PPP) per day. By 2011, this had decreased to 33.5 per cent. The country's Gini coefficient was stable at 0.30 over this period (World Bank 2016).[2]

The primary school enrolment rate has risen rapidly, but poor learning outcomes prevail due to low completion rates and a low quality of education. Between 2002 and 2014, the net enrolment rate (NER)[3] in primary school increased from 54 per cent to 92.6 per cent (FDRE 2015). However, the primary school completion rate was only 20 per cent in 2015 (FDRE 2015), and the quality of teaching remains a challenge at this stage. The Ethiopia Early Grade Reading Assessment (EGRA) in 2010 showed that 34 per cent of students in Grade 2 were unable to read a single word of a story written for this age group, and 48 per cent of students were unable to answer a single question from a reading comprehension test (FDRE 2015). The data also highlight severe inequalities in education outcomes across urban and rural areas and between men and women. In rural areas, the female illiteracy rate (71 per cent) was more than double the rate in urban areas (31 per cent), and 66 per cent of all illiterate adults were women in 2014 (FDRE 2015). Recent evidence from the Young Lives school survey for Grades 7 and 8 also shows that children are performing less well than would be expected for their grade (Rossiter et al. 2017).

Enrolment in secondary and tertiary education is increasing but remains low, partially reflecting the slow grade progress and low primary completion rate. In 2014, the gross enrolment rate (GER)[4] in lower secondary education was 39 per cent (the same as in 2009) and the NER was 20 per cent. For upper secondary education, the GER reached 20 per cent and the NER 6 per cent (FDRE 2015). The differences in GER and NER in both lower and upper secondary education indicate that more than half of the students are over-age. Similarly, GER in tertiary education increased from 3.54 per cent in 2008 to 8.13 per cent in 2014 (UNESCO 2018).

The Ethiopian labour market is characterised by a very significant agricultural sector accounting for 76.6 per cent of the total working population in 2011 (CSA 2014). In rural areas, young people work mainly in subsistence farming (self-employed or unpaid workers) and only 3.8 per cent of the total employed population in these areas were paid employees (CSA

2 The Gini coefficient is a commonly use indicator for income inequality. It is a measure of the deviation of the distribution of income among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality, a value of 1 absolute inequality.

3 NER is the total number of students belonging to the school-type age group, expressed as a percentage of the total number of children in that age group.

4 GER is the total number of enrolled students of all ages, expressed as a percentage of the total population in the school-type age group.

2014). The youth (aged 15-29) unemployment rate in rural areas was 3.1 per cent in 2013 (2 per cent for all ages).

Young people are moving to urban areas and facing high unemployment rates there. With 37 per cent of the Ethiopian population between age 15 and 34 (CSA 2015), rapid economic growth in the urban economy[5] and greater education opportunities in urban areas have led to rising rural–urban migration (Kosec et al. 2017). Ethiopia's low urban population share was projected to double from the 2015 rate of 19 per cent of the population to 38 per cent by 2050 (UN DESA 2015). However, existing labour opportunities in urban areas are insufficient to meet the increasing number of skilled and unskilled young people entering the labour market every year (Seif et al. 2016). Youth unemployment rate in these areas was 21.6 per cent in 2013 whereas, for all ages, the unemployment rate was 16.5 per cent in the same year (CSA 2014). Most jobs for young people are in services, sales, or elementary occupations and more than 60 per cent of urban workers are engaged in the informal sector, defined as activities outside of government regulation, taxation and social contributions (CSA 2014). According to the World Bank (2017), the proportion of youth neither in employment, education nor training (NEET) was only 1.1 per cent in 2013.

Over the past 15 years, the Ethiopian government has invested in youth skill development. It has also promoted labour opportunities for young people in urban areas. Since the 1990s, the government has made access to primary schooling a priority (Woldehanna and Araya 2017). Between 1996 and 2015, the number of primary schools increased from 11,000 to 32,048 (FDRE 2015). In the 2004 National Youth Policy, as part of the 2005-2009 5-Year National Plan, the government has also established new technical and vocational education and training (TVET) and has centred the curriculum on skills relevant to the growing manufacturing and construction sectors (FDRE 2015). Moreover, it aimed to promote youth job creation through support to micro and small enterprises (Broussard and Tekleselassie 2012). In the 2010-2015 5-Year National Plan, the construction of industrial cluster zones, roads and other infrastructure led to the creation of job opportunities for young people (Seid et al. 2015). More recently, a new youth development strategy and youth package were launched by the Ministry of Youth and Sports and will come into force soon.

2.2. India: pervasive inequalities in education and economic participation

Despite rising enrolment rates at all levels of education in the last two decades in India, access to primary education is still not universal, and a significant proportion of youth lack basic primary school skills. The NER in primary school in India showed little progress between 2005 and 2014, increasing from 84.5 per cent to 88.08 per cent (MHRD 2014), and declining to 87.3 per cent in 2015-16 (U-DISE 2016).[6] GER in lower and higher secondary education increased from 51.7 per cent to 76.6 per cent and from 27.8 per cent to 52.2 per cent, respectively, between 2001 and 2014 (MHRD 2014).[7] According to U-DISE, the NER in lower and upper secondary education reached 80 per cent and 56.2 per cent, respectively, in 2015 (U-DISE 2016). GER in tertiary education in India was 24.3 per cent in 2015 (MHRD 2016).

5 Between 1980 and 2014, most of the economic growth has occurred in non-agricultural sectors. The average four-year growth rate was 6.9 per cent in the industrial sector, 5.1 per cent in manufacturing, 7.1 per cent per cent in services, and only 3.8 per cent in agriculture (World Bank 2017).

6 According to U-DISE, in 2015-16 the national NER in primary in both the two study states was slightly below the average: 72.1 per cent in Andhra Pradesh and 80.6 per cent in Telangana (U-DISE 2016).

7 According to U-DISE, in 2015-6 the national NER in lower secondary education was 75.5 per cent and in upper secondary education was 60.2 per cent in Andhra Pradesh, and respectively 82.5 per cent and 61.3 per cent in Telangana (U-DISE 2016).

Although the youth literacy rate in India increased from 76 per cent in 2001 to 86.1 per cent in 2011 (MHRD 2014),[8] in 2013, more than three quarters of students in Grade 3 and half of students in Grade 5 could not read a Grade 2 text (ASER 2013). A significant proportion of teachers in primary school still lack the necessary training (MHRD 2014). Furthermore, the Annual Status of Education Report (ASER) 2016 indicated that teachers' attendance at primary level was 85.4 per cent, and was 84.7 per cent at upper primary level.

Young people's access to education varies widely, depending on gender, region, and social group. Although India has successfully closed the gender gap in access to primary and secondary education in the last two years, young women are far less educated than young men (WEF 2017). In 2011, the literacy rate was 90 per cent for male youth and only 81.8 per cent for female youth (MHRD 2014). Regional disparities in access to education are also significant. The NER in primary education in the worst performing state (Jammu and Kashmir) was 20 percentage points lower than the average Indian NER in 2011 (MHRD 2014). Similarly, GER in tertiary education for Scheduled Tribes students is half the national rate (at 24.3 per cent) (MHRD 2016).

The youth labour market is characterised by the low participation of women, high unemployment rates, particularly in urban areas, and high level of informality. Social norms and a marked gendered division of labour are very important in explaining low female participation in the labour force (UN Women 2016). Between 2000 and 2016, the female labour force participation rate declined from 33.9 per cent to 23.7 per cent (NSSO 2011 and Ministry of Labour and Employment 2016). For young women between 18 and 29, the rate was 21.3 per cent in 2016, whereas it was 66.8 per cent for men in the same age group (Ministry of Labour and Employment 2016). The decline in the female labour force participation is partly explained by the rise in young women's attendance in secondary and tertiary education (ILO 2013). High unemployment rates in urban areas also discourage female participation in the labour force. The unemployment rate was significantly higher among young people (aged 18 to 29) relative to the overall labour force (13.2 per cent and 5 per cent in 2016, respectively) (Ministry of Labour and Employment 2016).[9] Specifically for young urban workers, unemployment reached 15.1 per cent in 2016, compared to 12.7 per cent for rural workers in this age group (Ministry of Labour and Employment 2016).[10] Educated young people are particularly affected. The unemployment rate of young male and female university graduates was 18.4 per cent, whereas it was only 2.2 per cent for illiterate young people in 2016 (Ministry of Labour and Employment 2016). Also, the proportion of NEET is quite high. In 2009, Indian youth's NEET rate was estimated at 30.8 per cent (OECD 2017b).

Of those employed, the vast majority of workers are in the informal sector: 79 per cent of non-agricultural wage workers did not have a written contract and only 23.8 per cent of workers were eligible for social security benefits (ILO 2017).

In the last 15 years, the government has funded programmes for skills development and entrepreneurship opportunities with, recently, a special focus in reducing gender, regional and caste inequalities in access to education and work. As part of the 2003 National Youth Policy, the Rashtriya Madhyamik Shiksha Abhiyan and the Rashtriya Ucchtar Shiksha Abhiyan schemes supported youth in marginalised areas in accessing secondary and higher education (respectively) in order to ensure that they have equitable access to work

8 In Andhra Pradesh, the youth literacy rate improved from 74 per cent to 87 per cent during the same period.

9 In the states of Andhra Pradesh and Telangana, the youth unemployment rate in 2016 was 11.3 per cent and 8.1 per cent, respectively (Ministry of Labour and Employment 2016).

10 In the states of Andhra Pradesh and Telangana, the urban youth unemployment rate in 2016 was 15.8 per cent and 16.2 per cent, respectively. In rural areas, it was 10.4 per cent and 4.3 per cent, respectively (Ministry of Labour and Employment 2016).

opportunities. The National Rural Employment Guarantee Act in 2005 provided paid labour for 100 days to unskilled workers in rural areas. In 2005, the National Council for Skill Development was launched to strengthen vocational training (Dev and Venkatanarayana 2011). In addition, the Prime Minister's Employment Generation Programme (PMEGP) started in 2008, and provided credit to generate self-employment opportunities for youth through the establishment of micro-enterprises in the non-farm sector (MoSPI 2017). In 2013, the government put forward the National Skills Qualifications Framework (NSQF) to help employers better identify workers' skills levels. The Ministry of Skill Development and Entrepreneurship was set up in November 2014 to give fresh impetus to the 'Skill India' agenda and help create an appropriate ecosystem that facilitates imparting employable skills to its growing workforce over the next few decades. In the National Youth Policy of 2014, the government has endeavoured to reduce inequalities in access to education and employment by preventing illegal social practices such as dowry, child marriage, honour killings and caste-based discrimination (Young Lives 2017).

In 2015, new programmes started to help youth find employment. The National Policy for Skill Development and Entrepreneurship was launched by the Ministry of Skill Development and Entrepreneurship to create an upskilled environment for work, to align skills with work-based competencies, and to promote innovation-based entrepreneurship. Skill India provided greater access to skills training programmes and financial incentives for youth enrolled in these programmes, and Start-Up India created incentives for youth to become entrepreneurs (OECD 2017a).

2.3. Peru: encouraging trends that the country needs to capitalise on

In the last decade, Peru has made significant improvements in education enrolment, making it one of the best performers in the Latin American region. Ten years ago, primary education enrolment was nearly universal in Peru. Between 2005 and 2015, NER and completion rates increased at all levels of education: NER rose from 57 per cent to 78 per cent in pre-primary education, and 70 per cent to 83 per cent in secondary education; and completion rates progressed from 75 per cent to 85 per cent in primary education and 56 per cent to 72 per cent in secondary education (ENAHO 2015). Gross enrolment at the tertiary level is close to the Latin American regional average (World Bank 2017). The NER in tertiary education almost doubled during this period, from 17 per cent to 32 per cent (ENAHO 2015). Peru was one of the lowest-scoring countries in the OECD Programme for International Student Assessment (PISA) in 2015 (63rd out of 70 countries) (Gurría 2016). Peru was also one of the PISA countries with the narrowest gender gap in performance among students aged 15 (OECD 2016). However, inequalities in access and quality of education exist between urban and rural areas, regions, and family backgrounds. Attendance was lower in preschool, secondary and tertiary education for children living in rural areas, for children in the highlands and the Amazonian jungle, for children from indigenous families, and for children with non-educated mothers (ENAHO 2015). In addition, the urban–rural gap in academic achievement is large, as seen in the Evaluación Censal de Estudiantes (ECE). In this nationwide primary school reading examination, 55.1 per cent of Grade 2 pupils in urban areas achieved a satisfactory performance in 2015, but only 18.5 per cent of students achieved this performance in rural areas (Minesterio de Educación 2015).

There have been moderate improvements in labour market outcomes since 2005, but most young people are working in low-skilled and informal jobs. Unemployment has dropped in recent years (to 1.5 per cent in 2014), making Peru one of the Latin American and Caribbean (LAC) countries with the lowest unemployment rate (the LAC average is 3.3 per cent) (OECD/ECLAC/CAF 2016). However, the youth (aged 15-29) unemployment rate of 6 per cent was more than three times higher than the adult unemployment rate. With a NEET rate at 12 per

cent in 2014, Peru also has one of the lowest youth NEET in the region (OECD/ECLAC/CAF 2016). Looking at the quality of young people's jobs, seven out of 10 young workers are employed either in elementary occupations (five out of 10) and increasingly in services and sales (two out of 10). Informality of work has been declining since 2005, but the levels are still very high, particularly among young people living in poverty (OECD/ECLAC/CAF 2016). In 2015, about 85 per cent did not have a written work contract (ENAHO 2015).

Active labour market policies for young people in Peru in the last 15 years have targeted those facing poverty or at high risk of unemployment. The most important youth programme is Jovenes Productivos, a short-term training programme for people aged 15 to 29 living in poverty (formerly PROJOVEN). In addition, Trabaja Peru is a temporary public work programme that targets people aged 18 to 59. Three other government programmes are Impulsa Peru (which offers skills certificates to participants of Jovenes Productivos), Peru Responsable (which offers jobs to participants of Jovenes Productivos through agreements with private firms that in turn receive a certificate of social responsibility), and Fortalece Peru (a programme designed to help young unemployed people to search and find jobs).

2.4. Vietnam: dynamic technological progress coexists with a young, low-skilled labour force

Considerable progress has been made in Vietnam in terms of access, quality of education, and learning at all levels over the past 15 years. Pre-primary school access was universal in 2010, increasing from 72 per cent in 2000 (UNESCO 2015). Between 2001 and 2015, primary education NER increased from 94 per cent to 98.3 per cent, lower-secondary school NER from 70 per cent to 85 per cent, and upper secondary school NER from 33 per cent to 63.1 per cent (UNESCO 2015; OECD 2017c). In 2015, GER in tertiary schools was 29 per cent (OECD 2017c). Vietnamese students in the PISA 2015 scored higher than students in countries with similar GDP levels, illustrating the high quality of teaching, especially in science. Vietnam was ranked eighth out of 70 countries in the PISA 2015 (Gurría 2016).[11]

Disparities in access to lower and upper secondary school exist. In the Central Highlands, Northern Mountains and the Mekong Delta regions, NER in upper secondary school in 2014 was 48.5 per cent, 50.3 per cent and 56.9 per cent, respectively, whereas it was 77.1 per cent in the Red River Delta (the region with the highest NER in upper secondary school). For ethnic minority groups, such as the Kho Me and the Hmong, NER in lower secondary school was 59.9 per cent and 57.3 per cent respectively, far inferior to the rate for the main ethnic group (86.9 per cent).[12] In upper secondary school, NER for these ethnic minorities was 24.1 per cent and 18.3 per cent, respectively, and 69 per cent for the main ethnic group (OECD 2017c).

Young people aged between 15 and 24 account for more than half (51.3 per cent) of the total unemployed population (GSO 2017). In the second quarter of 2017, the youth unemployment rate was 7.86 per cent, almost four times the overall unemployment rate (2.1 per cent) in the same year.

Youth unemployment is prevalent in urban areas (12 per cent) and the risk of unemployment increases with the level of education. The unemployment rate is highest among university graduates at 19.8 per cent, while it is 6.8 per cent for students with short-term vocational training (GSO 2017). It has been suggested that there is a mismatch between the

11 It is important to note that Vietnam's PISA scores are only representative of the knowledge of students enrolled in lower or upper secondary education (OECD 2016).

12 The Kinh is the dominant ethnic group, constituting 86 per cent of the population. The Kho Me and Hmong ethnic groups represent approximately 3 per cent of the population.

labour force skills and the skills demanded by the labour market, especially for university and vocational training graduate jobs (OECD 2017d). In the World Bank's Skills Toward Employment and Productivity survey (STEP) in 2012, 80 per cent of local employers reported that the job applicants were lacking the relevant skills for university graduate jobs, such as managers and technicians.[13] However, for blue-collar workers, only 25 per cent of employers hiring machine operators mentioned that job applicants lacked the relevant skills (Bodewig et al. 2014).

The Vietnamese labour force is still dominated by low-skilled workers. According to the ILO School-to-Work Transition Survey (SWTS) in Vietnam,[14] almost 40 per cent of employed youth are engaged in low-skilled elementary occupations where low wages and informality are prevalent (Nguyen et al. 2015).[15] These low-skilled jobs are highly exposed to the risk of displacement as a result of technology change, possibly leading to higher unemployment and inactivity in Vietnam. The youth NEET rate was 11.1 per cent overall (and 12.4 per cent for female youth) in 2013 (Nguyen et al. 2015).

The Vietnamese government has encouraged youth to enrol in vocational training and to invest in job-creating businesses. Since the early 2000s, the government has heavily invested in vocational training to increase access and improve the quality of training. The number of trained vocational teachers quadrupled between 2001 and 2010 (UNESCO 2015). In 2008, the government facilitated access to credit for young people to engage in vocational training and job creation. The Vocational Training for Rural Workers, 2020 programme established in 2009 aims to train about one million rural workers each year until 2020 to gain skills relating to the industrial, services and modern agricultural sectors. Similarly, in 2015, the government offered an exemption on education fees in vocational training institutions for young people aged 16 to 30 coming from poor or underprivileged ethnic minority households. In 2015, the National Fund for Employment Creation gave access to loans at preferential rates for job-creating investments. It estimated that this led to the creation of 50,000 jobs for young people (OECD 2017c).

13 This survey is considered representative of the two major urban conglomerations in Vietnam (Hoi Chi Minh City and Hanoi). Employers from 350 international and national firms in the formal and informal sectors were interviewed, stratified by enterprise size (1 to 10 employees, 11 to 50, and 51 and more employees). The sampling frame was the General Statistics Office Vietnam enterprise census 2009.

14 SWTS is a nationally representative survey of young people between 15 to 29 years. The sample size was 2,722 people.

15 Nearly half (44.7 per cent in 2013) of youth in paid employment were working without a written contract (Nguyen et al. 2015).

3. Young Lives data and definitions

3.1. Sampling design, attrition rates and data collected

The Young Lives survey is a unique longitudinal cohort study that has followed two cohorts of children in four low and middle-income countries – Ethiopia, India (the states of Andhra Pradesh and Telangana), Peru and Vietnam – for over 15 years. The first cohort (the 'Older Cohort') was born in 1994-95 and tracked since they were about 8 years old. The second cohort (the 'Younger Cohort') was born in 2001-02 and tracked since they were about 1 year old. The analysis for this report is done using the Older Cohort data, unless otherwise stated.

Young Lives was developed as a longitudinal study of child poverty and the sampling design reflects that intent by oversampling poor households.[16] It was not intended to be a national representative survey. Nevertheless, the sampling procedure ensured a balanced representation of regional diversities in each country. Comparisons of Young Lives households with households sampled in nationally-representative datasets[17] indicate that the Young Lives Younger Cohort captures a large part of the diversity of living standards in each country (Escobal and Flores 2008; Nguyen 2008; Kumra 2008; Outes-Leon and Sanchez 2008). [18]

The sample sizes in Round 5 (with attrition rates from Round 1 to Round 5 in parentheses) for Older Cohort children in Ethiopia, India, Peru and Vietnam country sites are 814 (17.7 per cent), 914 (7.6 per cent), 608 (14.1 per cent) and 909 (8.6 per cent), respectively.[19] Attrition was higher in Ethiopia and Peru, mainly due to international and national migration. Despite this, attrition rates are still generally quite low, in part because migrant children and their families are followed within the country, but also because of the good practices the Young Lives team put in place, such as strong partnership at country level, maintaining a core of field supervisors across all survey rounds in all countries, enabling a crucial and stable relationship with Young Lives families.

The data comprise five rounds of quantitative data collection and four rounds of qualitative data collection, as shown in Figure 1. The first round was in 2002 (at age 1 for the Younger Cohort and age 8 for the Older Cohort) and was followed by four subsequent rounds in 2006 (age 5 for the Younger Cohort and age 12 for the Older Cohort), 2009 (age 8 for the Younger Cohort and age 15 for the Older Cohort), 2013 (age 12 for the Younger Cohort and age 19 for the Older Cohort), and 2016 (age 15 for the Younger Cohort and age 22 for the Older Cohort).

In all rounds, three main questionnaires were administered: a child questionnaire, a household questionnaire and a community questionnaire. The child questionnaire includes data on child health, anthropometrics, education history, numeracy and literacy tests, socio-emotional

16 For more information on the sampling design, see www.younglives.org.uk/content/our-research-methods

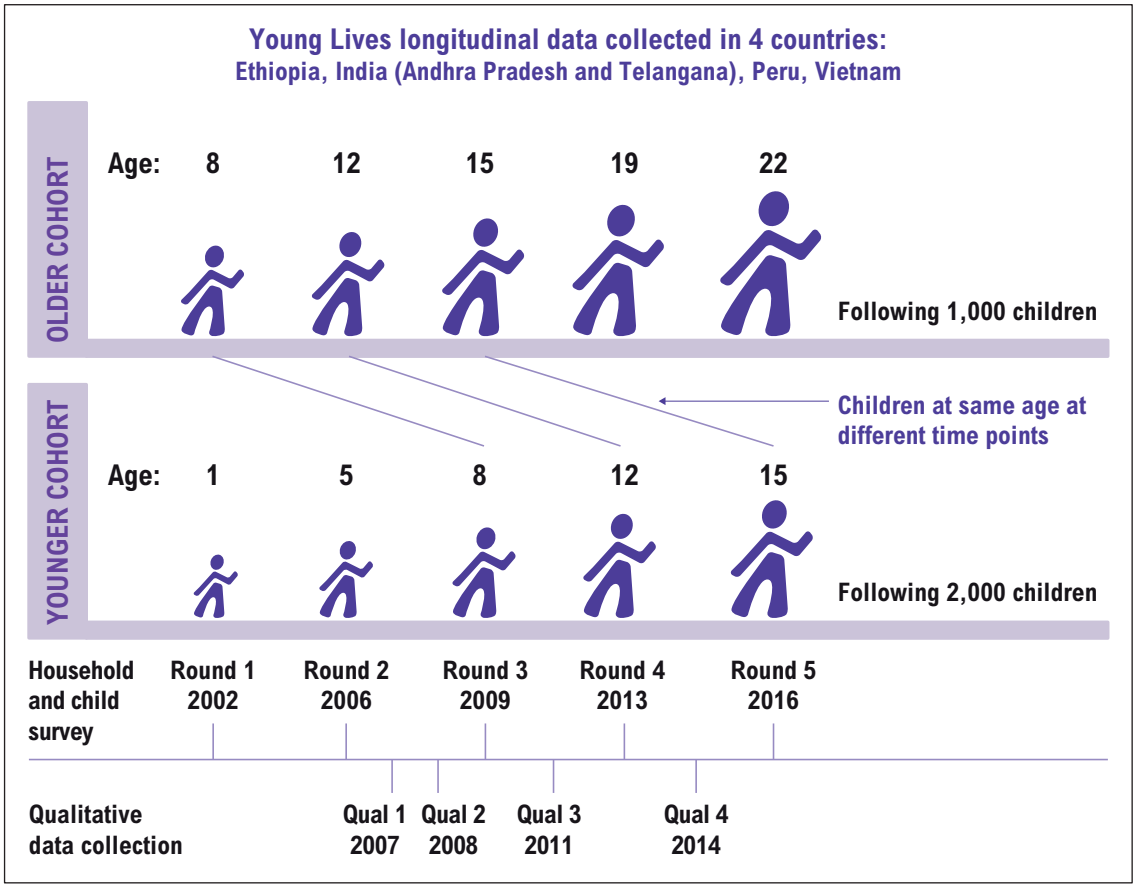
17 This is compared with each country's Demographic Health Survey (DHS) and another survey where applicable (Welfare Monitoring Survey in Ethiopia and Peru, and Vietnam Household Living Standards Survey in Vietnam).

18 In Ethiopia, the Young Lives sample represents a wide range of living standards, in line with the variability found in the Ethiopian population as a whole (Outes-Leon and Sanchez 2008). The sample in India showed better access to services, greater ownership of assets and slightly wealthier than the average household in Andhra Pradesh, and thus includes some biases. In Peru, the sample has been found to optimally reflect the diversity of children and families in Peru, excluding the wealthiest 5 per cent (Escobal and Flores 2008). In Vietnam, the sample includes households with less access to basic services and slightly poorer than the average household. The urban sector is also under-represented with regards to both the total population share and level of development. The chosen city, Da Nang, is less developed than other cities such as Ha Noi and Ho Chi Minh City.

19 For the Round 4 and Round 5 panels, the full sample was 785 for Ethiopia, 917 for India, 587 for Peru and 832 for Vietnam.

competencies, time use, participation in paid and unpaid economic activities, and job and educational aspirations, consistently collected across rounds. The last round of data includes additional information on personality traits and job-related skills. The household questionnaire includes data on caregiver background, livelihood, demographic characteristic of household members, socio-economic status, self-reported shocks, maternal and paternal characteristics (including education level), and caregiver's aspirations and expectations for his/her child. Finally the community questionnaire contains information on demographic, geographic and environmental characteristics, social environment, infrastructure, the economy, health and education.

Figure 1. *Young Lives data*



3.2. Definitions of the main variables and labour market indicators

The main labour market indicators are computed using information from the Older Cohort child questionnaire, which comprises three main sections: (i) labour market participation; (ii) list and characteristics of all economic activities the young people are involved in; and (iii) more information on the main activity (e.g. working arrangements and quality of work), defined as the activity the respondent has spent most time on in the last 12 months. The labour market participation section is answered by everybody, and refers to whether or not the young person has been involved in any paid and/or unpaid work activity for at least an hour over the last seven days and the last 12 months, and if not, whether they were searching for work. If the respondent reports that they have worked, they are asked about the characteristics of all economic activities and the main activity they have been involved; otherwise the interviewer skips these questions and moves to the next survey module.

The three labour market sections enable us to determine the young person's employment status (e.g. employed, unemployed, inactive) and working status (working only, working and studying, studying only, and neither working or studying) in the last seven days and the last 12 months. However, information on the characteristics of their economic activities, economic sector, type of occupation and earnings, only refers to the last 12 months' activities, which is one reason why we use the 12 months reference period for the present analysis. Additional information was collected on the quality of the past 12 months main activity (e.g. time spent working in the same activity, presence of job hazards, satisfaction with activity), as well as working arrangements of wage-dependent activities (e.g. availability of written contract, whether received any benefits, part of an union, and length of time working for the same employer). Table 1 provides a detailed description of the main labour market indicators used.[20]

Table 1. *Labour market indicators*

Labour force and inactive population	
Active population (or labour force)	Encompasses those who are employed in economic work and those who are unemployed, that is, those who are not working and are looking for work during the reference period (the past 12 months). It excludes housewives, domestic chores and students.
Employed	Refers to those who have worked for at least an hour in the past 12 months. It includes both paid (in cash and/or in kind) and unpaid working activities (which excludes housewives, domestic chores and students). For example, it includes those working in a farm owned or rented by a household member or someone who is not a household member, those working on their own account (self-employed) or in a business enterprise belonging to him/her or someone in their household.
Unemployed	Those who were not working but have been looking for work during the reference period.
Inactive	Those who are not working during the reference period and are not searching for a job. Some of the possible reasons for groups being inactive include: students, housewives, caring for others, pregnant, waiting for reply from potential employer, waiting for busy season, not interested, given up, idle (or on holiday), and preparing for exams or work.
Working status	
Working only	Those who are employed and not enrolled in education in the current academic year.
Studying and working	Those who are both employed and enrolled in the current academic year.
Studying only	Those who are not working (either unemployed or inactive) in the last 12 months, and enrolled in education in the current academic year.
Neither studying nor working (NEET)	NEET stands for persons not in employment, education nor training, during the reference period. They are either unemployed or inactive persons who are not students (or in training). Common reasons for this are being a housewife/childcare/pregnant, and illness or disability.
Dependent workers versus own-account (self-employed) workers Defined by combining information about the type of (main) activity and self-reported information about who the individual works for.	
Own-account worker (self-employed)	A person is self-employed if they report that they work on their own account and describe their work as any of the following: self-employed (small manufacturing business); self-employed (services); self-employed farmer (own plot); food crops; other (not related to agriculture); other (non-wage earner); other (related to agriculture); or other (not related to agriculture). An individual is also considered as self-employed if they are doing unpaid work for a household member (as a non-remunerated household member) (ILO 2015).
Dependent worker	A person is a dependent worker if they report that they work for a private or cooperative company, an individual, or the public sector/government, and describe their work as any of the following: wage employment (agriculture); part-time agricultural labourer; cattle farmer; forestry; fishing; waged worker; part-time labourer; housekeeper; other (related to agriculture); or other (not related to agriculture). An individual is also considered as a dependent worker if they are doing paid/unpaid work for a relative (who is not living in the same household) or paid work for a household member.

20 See Table A1 in the Appendix for the other variables used in this report's empirical analysis.

Table 1. *Labour market indicators* (continued)

Quality of job	
Excess hours	This identifies young people who report that they work more than 48 hours per week in their main activity (only).
Job hazard	This identifies young people whose main activity entails any of the following form of hazard (self-reported): carrying heavy loads; using dangerous tools such as machetes, knives and sickles; handling chemicals such as fertilisers, pesticides, solvents or paints; working under the hot sun or in the rain; working with or close to animals; working with insufficient lighting; working in a very noisy environment; working with fumes, gases, dust; being close to moving vehicles or driving; working in a smelly and/or dirty environment; working at heights.
Working arrangements The following attributes are asked only to dependent workers (with some variations across rounds)[21]	
Work duration	Number of months the young person has been working for their current employer (if still currently performing the reported main activity) or previous employer (if no longer performing the same main activity).
Written contract	This identifies young people who hold a written contract for their main activity as a dependent worker.
Benefits	This collects information about the type of benefits received: • Basic/necessities-type benefits, which include food, housing, transportation, clothing, and schooling. • Debt relief, social security, health insurance. • Paid benefits, which include paid holidays, sick leave, pension and maternity leave.

21 In Round 4 these were asked to all people in: wage employment (agriculture), wage employment (unsalaried/irregular; non-agriculture), regular salaried employment, or housemaid. In Round 5 these were asked to all people in: wage employment (agriculture), part-time agricultural labourer, forestry, waged worker, wage employment (unsalaried/irregular; non-agriculture), regular salaried employment, or housemaid.

4. Transitions into post-secondary education and work

4.1. Education trajectories from preschool to secondary and post-secondary education

We use longitudinal data from Young Lives to compare the educational trajectories of two birth cohorts. Table 2 reports school enrolment rates and school attainment (number of grades completed) at ages 12 and 15 for the Older Cohort (observed in 2006 and 2009) and the Younger Cohort (observed in 2009 and 2013). Table A2 in the Appendix reports results by gender, native tongue, and by three indicators strongly correlated to the socio-economic characteristics of the household: maternal level of education, wealth index and area of residence at age 8. By comparing the evolution of school enrolment and school attainment between and within cohorts we are able to understand the patterns of access to education over the life course, and possibly how these patterns changed over time. While results are not nationally representative, due to the sampling design, they are likely to be informative of educational trajectories in each of the countries.

Table 2. *Enrolment rate and highest grade completed at ages 12 and 15, comparing the two cohorts*

	Percentage enrolled in school				Highest grade completed			
	12 years old		15 years old		12 years old		15 years old	
	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)
India	90	97	78	91	5.62	5.47	8.17	8.35
Ethiopia	97	95	89	93	3.08	3.50	5.42	5.88
Peru	98	100	94	97	6.00	6.00	8.65	8.95
Vietnam	97	97	78	82	5.57	5.71	8.31	8.55

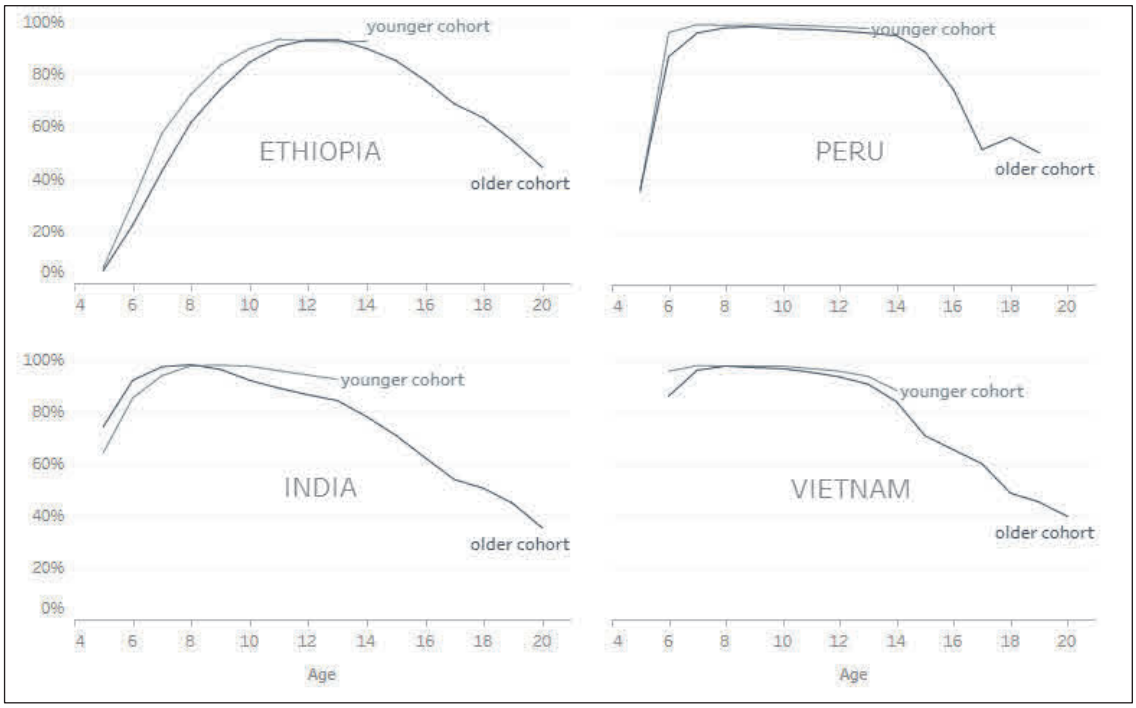
Notes: This only includes children who were interviewed in all five survey rounds. Information about enrolment is obtained from the 'current enrolment status' at the time of interview in the child questionnaire. Information on highest grade completed is obtained from the household roster, answered by the caregiver. However in the case of Peru, the question from the household roster asks about the grade the child is currently enrolled in, or the highest grade achieved if no longer in education. Hence, information for Peru is obtained from the children's education history.

In the Young Lives cohorts, school enrolment at age 12 was near universal in Ethiopia, Peru and Vietnam in 2006, and India reached a similar level in 2013. At age 15, school enrolment improved over time in the four country samples, particularly in India (Table 2). The enrolment rate at age 15 in India increased from 78 per cent for the Older Cohort in 2009 to 91 per cent for the Younger Cohort in 2016. In 2016, enrolment in education at age 15 was almost universal in Peru (97 per cent), and lower in Ethiopia (93 per cent) and Vietnam (82 per cent).[22]

In Ethiopia, the high school enrolment rate at age 15 hides late-age entry in education and slow grade progression, although these are less than in the past. Less than half of the Older Cohort start schooling at age 7 (Figure 2). This rate increased by 14 percentage points for Younger Cohort children at the same age, seven years later. However, it is still low in 2016: only 57 per cent of these children were enrolling 'on time' in terms of formal age for grade. Figure 2 shows that enrolment peaks at the age of 12/13 at 93 per cent for both cohorts in Ethiopia, and starts declining at the age of 14/15, when children are expected to be in their last year of primary school. However, this is not always the case.

22 Box 1 provides more information about each country's education system.

Figure 2. *Enrolment rates in formal education*



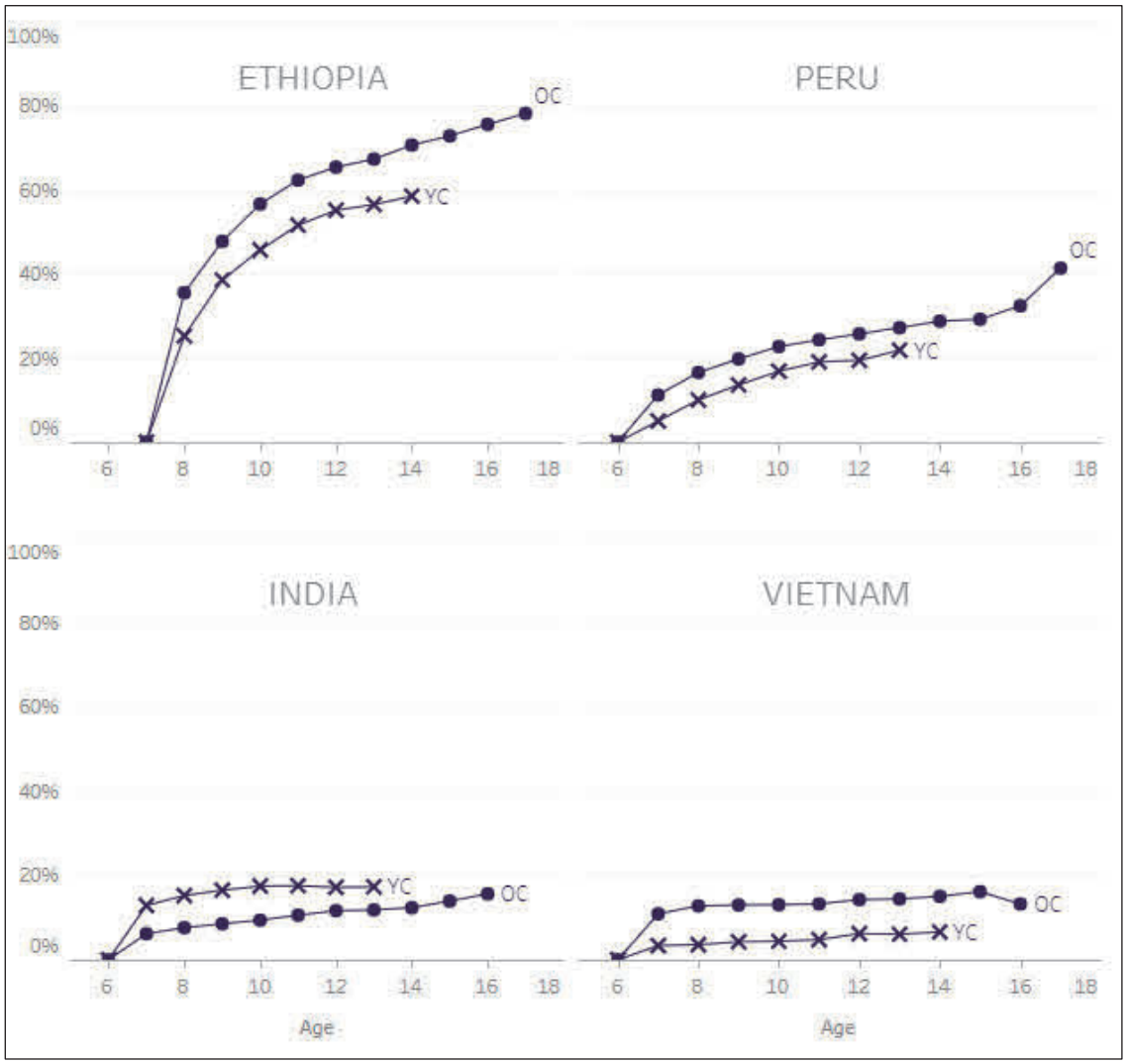
Note: An interactive version of this data is available at https://www.younglives.org.uk/content/enrolment-rates-gaps-formal-education-country-sites#overlay-context=.

At age 15, when students should leave primary education and transition to secondary education in Ethiopia, only 27 per cent of Older Cohort children progressed as expected. This is not surprising given the prevalence of over-age enrolment in primary education. Furthermore, the number of delayed students increases year on year. This signals a cumulative delay, that is, a slow progression through grades, as seen in Figure 3 which shows the percentage of Younger and Older Cohort students who are over-age for grade (older than the official entrance age for each grade). Many factors can be posited, including grade repetition linked to poor performance or absenteeism, re-entrance after a period of non-enrolment, and other circumstances.

Starting school at the norm-age and on-time grade progression has become more common than in the past in all countries, with the exception of India (Figures 2 and 3). The prevalence of over-age students in Ethiopia decreased in the seven-year period between the Older and Younger Cohort. In India, by age 12, when they should be in Grade 6 if they started primary school at age 6, about 12 per cent of the Older Cohort were found to be in a lower grade in 2009; this increased to 17 per cent for the Younger Cohort in 2016.

In Ethiopia, late enrolment combined with slow progression through grades still results in delayed education trajectories for those children who remain within the education system. At age 19, when it would be expected that they would be entering university education (following over 12 years of schooling), most of the young people in the Ethiopia sample have only completed eight to nine years of education.

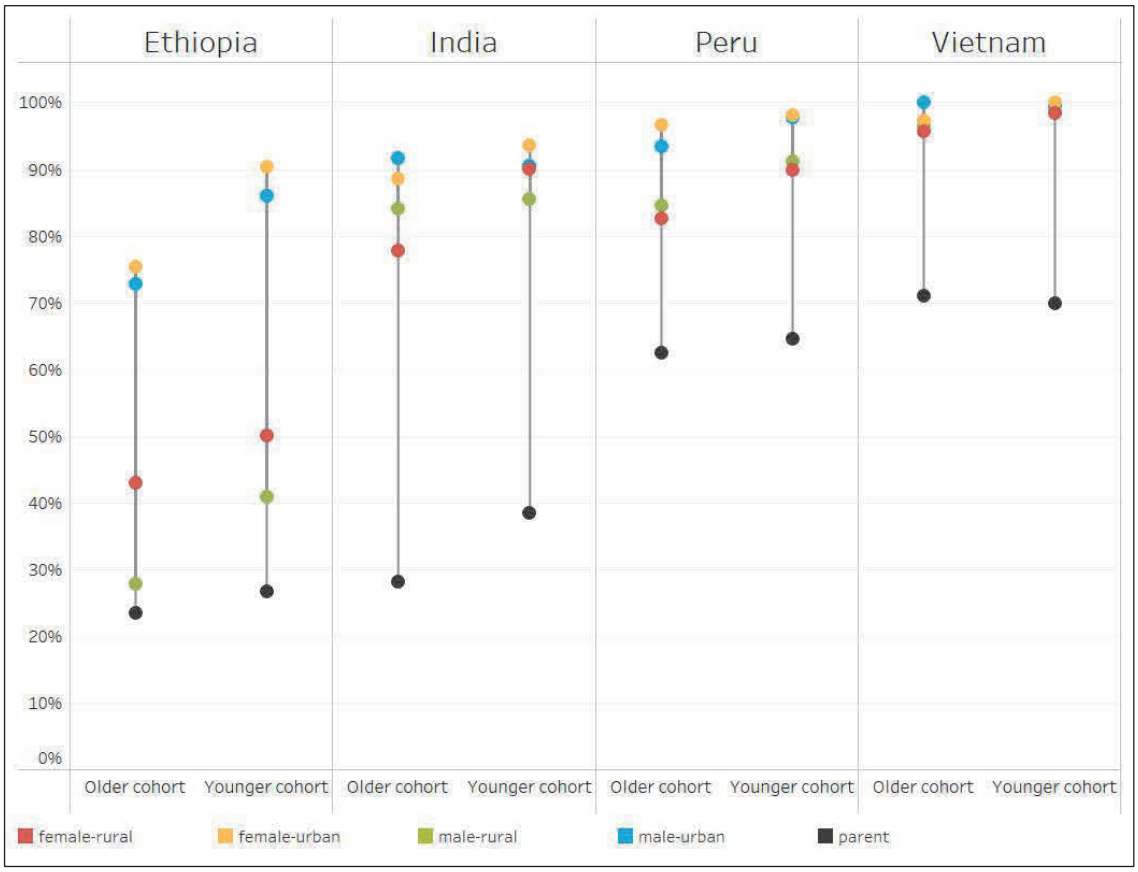
Figure 3. *Percentage of children over-age for grade*



Note: An interactive version of this data is available at https://www.younglives.org.uk/content/percentage-children-over-age-for-grade-all-country-sites#overlay-context=.

On average, children in the four countries stay longer at school and there have been intergenerational improvements in educational attainment, both in terms of an increase of secondary education graduates and a reduction in people without formal education. In all four countries, by age 15 the Younger Cohort completed a higher number of grades than the Older Cohort at the same age, seven years before (Table 2 and Table A2 in the Appendix). More young people than previously complete primary education, when comparing the Younger Cohort and the Older Cohort, and comparing both to their parents' primary school completion rate (Figure 4). This is true for both females and males living in urban and rural areas in all countries. This is the result of a combination of improvements in on-time start and grade progression, but also a decrease in dropout rates at age 15 over time.

Figure 4. *Primary education completion rates, comparing 15 year olds with their parents*

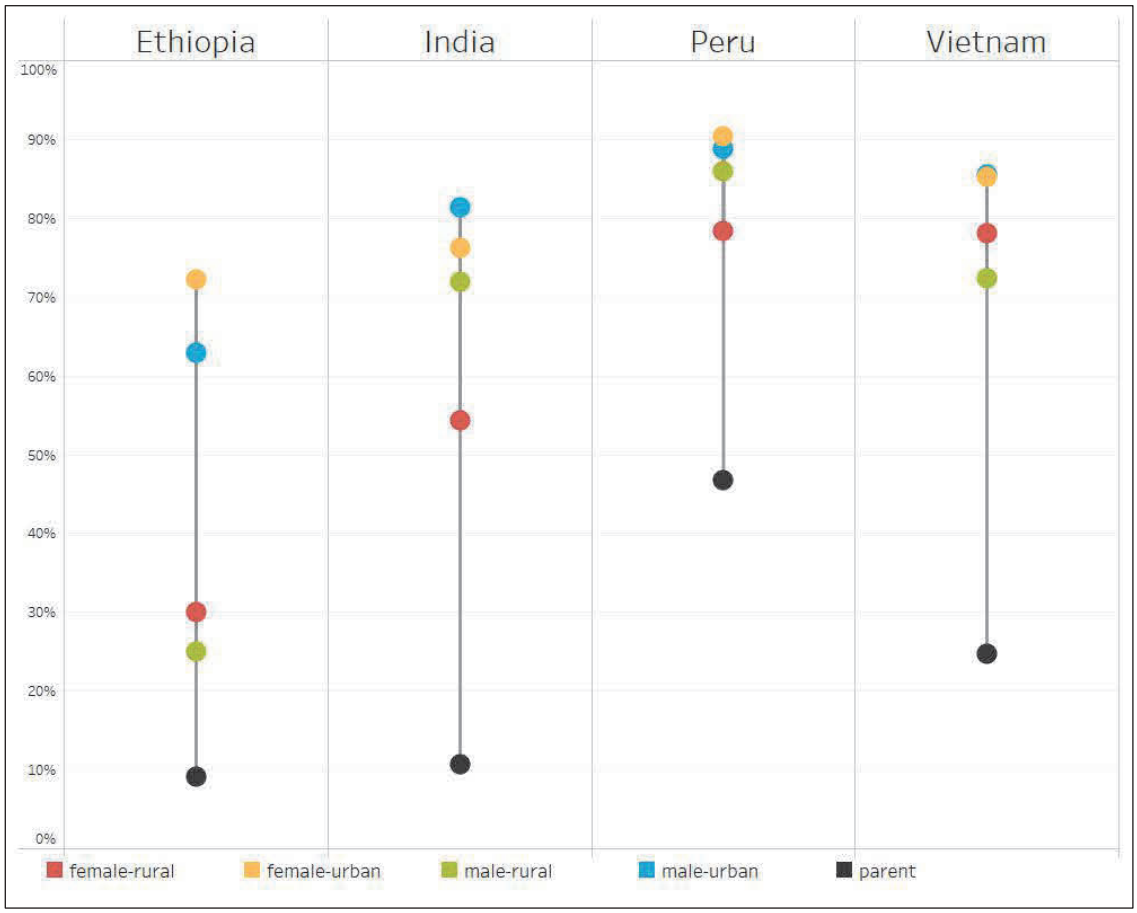


Notes: Primary school completion is computed as the percentage of children who finished Grade 8 in India, Grade 6 in Peru, and Grade 5 in Vietnam. In Ethiopia, while primary education is completed at Grade 8, for this figure the ISCED 2011 classification for Ethiopian primary education was used, which is Grade 6. Data for the Older Cohort are from Round 3, with data for the Younger Cohort from Round 5. Parental education used is from the biological parent with the higher educational attainment. Location information used is household location in Round 1.

From an inter-generational perspective, there have been substantial improvements in secondary and post-secondary completion rates. Data show that in Ethiopia far more 22 year olds have completed lower secondary education (Figure 5) and attained post-secondary compared to their parents (30.1 per cent of children and 6 per cent of their parents), with huge disparities between young people living in urban and rural areas, and a pro-girl gender bias (Table A3 in the Appendix).

In India, while 42 per cent of fathers had no formal education, no 22 year old in the Older Cohort was deprived of basic education (Table A3). There was also a large increase in lower secondary education completion (Figure 5), while only 7 per cent of fathers had post-secondary compared to 35 per cent of 22-year-old boys now (Table A3). The findings are very similar for girls, with 60 per cent of mothers having no formal education compared to only 0.4 per cent of girls in the sample. Some 31 per cent of 22-year-old girls have completed or are pursuing post-secondary education, compared to only 3 per cent of mothers. In Peru, the proportion of individuals who completed secondary school has more than doubled (from 39 per cent to 87 per cent), while the proportion that completed post-secondary has quadrupled (from 11 per cent to 46 per cent) (Figure 5 and Table A3). Similarly, in Vietnam the proportion of 22 year olds with some form of post-secondary education is almost four times that of parents with the same level of education (33 per cent versus 9 per cent, respectively) (Table A3).

Figure 5. *Lower secondary education completion rates, comparing 22 year olds with their parents*



Notes: Lower secondary school completion is computed as the percentage of children who finished Grade 10 in Ethiopia and India, Grade 9 in Peru and Vietnam. Data used are for the Older Cohort in Round 5. Parental education used is from the biological parent with the higher educational attainment. Location information used is household location in Round 1.

By age 22, a substantial proportion of the Older Cohort is enrolled or has completed post-secondary education. In Young Lives, enrolment in post-secondary education is observed for the Older Cohort. Those enrolled or that have completed post-secondary education (including attendance and awarding of degrees at universities, technical institutes, vocational institutes, and other institutes) account for 30 per cent, 41 per cent, 52 per cent and 54 per cent in Ethiopia, India, Peru, and Vietnam, respectively (Table 3). These enrolment/completion rates are higher than those observed in the previous round at age 19 (Sanchez and Singh 2018). This is in part related to the over-age rates observed in these countries at the basic education level (by age 19, a substantial proportion was enrolled in secondary education). However, these results mask important differences in the type of institution attended between and within countries. When focusing exclusively on university education, the largest rates of enrolment/completion are observed in India and Vietnam (34 per cent and 31 per cent, respectively, versus 26 per cent and 15 per cent in Peru and Ethiopia, respectively). Conversely, when focusing on vocational, technical and other institutes, the largest rate of enrolment/completion in is observed in Peru (26 per cent).

Table 3. *Enrolment/completion rates at the post-secondary education level, age 22*

	Ethiopia		India		Peru		Vietnam	
	%	N	%	N	%	N	%	N
Total	**30**	**814**	**41**	**922**	**52**	**608**	**54**	**910**
By gender								
Female	35	387	36	474	53	288	58	464
Male	26	427	47	448	51	320	49	446
By type of institution								
University	15	814	34	922	26	608	31	910
Vocational/technical/other institutes	15	814	8	922	26	608	22	910

Notes: Data used are from the Older Cohort. Post-secondary institutions include universities, technical institutes, vocational institutes, and in the case of Peru, pedagogical and artistic institutes.

Socio-economic gaps in post-secondary education are observed in all countries, and gender gaps are observed in all countries except Peru. A pro-male gap in post-secondary education is observed in India, while a pro-female gap is observed in Vietnam (Table 3). In the case of India, the pro-male gap is observed in universities and institutes, while in Vietnam the pro-female gap is observed in universities only (Table A4 in the Appendix). We also observe a pro-female gap in Ethiopia (Table 3), which seems only to relate to enrolment at vocational/technical/other institutes (Table A4). In all countries a substantial socio-economic gap (by area of location and wealth) in access to universities is observed, favouring those from urban areas or from the upper wealth tertile. A similar but smaller socio-economic gap is observed in access to institutes in Ethiopia, India and Vietnam, but no gap is observed in the case of Peru (Table A4). In general, these findings are similar to the patterns observed at age 19 (Sanchez and Singh 2018).

Despite improvements in recent years in school enrolment, primary and secondary completion, and access to post-secondary education, differences along socio-economic lines are observed in all country samples. Figures 4 and 5 highlight important differences in primary and secondary completion rates (respectively) by area of residence, especially in Ethiopia. Although these gaps have reduced over time (comparing the Younger Cohort and Older Cohort), they remain substantial in all cases, with the exception of Vietnam in the case of primary completion. In turn, these gaps resemble differences by maternal level of education and by wealth index, which are observable in all countries.[23] There are also substantial socio-economic gaps in access to post-secondary education, especially to university education.

4.2. Beyond basic and post-secondary education: vocational education and training

Formal education is not the only way Young Lives young people acquire skills for the labour market. **Overall, about 20 per cent report that in the past three years (since the last interview) they undertook training** that lasted for at least one week and entailed skills acquisition that helps them conduct or find work, but was not part of their formal education. As defined in Young Lives, training includes any of the following: formal training, informal training,

23 See Tables A2 and A3 in the Appendix.

apprenticeships, and public training programmes.[24] Table 4 reports the characteristics of training involving the Older Cohort across all country sites.

At age 22, between 24 per cent of young people (in India, the country with the highest prevalence of training enrolment) and 17 per cent (in Ethiopia, the country with the lowest prevalence) had been involved in at least one training programme in the last three years. In Peru, an additional 32 per cent of young people had attended a language course or a course to prepare for a university/technical institute/other institute admission exam by age 22. In Ethiopia and Peru, the majority of those who undertook training between ages 19 and 22 were involved in formal training. Informal training was more prevalent in India and Vietnam, particularly at age 19, with a tendency to shift into formal training by age 22. In all countries except Vietnam, apprenticeship take-ups are quite low (below 10 per cent), but are about 30 per cent in Vietnam. In Ethiopia, India and Peru, where formal training is more prevalent, only about 60-75 per cent of trainees expect to receive or have received a certificate after their training.

As expected given the limited coverage of public training programmes at the national level in the four countries, a small proportion of Young Lives samples (less than 5 per cent) attend public training programmes. This proportion is substantially higher in India, where at age 19 more than one out of 10 young people attended at least one public training programme.

Table 4. *Prevalence of training at age 19 and 22 across the four countries*

	Ethiopia				India				Peru				Vietnam			
	19 years old		22 years old		19 years old		22 years old		19 years old		22 years old		19 years old		22 years old	
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N
Involved in training (undergoing/completed)	12%	785	17%	784	23%	917	24%	908	13%	574	19%	578	13%	829	18%	832
# training programmes (undergoing/completed)	1.1	91	1.1	131	1.0	211	1.1	215	1.1	75	1.1	108	1.0	104	1.2	148
Completed training (%)	84%	91	86%	131	72%	211	78%	215	91%	75	91%	108	68%	104	86%	148
Type of training undergoing/completed																
Formal training	44%	91	72%	131	23%	211	43%	215	87%	75	86%	108	32%	104	35%	148
Informal training	57%	91	31%	131	56%	211	51%	215	5%	75	11%	107	41%	104	46%	148
Apprenticeship	1%	91	2%	131	9%	211	2%	215	4%	75	4%	107	28%	104	23%	148
Public programme	0%	91	1%	131	12%	211	5%	215	4%	75	1%	107				
Characteristics of formal training																
Received/expected certificate after training (%)	73%	40	75%	97	64%	72	72%	105	56%	45	68%	91	34%	62	51%	85
Duration of all training (undergoing/ completed) in weeks	16.1	73	11.9	119	14.9	198	14.6	198	11.0	75	8.8	108	15.8	71	15.0	128

Notes: Data from the Older Cohort are used. Discrepancy in the sample is due to those who reported having undergone training but did not provide any information regarding the training. Certificates are recorded for all types of training except informal training. 'Duration of all training (undergoing/completed) in weeks' includes both the duration of the training for those who completed it and the expected duration for those undergoing it. Outliers reporting a training duration longer than 100 weeks (two years) have been removed (about 30 observations in India).

24 Formal and informal training is self-reported information and the definition about what to consider formal training is not specified by the interviewer. Respondents seem to be more likely to report training to be formal when a certificate is provided after completion. Public programmes include: MSE in Ethiopia; Mahila Vikasa Kendrams, Rajiv Gandhi scheme for adolescent girls (REGSEAG/SABLA) in India; National Target Program on Employment 2012-2015 and the National Target Program on Education and Training 2012–2015 in Vietnam; and Projoven/Jovenes a la obra, Vamos Peru and Trabaja Peru in Peru. In Vietnam, while the option was available for public programmes, none were reported.

4.3. Skills profile and other background characteristics of those enrolled in post-secondary education

The previous sub-section showed that access to primary education is close to universal, secondary education enrolment is substantially higher, and completion is more likely than in the past. At the same time, socio-economic gradients at all education levels are still marked across all the countries. This suggests that household poverty plays a role in defining educational trajectories, and this is likely to have implications for labour market outcomes. The literature on the returns on education shows that access to tertiary education is an important factor to explain earning differences in the labour market (Psacharopoulos and Patrinos 2004). Moreover, recent evidence shows that the private returns to tertiary education are the largest among all the education levels (Montenegro and Patrinos 2014). For this reason, this sub-section explores the association between aspects related to early-life household poverty and access to post-secondary education (enrolment or completion). Among different aspects, we emphasise the skills profile (where skills are measured both prior and contemporaneously to the transition to post-secondary education) of young adults according to whether or not they make it to this education level.

Table A5 in the Appendix shows how the characteristics of those enrolled or who have completed post-secondary education differ compared to the rest of the samples at age 22 in five dimensions that are also related to poverty (see Table A1 for a detailed definition of these indicators): (a) child, household and family characteristics measured at age 8; (b) own and parental educational aspirations at ages 12 and 15; (c) skills measurements, including cognitive achievement test scores (in maths and vocabulary) at ages 8, 12 and 15, and aspirations and psychosocial competencies (e.g. pride, agency, self-esteem and self-efficacy) at ages 12, 15, 19 and 22; (d) recent household socio-economic status at ages 15, 19 and 22; and, (e) whether the individual is married/cohabitating and/or has a child at age 19 and 22.

Across all countries, those in post-secondary education are more likely to come from more advantageous household backgrounds, and to report higher levels of cognitive achievement, psychosocial competencies and aspirations during childhood and adolescence. A greater proportion come from and grow up in urban areas, in less poor and more educated households, and tend to be better off in terms of health and nutrition since young. Furthermore, they consistently show better cognitive skills and socio-emotional competencies throughout their childhood and adolescence. They perform better in numeracy tests (at ages 8, 12 and 15) and literacy tests (at ages 12 and 15) and, with some variations across countries, report higher levels of self-esteem and self-efficacy – and the related concepts of pride and agency – at all ages, compared to their peers who have never enrolled in post-secondary education or who have dropped out.

Unsurprisingly, the majority of those enrolled or who completed post-secondary education are mostly still enrolled in education, compared to those who have not. Mirroring their current status, those who are in post-secondary education (or have completed it) had higher educational aspirations at ages 12, 15 and 19, along with their parents.[25] It is worth noting that the relatively high proportion of young people in education by age 22 (19 per cent) combined with low secondary completion rate in Ethiopia compared to the other countries, possibly reflects the late enrolment age into formal education and the slow grade progression in the country. Finally, those that get married, cohabit, or have a child by age 19 or 22 are less likely to be enrolled in post-secondary education. All of these differences are statistically significant.

25 Parental aspirations were not collected in India at age 15.

Box 1: Characteristics of the education system in the Young Lives countries

In all the study countries, basic education comprises of preschool, primary and secondary levels. More details about the each country's education system are below.

In **Peru**, enrolment in basic education is legally compulsory from 5 years old, but in practice this is not enforced. Preschool education is available at crèches and kindergartens (for 0 to 2 and 3 to 5 year olds, respectively, which corresponds to Cycles I and II of the seven learning cycles defined by the Ministry of Education). Primary education is available from 6 years old and consists of six grades, with the secondary level consisting of five grades. With higher education, a distinction can be made between university institutions (which require at least five years to obtain a bachelor degree) and non-university institutions, which require one, two, or three years depending on the degree (auxiliary technician, technician, and professional technician). Some non-university institutions (pedagogical and artistic institutes) provide degrees equivalent to university degrees. In addition, Productive Technical Education Centres (CETPROS) provide vocational degrees. CETPROs do not require a secondary level certificate for admission, whereas university and technical institutes do. Our definition of post-secondary education for Peru includes higher education and vocational institutes.

The education system in Peru

Stage	Level	Cycle/grade/type	Expected entrance age	Minimum expected duration (years)	Certificate/degree
Basic education	Preschool	Cycle I	0	2	NA
		Cycle II	3	3	Record of Assessment
	Primary education	Grades 1 to 6 (Cycle III to V)	6	2	Primary Education Certificate
	Secondary education	Grades 9 to 11 (Cycle VII)	12	3	Secondary Education Certificate
Higher education	University	Undergraduate studies	17	5	Bachelor and Professional
	Non-university (colleges and institutes)	Technology institutes (excl. armed forces colleges)	17	1 / 2 / 3	Auxiliary Technician / Technician / Technician Professional
		Armed forces colleges for non-professional track		3	Technician Professional
		Pedagogical and artistic institutes and schools, and armed forces colleges for professional track	17	5	Bachelor and Professional (equivalent to university degree)
	University	Graduate studies	22	2 / 3	Master / Doctor
Productive technical education (vocational education)		Basic cycle	Since 14	1	Auxiliary Technician
		Medium cycle	Since 14	2	Technician

Note: In our definition of post-secondary education we include higher education and vocational education.

In **Ethiopia**, enrolment into formal education is generally later than in the other study countries. Preschool education starts in kindergarten at about age 4 for approximately three years. Thus, the expected age of enrolment into primary education is about 7 years old, for eight years until Grade 8. Secondary education includes lower secondary education or First Cycle up to Grade 10, and higher secondary education or Second Cycle up to Grade 12. Post-secondary education includes both university (requires completion of Grade 12) and non-university (usually requires completion of at least Grade 10, except for secondary education, teacher, which requires Grade 12).

The education system in Ethiopia

Stage	Level	Cycle/grade/type	Expected entrance age	Minimum expected duration (years)	Diploma/certificate
Basic education	Preschool	Kindergarten	4	3	Kindergarten Certificate
	Primary education	Grades 1 to 8	7	8	Grade 8 Completion Certificate
	Secondary education	Grades 9 to 10 (First Cycle)	15	2	Ethiopian General Secondary Education
		Grades 11 to 12 (Second Cycle)	17	2	Ethiopian Higher Education Entrance Certificate
Post-secondary education	University	Undergraduate studies	19	3 / 4	Bachelor's
		Graduate studies	22	2 / 3	Masters / PhD
	Non-university	Technical/Vocational Education Training (TVET)	17	5	TVET Certificate (Levels 1 to 5)
		Preschool Teaching Certificate Programme	17	2	Preschool Teaching Certificate
		Primary Teaching Certificate Programme (First cycle: Grades 1 to 4)	17	3	First Cycle of Primary Teaching Certificate
		Primary Teaching Certificate Programme (Second cycle: Grades 5 to 8)	17	3	Second Cycle of Primary Teaching Certificate
		Secondary education, teacher	19	4	Diploma / Bachelor

In **India**, enrolment into preschool starts at age 3, for an average of one to two years. Primary and secondary education in Andhra Pradesh and Telangana are slightly different to the rest of India; primary education consists of Grades 1 to 5, and upper primary is from Grades 6 to 7 (usually Grades 6 to 8 in the rest of India). Secondary education consists of high school at Grades 8 to 10 (usually Grades 9 to 10 in the rest of India), and senior secondary at Grades 11 to 12. Similarly to the other countries, post-secondary is separated into university (requires completion of Grade 12 to proceed) and non-university, which consists of vocational studies and post-secondary technological institutes.

The education system in India

Stage	Level	Cycle/grade/type	Expected entrance age	Minimum expected duration (years)	Diploma/certificate
Basic education	Preschool	Early childhood education	3	1 / 2	Pre-primary Certificate
	Primary education	Grades 1 to 5	6	5	Primary Certificate
		Grades 6 to 7	11	2	Upper Primary Certificate
	Secondary education	Grades 8 to 10	13	3	Matriculation Certificate
		Grades 11 to 12	16	2	Senior Secondary School Leaving Certificate
Post-secondary	University	Undergraduate studies	18	3 / 4	Bachelor's
		Graduate studies	21	2 / 3	Masters / PhD
	Non-university	Post-secondary technological institute	13	1-2 / 2-4	ITI certificate
		Other vocational	16	2-3	Diploma in Technical Education

In **Vietnam**, basic education covers preschool up to secondary education. Children start school in crèches at about the age of 3 months for three years, and enter preschool at age 3. Their enrolment into formal primary education starts at age 6 for five years, then for four years in secondary education between Grades 6 to 9 (lower secondary education), and another three years between Grades 10 to 12 (upper secondary education). The minimum qualification needed before moving into most higher education is upper secondary education, except for professional technical secondary education where students only need to complete lower secondary education. Post-secondary education here is categorised generally as university (undergraduate and graduate studies) and non-university (professional vocational or technical secondary education, and higher education, collegiate programmes). A separate form of education is the Centre for Continued Education, which is a non-formal type of education.

The education system in Vietnam

Stage	Level	Cycle/grade/type	Expected entrance age	Minimum expected duration (years)	Diploma/certificate
Basic education	Preschool	Creche	3 months	3	N/A
		Preschool	3	3	N/A
	Primary education	Grades 1 to 5	6	5	Primary education
	Secondary education	Grades 6 to 9	11	4	Lower Secondary Completion Certificate
		Grades 10 to 12	15	3	Upper Secondary Graduation Diploma
Post-secondary	University	Undergraduate studies	18	4 to 6	Bachelor's
		Graduate studies	22	2 to 4	Masters / PhD
	Non-university	Professional vocational secondary education	18	1 to 2	Professional Vocational Secondary Education Diploma
		Professional technical secondary education	15	3 to 4	Professional Technical Secondary Education Diploma
		Higher education, collegiate programmes	18	3	College Degree
Centre for Continued Education (non-formal student)			N/A	N/A	N/A

5. Profile of jobs: who, where and how do young people work?

5.1. Participation in the labour market at ages 19 and 22, and job quality

Data from the Older Cohort show that **labour force participation was already quite high at age 19 across all countries, and increased substantially between age 19 and 22, as young people transition out of education into the labour market** (Table 5). The majority of the young labour force is employed, and unemployment rates are generally low (below 6 per cent) across all countries, consistent with national statistics. The employment rate is highest in Vietnam (83 per cent at age 19 and 92 per cent at age 22) and lowest in India (62 per cent at age 19 and 67 per cent at age 22). Notably, in all countries, the proportion of those employed substantially increases between ages 19 and 22 alongside a reduction in the proportion of inactive students, indicating an obvious transition out of education and into employment.

Table 5. *Employment status at ages 19 and 22 (all countries)*

	Age 19					Age 22				
	(%)		t-test		N	(%)		t-test		N
	Total	Male	Female	p-value		Total	Male	Female	p-value	
Ethiopia										
Inactive	24	15	34	0.000	908	17	12	23	0.000	813
Employed	74	84	64	0.000	908	78	86	70	0.000	813
Unemployed	2	1	3	0.080	908	5	3	7	0.004	813
India										
Inactive	37	26	47	0.000	952	29	14	43	0.000	913
Employed	62	74	51	0.000	952	67	81	53	0.000	913
Unemployed	1	1	2	0.097	952	4	5	4	0.613	913
Peru										
Inactive	23	17	29	0.000	619	13	8	19	0.000	596
Employed	73	79	66	0.000	619	84	90	77	0.000	596
Unemployed	5	4	5	0.746	619	3	2	4	0.174	596
Vietnam										
Inactive	16	12	19	0.008	880	6	5	7	0.177	910
Employed	83	86	80	0.017	880	92	93	91	0.165	910
Unemployed	2	2	2	0.678	880	2	2	2	0.696	910

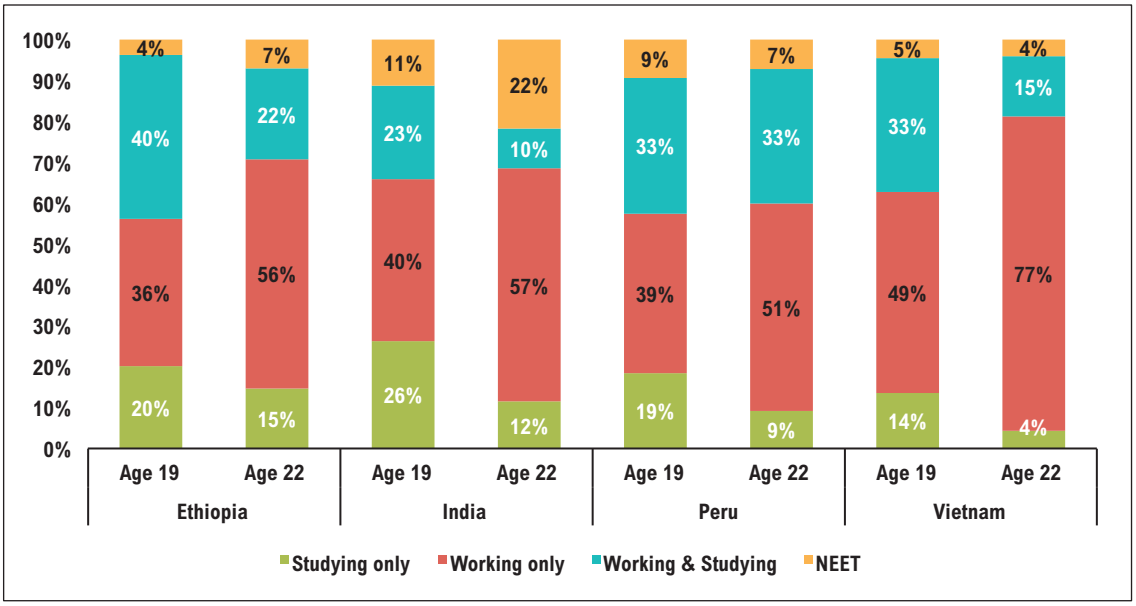
Note: An interactive version of this data is available at https://www.younglives.org.uk/content/employment-status-by-country-sites.

Labour force participation is lower for females than males in all countries at age 19, and in all countries except Vietnam at age 22. Results are driven by higher rates of inactivity among females, particularly in India (Table 5). India has the highest inactivity rate (29 per cent), mainly due to a high inactivity level among females; at age 22, only 57 per cent of females are either employed (53 per cent) or unemployed and looking for job (4 per cent), with 43 per cent inactive (against 29 per cent of males). Inactivity is very low in Vietnam (only 6 per cent of 22 year olds are inactive, mainly because they are still in education) and below 20 per cent in both Ethiopia (17 per cent) and Peru (13 per cent). In all countries inactive males are more likely to be students and inactive females more likely to be housewives and carers.[26] It is noteworthy that in Vietnam labour force participation is similar for males and females at age 22.

26 See Table A6 for the full table.

The transition from education to labour market is gradual. At ages 19 and 22, a significant proportion of individuals continue combining formal education and work in all countries, being lowest in India (23 per cent) and highest in Ethiopia (40 per cent) (Figure 6). About three to five out of 10 young people (depending on the country) are exclusively working at age 19. Growing up, there are fewer young people studying only, and more exclusively working or not in education, employment or training (NEET).

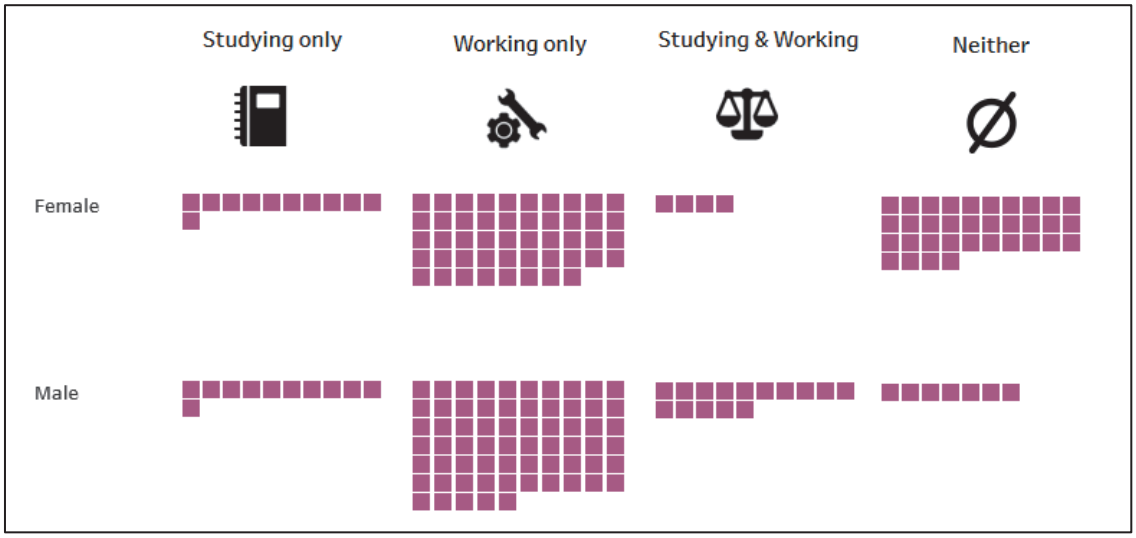
Figure 6. *Working and studying status at age 19 and 22, all countries*



Note: An interactive version of this data is available at https://www.younglives.org.uk/content/working-and-studying-status-by-country-sites.

The transition to work is happening earlier for young men than for women. In all countries, 19-year-old males are more likely to be working only, compared to their female peers. As reflected by high inactivity rates, the proportion of NEET is the highest in India, starting at age 19 and increases at age 22, particularly among females as a result of early family formation and fertility (Figure 7).

Figure 7. *Working and studying status at age 22 in India, across gender*



Note: An interactive version of this data is available at https://www.younglives.org.uk/content/working-and-studying-status-by-country-sites.

Most of the employed young labour force work as dependent workers, and increasingly so as they grow up, in all countries except Ethiopia, where self-employment is prevalent (Table 6). Across all countries, most own-account workers work in unpaid jobs (e.g. that would be the case for self-sufficient farmers), whereas most dependent workers are paid. At age 22, there is an increase in the proportion of dependent workers across all countries, possibly indicating the progressive movement out of education as more young people move into (exclusively) work, and possibly a movement out of agriculture activities (discussed in Section 5.3).

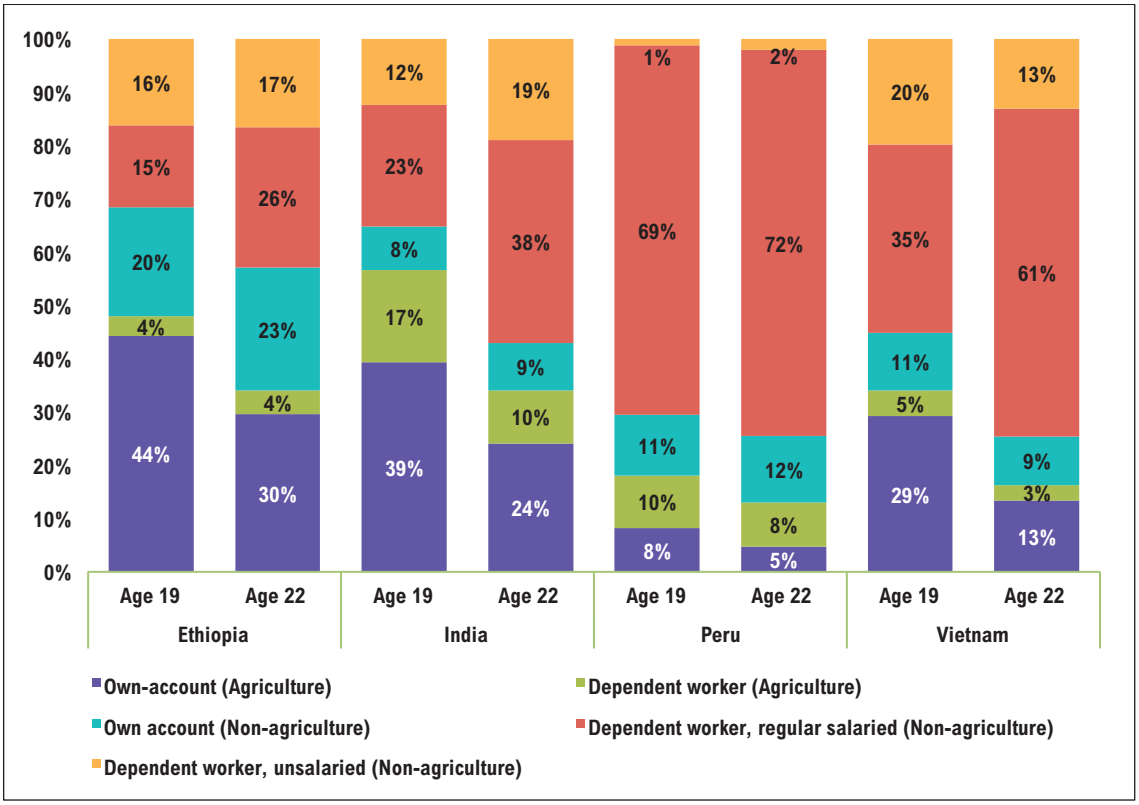
There are few significant differences when comparing the types of work males and females pursue in all countries. In India at age 22, females are less likely than males to be working as a dependent worker, but more likely to be doing unpaid work as a self-employed worker – most of whom are unpaid family workers, working for a household member (in the same household) (Table 6). This is also true in Peru, while in Vietnam more self-employed males than females are likely to be unpaid.

Table 6. *Type of main activity done by employed young people at ages 19 and 22, by country*

	Age 19				Age 22			
	(%)			t-test	(%)			t-test
	Total	Male	Female	p-value	Total	Male	Female	p-value
Ethiopia								
Own-account workers	63	63	64	0.919	52	55	49	0.206
Paid	11	13	8	0.020	15	17	13	0.102
Unpaid	52	50	56	0.119	37	37	37	0.926
Dependent workers	37	37	37	0.919	48	46	51	0.206
Paid	34	33	34	0.910	44	43	45	0.552
Unpaid	3	3	3	0.556	4	3	5	0.071
India								
Own-account workers	47	46	49	0.529	33	26	43	0.000
Paid	7	5	9	0.117	5	5	6	0.572
Unpaid	41	41	40	0.880	28	22	37	0.000
Dependent workers	53	54	51	0.529	67	74	58	0.000
Paid	47	52	39	0.003	64	71	53	0.000
Unpaid	6	2	12	0.000	3	3%	4	0.495
Peru								
Own-account workers	20	19	22	0.381	17	18	16	0.566
Paid	8	10	6	0.129	11	13	7	0.032
Unpaid	12	9	16	0.019	6	5	9	0.070
Dependent workers	80	82	78	0.381	83	82	84	0.566
Paid	77	79	74	0.196	79	78	80	0.500
Unpaid	3	2	4	0.264	4	5	4	0.766
Vietnam								
Own-account workers	41	38	43	0.223	22	23	21	0.448
Paid	7	7	7	0.896	7	6	9	0.158
Unpaid	34	31	36	0.183	15	17	12	0.052
Dependent workers	60	62	57	0.223	78	77	79	0.448
Paid	52	54	51	0.407	75	73	76	0.301
Unpaid	7	8	6	0.472	3	4	3	0.427

The type of work accessible to young people changes as they grow up, shifting from agriculture to non-agriculture work. Across the country sites, children were initially mainly involved in agricultural work, with the exception of Peru. Growing up, they tend to move out of agriculture, possibly migrating to find jobs in urban areas. Most young people in the four study countries have left agriculture by age 22 and are working mainly as dependent workers in other sectors (Figure 8). The transition out of agriculture in India happens at a later stage than in the other countries: six out of 10 young people in India are still working in agriculture at age 19.

Figure 8. *Type of main activity pursued in the last 12 months at ages 19 and 22, by country*



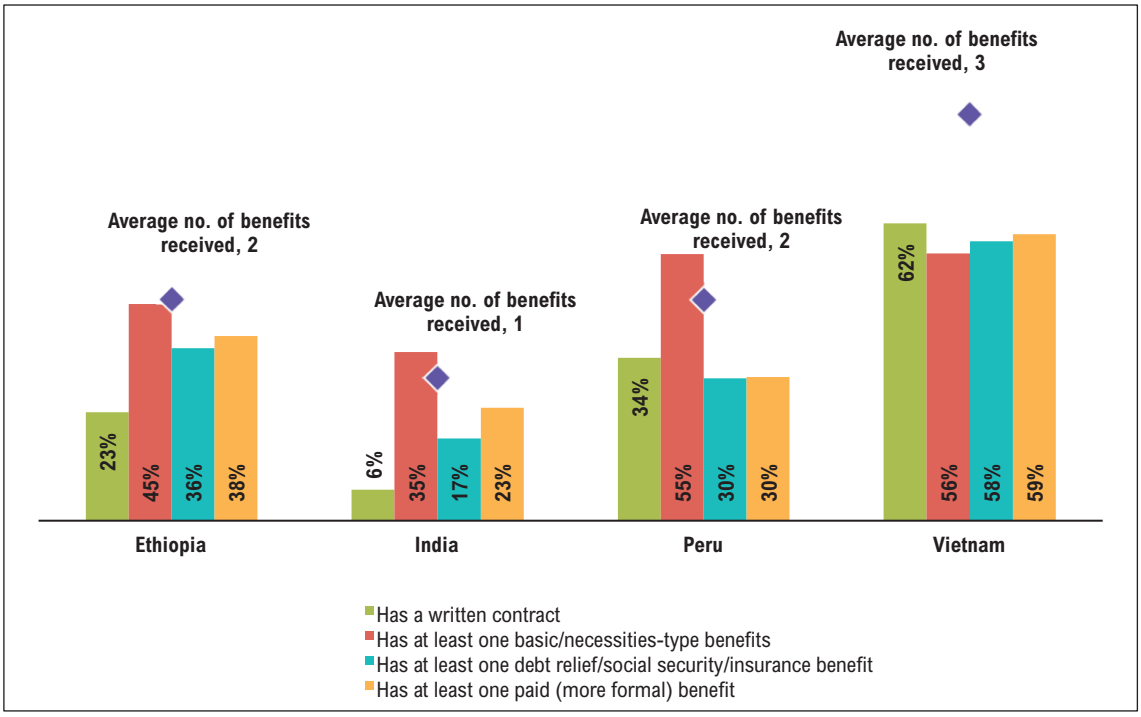
Note: An interactive version of this data is available at https://www.younglives.org.uk/content/type-of-main-activity.

At age 22, more females than males work in non-agriculture activities across all countries except India, where 52 per cent of females and 76 per cent of males work in non-agriculture (predominantly as salaried wage workers) (see Table A7 in the Appendix).

Working in more than one activity and working over 48 hours per week is quite common among 22 year olds in the four countries. Most employed young people are involved in more than one work activity at the same time, and almost one out of two work more than 48 hours per week in their main activity (Table A7). Reasonably, they do so to have enough money to live.

Working conditions are often poor. The work of seven to eight out of 10 dependent workers entails some form of hazard in all countries (Table A7). Only two to three out of 10 22-year-old workers have a written contract in Ethiopia and in Peru (Figure 9 and Table A7), and in India only 6 per cent of young workers have a written contract. Finally, only three to four out of 10 young workers received social security in Ethiopia and Peru, and two out of 10 in India. Vietnam is the exception, given the strict regulations and the role played by public-owned enterprises, with about six out of 10 workers having a written contract and an equal proportion entitled to receive social security benefits.

Figure 9. *Working arrangements of waged work at 22 years old, by country*



5.2. Characterising the young labour force

As mentioned above, the transition to the labour market is gradual in all four countries. Indeed, a substantial proportion of young people combine work and studies, and progressively more young people then abandon education to dedicate themselves exclusively to economic activities, or become inactive as a consequence of childbearing and new family formation. These four population groups (studying only, working only, working and studying, and NEET) are quite different to one another. In an attempt to understand the extent to which these groups differ from one another, Table A8 in the Appendix reports the socio-economic characteristics of each group; their skills profiles, aspirations and educational attainments measured at different ages.[27] The p-values from the t-tests for difference in means when comparing each group to their peers are also reported alongside their means. Similarly, Table A9 profiles own-account workers compared to dependent workers.

5.2.1. Studying only

In all countries, those who are studying only grew up in richer and better-educated households than their peers, and they are still living in relatively richer families and most likely in urban areas as young adults. In Ethiopia, India and Vietnam there is a higher proportion of young people who are studying only who come from urban backgrounds and are still living in urban areas. Ethiopia is the only country where more young women than men are studying only, while gender composition is balanced in the other countries.

Across all countries, those who are studying only also have smaller households, with fewer siblings, and in Peru a higher proportion come from single parent households. In Peru, India and Vietnam, fewer are the first born in the family, which possibly alleviates the pressure of having to take on responsibilities for their natal families.

27 The variables used are described in Table A1 in the Appendix.

The proportion of 19 year olds who are married or cohabiting is lower among those who are studying only than their peers, and the gap tends to grow wider at age 22. This is true in all countries. In India, the country with the highest fertility at age 19, only 1 per cent of those who are studying only get married or have a child, compared to 22 per cent of their peers.

In all countries, those who are studying only have parents/caregivers that tend to have higher educational aspirations, with a large majority aspiring for the child to complete university. In Ethiopia, India and Vietnam, parents/caregivers expect that the children will leave the house/or be married, and/or financially independent at an older age (one to two years later), compared to their counterparts.

Unsurprisingly, **most of those who are studying only completed secondary education and tend to perform better than their peers in both numeracy and literacy tests at all ages.** Almost all of those in Peru and in Vietnam had completed secondary education, and more than twice as many had, compared to their peers, in India. In Ethiopia, the proportion of secondary completion is lower compared to the other countries.

Finally, those who are studying only tend to score higher in the non-cognitive tests, particularly at younger ages, with some variation across countries.[28]

5.2.2. Working and studying

Overall, those young people studying only and those combining working and studying, are quite similar in many aspects. As with those who are studying only, the young people who balance work and studies primarily come from richer and more-educated households compared to their peers, even if in this case the differences are less marked. **However, a substantial proportion of those combining working and studying have grown up in the poorest families** (about four out of 10 in Ethiopia, India and Peru, and one to two out of 10 in Vietnam), a proportion that is much higher than among those who are studying only. In Peru and Vietnam, the majority grew up and continued living in urban areas, while in Ethiopia and India, a higher proportion live in rural areas than in urban areas compared to others at age 22. In India and Ethiopia, more young men than women are combining work and studies compared to their peers.

Similarly to those who are studying only, in Peru and Vietnam those combining working and studying are less likely to be the first born in the family. Also, they had **grown up in smaller households**, and tend to have fewer siblings than their peers.

Overall, this group grew up with **higher educational aspirations** than their peers, particularly compared to those who are working only or NEET. In Peru, India and Vietnam their caregivers expected them to get married, support the household or become financially independent at a later age compared to their peers (about half to one year later). **Few young people who are combining studying with working are married/cohabited/have a child by ages 19 and 22** (1 and 5 per cent in Ethiopia, 16 and 26 per cent in India, 5 and 12 per cent in Peru, and 2 and 7 per cent in Vietnam).

28 So, for example, in Peru their pride score at age 15 and agency at age 19 is significantly higher than their peers, while by age 22 they are less emotionally stable than their peers. In Ethiopia, they also have a higher pride and agency score at ages 12 and 22, higher conscientiousness score at age 22, and score lower on the depression scale. In India, they also have a higher pride score at ages 12, 19 and 22 and higher agency score at ages 15 to 22. Their self-esteem is higher at age 19, and self-efficacy higher at ages 19 and 22. There is no difference in their grit and neuroticism score at age 22. In Vietnam, those who are studying only had higher agency score at ages 15 and 22. There is no difference in self-esteem and self-efficacy at ages 19 and 22 and they score lower in the depression scores at ages 19 and 22. In Ethiopia, India and Vietnam, young people who are studying only seem to be better leaders than their peers, and in Ethiopia and India they are also more able to work in a team. In Ethiopia and Vietnam they tend to be more gender-egalitarian than their peers.

To a lesser extent than the group that only studies, these youth **perform better than their peers in their cognitive tests**, with some variation across countries, the gap being more marked in Peru and Vietnam than in India and Ethiopia. Not surprisingly, **a greater proportion of this group have completed secondary education** compared to others, except in Ethiopia where the reverse is true.

When comparing young people who are working and studying to their peers across countries, their non-cognitive skills profile varies quite substantially.[29] Interestingly, they have **higher teamwork and leadership scores** in all countries.

5.2.3. Working only

Those who are working only (mostly men in all countries, except Vietnam) grew up in poorer and less-educated households relative to their peers. Most come from (and still live in) rural areas in all countries, with the exception of Peru, where they are more likely to have grown up in rural areas but most are now living in urban areas. In all countries except Ethiopia, a greater proportion are the oldest child in the family, grew up in larger households (more likely to be single-parent households in Peru), and have more siblings.

In essence mirroring their current status (11 per cent in Ethiopia, 34 per cent in India, nearly half in Vietnam, and 75 per cent in Peru completed secondary education), these youth (and their main caregiver) had **lower aspirations to complete university than their peers, which might indicate a condition of persistent poverty**. Their caregivers expected the child to be able to support the household at a younger age (about a year younger in Peru and Vietnam and one and a half years in India), to be financially independent one year younger in India and Vietnam, and to get married and leave the household one year earlier in Vietnam. Interestingly, no significant differences in parental expectations were found in Ethiopia.

In all countries those who are working only are more likely to get married/cohabit/have a child during adolescence. In Ethiopia, Peru and Vietnam, the proportion of those married/cohabiting/parents by age 22 is about double that of their peers.

In terms of cognitive scores, **those who are working only score consistently lower than others in reading and mathematics tests in all countries and at all ages.** They also have lower leadership (in Ethiopia, Peru and Vietnam) and lower teamwork (in India) scores than their peers.

Finally, **overall those who are working only have a poorer non-cognitive profile and in Ethiopia are more likely to have poorer mental health**.[30] In all countries they tend to have a **more traditional view of gender roles**.

29 In Ethiopia, they have a lower pride score at age 22, a higher agency score at ages 19 and 22, but there are no differences in other non-cognitive skills. In India, they have higher pride scores at age 12, but this reverses by age 22. They have higher agency scores and lower depression scores at ages 19 and 22, and a higher self-efficacy score at age 22. In Peru, they consistently have higher agency from age 15 onwards, as well as higher scores for self-esteem and grit at age 22. Their profile in terms of pride is less clear, being lower than their peers at age 8 and then higher at age 22. Their self-efficacy score was also higher at ages 19 and 22, along with a lower score on conscientiousness. In Vietnam, their pride score is higher at age 12, but this difference disappears at later ages. This group scores significantly higher for agency at ages 15 to 22, has no difference in self-esteem and self-efficacy, and scores lower in neuroticism and conscientiousness. Finally, in Peru and Vietnam by age 22 they are more gender-egalitarian than their peers.

30 They tend to have lower agency at ages 19 and 22, and lower self-esteem at age 19 in Ethiopia; lower pride and agency scores at all ages and lower self-efficacy scores at ages 19 and 22 in India; lower pride scores at ages 15 and 22, lower agency at ages 15, 19 and 22, as well as lower self-esteem and self-efficacy at ages 19 and 22 in Peru; and lower pride at ages 12 and 15, and lower agency scores at ages 15, 19 and 22 in Vietnam.

5.2.4. NEET

The proportion of NEET at age 22 is quite low in all countries, with the exception of India (22 per cent). Their characteristics vary significantly across countries, revealing the different natures of the obstacles young people face in transitioning to the labour market. One of the few things in common is that they are **predominantly female in all countries.**

However, while in Peru those NEET tend to come from low-economic backgrounds (their parents tend to be less educated, with six out of 10 mothers with primary education or less, and more likely to have grown up in the poorest families), **in India they are more likely to have grown up and be part of wealthier families.**

At age 22, most NEET live in urban areas. In Peru, they are more likely than their peers to have grown up in rural areas but by age 22, the majority of NEET are concentrated in urban areas. In Ethiopia and India, there are a higher proportion of NEET in urban areas compared to their peers, at all ages.

A lower proportion of NEET aspired to complete university when they were 12 years old in Peru (60 per cent compared to 80 per cent of their peers), **but in Ethiopia 12 year olds who ended up being NEET ten years later, had higher aspirations than their peers** (80 per cent aspired to go to university compared to 68 per cent of their peers). Nevertheless, by age 15 in Ethiopia they already had revised their aspirations downward. In Ethiopia, India and Peru, their caregiver expected them to get married one to two years before the time that the parents of their peers expected.

Early marriage/cohabitation/parenting is quite common among the NEET group in all countries, and highest in Peru with one out of two NEET married/cohabiting/parents by age 19, compared to only 15 per cent of their peers.[31] By age 22, the proportion of NEET that are married/cohabited/parents is nearly double or triple that of their peers, depending on the country.

The NEET group exhibits lower secondary education achievement in Peru and Vietnam compared to their peers. Only 44 per cent of NEET in Vietnam and 62 per cent in Peru have completed secondary education. No differences in secondary education completion rates were found in India. Interestingly, a higher proportion of NEET completed secondary education in Ethiopia compared to their peers (57 per cent for NEET and 46 for others).

NEET have lower numeracy and literacy skills than their peers at all ages in Peru, while in Ethiopia they score lower than their peers at age 15 only. There were no differences in cognitive test achievement in India and Vietnam.

While slightly varied, NEET overall scored lower in non-cognitive skills (and particularly grit and self-efficacy/agency) at ages 19 and 22 compared to their peers.[32] It is worth noting that with the exception of Peru, **NEET tend to show more depressive symptoms than their peers** at both ages 19 and 22. Finally, in all countries except Ethiopia, they show lower teamwork skills and leadership at age 22.

31 The percentage of NEET cohabiting/married/having a child is 16 per cent in Ethiopia, 32 per cent in India, and 24 per cent in Vietnam.

32 In Peru, by age 19 NEET have less self-efficacy than their peers, and at age 22 they also have lower self-esteem, less grit and are less emotionally stable. However, by age 22 they are more conscientious. In India, they have more pride at ages 15 to 22, but less agency and grit at age 22. In Ethiopia, they have lower agency and grit at age 22. In Vietnam, they have lower self-efficacy at age 19 and score lower in pride and agency at age 22.

5.3. Predicting labour market participation at age 22

In order to improve our understanding of the predictors of labour market participation, we consider a setting in which the young people choose to perform any of the following activities at age 22: studying only, working and studying, working only and NEET. We model the probability that a young individual is engaged in any of these activities as a function of a set of characteristics. We start with a basic model in which only child characteristics and household characteristics at age 8 (most typically measured in standard surveys, except for height-for-age) are considered. The model is then enriched sequentially. First, we incorporate one's own aspirations to complete university at age 12. Second, we introduce a vector of skills that controls for cognitive achievement test scores and psychosocial competencies measured at age 15. Third, we control for the size and socio-economic status of the household where the child was living at age 15. This is approximately the age when the decision about enrolling in further education was made. Fourth, we introduce variables which controls for current characteristics, measured at age 22. More specifically, we control for 'grit' and two of the 'Big Five' personality traits available in Young Lives data (i.e. conscientiousness and neuroticism or emotional stability).[33] There is plenty of evidence in the psychology literature that links specific dimensions of the Big Five and grit to job performance, educational attainment and health (for a discussion of this evidence see Duckworth et al. 2007 and Borghans et al. 2008). In addition, we introduce the Attitude Toward Women Scale for Adolescents (AWSA, Galambos et al. 1985), a control of gender norms. A higher score corresponds to more gender-egalitarian beliefs. The hypothesis is that traditional gender roles, prevalent in many developing countries (and stronger in contexts of poverty), might be associated with females' early dropout from school and low labour market participation. Fifth, we include indicators of team work and leadership measured at age 22. These skills are important to perform particular on-the-job activities. For this part of the analysis we estimate a multivariate probit model, considering those who are studying only as the reference group. The details of the empirical strategy are reported in Box 2. All models controls for clustered fixed effects, which allow accounting for clustered characteristics that are fixed over time.

The multivariate analysis substantially confirms the profile we sketched for the four groups looking at their mean characteristics in the previous section. This section gives more details about the extent to which each of the main characteristics included in the model increases (or decreases) the relative probability to be either working only, or combining working and studying, or NEET, rather than studying only. More specifically, for those characteristics that turn out to play an important role in predicting young people's labour market participation (i.e. those variables whose estimated coefficients are significantly different from zero), we computed relative probabilities.[34] For the sake of simplicity in Table 7 we only report the main estimated coefficients from the complete specification (Model 5 in Box 2).[35]

Overall, gender, household socio-economic status, where children grow up, and cognitive skills at age 15 are among the main predictors for working status at age 22 across all countries.

Gender roles strongly affect female economic participation in Ethiopia and India. In Ethiopia and in India being female reduces the probability of working only (rather than studying only) by 73 per cent and 49 per cent, respectively. Similarly, girls are relatively less likely than boys to be combining working and studying, by 63 per cent and 36 per cent, respectively.

33 The Big Five Inventory (John et al. 1991; John et al. 2008) identifies five broad dimensions of personality: (i) openness to experience; (ii) conscientiousness; (iii) extraversion; (iv) agreeableness; and (v) neuroticism.

34 See Table A11 in the Appendix.

35 See Table A10 in the Appendix for full results for the multinomial probit model.

In all countries, females are more likely to be NEET, likely signalling fertility and family formation. In Ethiopia and India, females are between two and three times more likely than boys to be NEET rather than studying only at age 22. The relative probability is much higher in Vietnam (3.6 times) and in Peru, where the probability of a girl being NEET is more than five times higher than the probability of studying only.

The relative probability of working only or combining working and studying rather than studying only is significantly higher for young people who grew up in the poorest families. This is true particularly in Ethiopia, where studying only is significantly less likely for young people who grew up in the poorest families. Their peers who grew up in better-off families are between 39 per cent and 66 per cent less likely to be working only or combining working and studying. Interestingly, **being NEET is correlated to growing up in poverty in all countries except India, where the opposite is true.** In India, young people who grew up in the least poor families are almost two times relatively more likely to be NEET rather than studying only than their peers.

Cognitive skills (in the form of higher numeracy) at age 15 are a strong predictor of being a student at age 22. Lower-performing children are more at risk of dropping out of education at earlier ages. In particular, having better cognitive skills reduces the probability of being working only or being NEET at age 22.

Table 7. *Estimated coefficients for the multinomial probit model*

	(1) Ethiopia			(2) India			(3) Peru			(4) Vietnam		
	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Female	-0.317*	-0.462***	0.962***	-0.716***	-1.009***	0.881***	-0.204	-0.029	1.676***	0.384*	0.458*	1.285***
	(0.166)	(0.167)	(0.209)	(0.178)	(0.206)	(0.180)	(0.221)	(0.241)	(0.363)	(0.215)	(0.262)	(0.316)
Urban, age 8	0.128	-0.086	0.717**	0.219	0.263	0.075	0.324	0.412	0.891**	-0.093	-0.081	-0.520
	(0.507)	(0.302)	(0.321)	(0.375)	(0.381)	(0.232)	(0.360)	(0.327)	(0.442)	(0.309)	(0.359)	(0.539)
Mother's education: completed primary and above	-0.654*	-0.180	-0.319	-0.342	-0.204	-0.210	0.208	0.208	-0.244	-0.102	-0.192	-0.252
	(0.357)	(0.237)	(0.248)	(0.294)	(0.282)	(0.238)	(0.210)	(0.258)	(0.305)	(0.277)	(0.307)	(0.345)
Wealth index: middle tertile, age 8	-0.414**	-0.587**	-0.506*	0.021	0.164	0.431**	-0.375	-0.714***	-0.989***	-0.687**	-0.495	-0.988**
	(0.211)	(0.254)	(0.300)	(0.271)	(0.182)	(0.183)	(0.405)	(0.269)	(0.363)	(0.292)	(0.320)	(0.457)
Wealth index: top tertile, age 8	-0.825*	-0.943**	-0.772*	-0.218	-0.505	0.552*	-0.622	-0.363	-0.892	-0.404	0.002	-1.175**
	(0.436)	(0.421)	(0.431)	(0.348)	(0.348)	(0.284)	(0.599)	(0.353)	(0.565)	(0.389)	(0.337)	(0.530)
Height-for-age z-score, age 8	0.157**	-0.053	0.155	0.169**	-0.051	0.179*	0.096	0.077	0.151	0.208**	0.112	0.193
	(0.073)	(0.068)	(0.100)	(0.076)	(0.112)	(0.099)	(0.122)	(0.105)	(0.153)	(0.101)	(0.096)	(0.158)
Household size, age 8	0.023	-0.124	-0.098	0.054	-0.033	-0.000	-0.052	-0.156***	-0.073	0.063	-0.190	0.001
	(0.128)	(0.143)	(0.119)	(0.056)	(0.085)	(0.045)	(0.069)	(0.049)	(0.084)	(0.138)	(0.119)	(0.207)
Whether older sibling at age 8	0.098	-0.149	-0.231	0.074	0.303	0.040	0.463	0.508	1.273***	0.185	0.168	0.463
	(0.300)	(0.238)	(0.385)	(0.176)	(0.232)	(0.163)	(0.317)	(0.324)	(0.324)	(0.291)	(0.298)	(0.303)
Number of siblings at age 8	-0.075	0.116	0.161	0.003	-0.050	0.069	-0.114	-0.101	-0.228*	0.340**	0.465***	0.508*
	(0.100)	(0.123)	(0.120)	(0.072)	(0.088)	(0.059)	(0.090)	(0.089)	(0.128)	(0.162)	(0.169)	(0.282)
Child's educational aspiration: complete university, age 12	-0.153	-0.229	0.046	-0.365*	0.275	-0.134	0.005	0.295	-0.188	0.465	0.573	0.542
	(0.232)	(0.254)	(0.314)	(0.198)	(0.324)	(0.250)	(0.301)	(0.300)	(0.430)	(0.354)	(0.413)	(0.477)
Maths: percentage of correct answers, age 15	-0.033***	0.000	-0.016*	-0.025***	-0.007	-0.012**	-0.026***	-0.012	-0.020*	-0.038***	-0.021**	-0.027**
	(0.006)	(0.006)	(0.009)	(0.006)	(0.006)	(0.006)	(0.010)	(0.011)	(0.011)	(0.010)	(0.009)	(0.013)

Table 7. *Estimated coefficients for the multinomial probit model* continued

	(1) Ethiopia			(2) India			(3) Peru			(4) Vietnam		
	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Pride index z-score, age 15	0.277*	0.085	0.343	0.018	0.226	0.107	-0.388**	-0.415**	-0.064	-0.140	-0.138	-0.136
	(0.149)	(0.141)	(0.213)	(0.152)	(0.146)	(0.135)	(0.158)	(0.166)	(0.234)	(0.226)	(0.267)	(0.258)
Wealth index: middle tertile, age 15	-0.453*	-0.196	-0.233	-0.108	-0.588	0.031	0.575*	0.137	0.476	-0.389	-0.123	-0.074
	(0.253)	(0.138)	(0.408)	(0.275)	(0.368)	(0.349)	(0.341)	(0.418)	(0.445)	(0.590)	(0.641)	(0.609)
Wealth index: top tertile, age 15	-0.331	0.033	-0.201	-0.990***	-0.959**	-0.280	-0.093	-0.239	0.191	-1.127*	-0.808	-0.044
	(0.448)	(0.348)	(0.462)	(0.323)	(0.408)	(0.410)	(0.424)	(0.456)	(0.464)	(0.583)	(0.697)	(0.516)
Household size, age 15	0.116**	0.171***	0.136**	0.015	0.064	-0.001	0.060	0.058	0.072	-0.030	-0.046	-0.085
	(0.056)	(0.061)	(0.061)	(0.049)	(0.084)	(0.048)	(0.085)	(0.069)	(0.118)	(0.097)	(0.101)	(0.161)
AWSA index z-score, age 22	-0.172	0.127	0.052	-0.146	-0.021	-0.139	0.348	0.906***	-0.038	-0.512	-0.226	-0.688
	(0.281)	(0.238)	(0.305)	(0.256)	(0.317)	(0.183)	(0.218)	(0.342)	(0.561)	(0.392)	(0.374)	(0.582)
Grit z-score at age 22	0.020	0.021	-0.556	0.230	0.183	0.097	-0.125	-0.000	-0.394	0.440**	0.076	0.287
	(0.240)	(0.210)	(0.343)	(0.281)	(0.268)	(0.200)	(0.253)	(0.209)	(0.344)	(0.225)	(0.254)	(0.273)
Big 5: neuroticism z-score, age 22	-0.049	-0.086	0.134	0.078	-0.048	0.037	-0.247	-0.687***	0.213	0.038	-0.269	0.280
	(0.177)	(0.253)	(0.451)	(0.249)	(0.235)	(0.227)	(0.241)	(0.258)	(0.414)	(0.318)	(0.225)	(0.410)
Big 5: conscientiousness z-score, age 22	-0.271	-0.697**	-0.048	0.348	0.619**	0.085	0.200	0.114	0.421	-0.133	-0.275	-0.428
	(0.253)	(0.305)	(0.455)	(0.266)	(0.285)	(0.209)	(0.293)	(0.295)	(0.400)	(0.335)	(0.326)	(0.443)
Teamwork z-score, age 22	0.286*	0.302**	0.313*	-0.380***	-0.341**	-0.472***	0.149	0.133	-0.130	-0.034	0.098	-0.287
	(0.148)	(0.125)	(0.177)	(0.115)	(0.158)	(0.127)	(0.156)	(0.173)	(0.221)	(0.176)	(0.184)	(0.210)
Leadership z-score, age 22	-0.333*	-0.127	-0.070	0.053	0.176	-0.046	-0.139	0.036	-0.022	-0.240*	-0.022	-0.485**
	(0.179)	(0.145)	(0.146)	(0.131)	(0.170)	(0.106)	(0.157)	(0.196)	(0.224)	(0.144)	(0.188)	(0.226)
Constant	2.281***	0.749	-0.716	2.978***	0.725	0.343	2.341***	1.677**	-0.885	5.221***	3.071**	1.644
	(0.470)	(0.584)	(0.568)	(0.565)	(0.667)	(0.630)	(0.727)	(0.844)	(1.034)	(1.214)	(1.229)	(1.570)
Observations	644	644	644	765	765	765	509	509	509	748	748	748

Notes: * p<0.1 ** p<0.05 *** p<0.1. Multinomial probability models estimated separately for each country sample (columns 1 to 4). Standard errors reported in brackets. The reference group is 'studying only'. Only selected variables are reported. See Table A10 in Appendix for full results.

Box 2: Modelling labour market participation at age 22

Our approach is that the decision of work or study, or a combination of both activities, is made simultaneously: studying only (category 0), working and studying (category 1), working only (category 2) and NEET (category 3). Therefore, in order to investigate the predictors of labour market participation over the life course and estimate the probability of moving from studying only (the reference group) to any of the other activities, we estimate a multinomial probit model. Specifically, we write the conditional probability that an individual *i* from cluster j belongs to category $k = 1,2,3$ at age 22 as $P(L_{ij,22} = k \mid X_i)$, where vector X_i has the following sequential structure:

$$X_i = \gamma_0 + Z_i\Gamma_1 + \varpi_j \quad (1)$$

$$+ Aspirations_{i,12}\Gamma_2 \quad (2)$$

$$+ Skills_{i,15}\Gamma_3 \quad (3)$$

$$+ SES_{i,15}\Gamma_4 \quad (4)$$

$$+ NewSkills_{i,22}\Gamma_5 + Techskills_{i,22}\Gamma_6 \quad (5)$$

The content of each scalar/vector is specified as follows:

- Z_i: child and household characteristics at age 8: child´s sex and age in years, child´s height-for-age, area of location, mother's education level, household wealth, household size, the number of siblings and whether the individual is the oldest sibling in the household.
- $Aspirations_{i,12}$: dummy variable that takes the value of 1 if a child's own aspirations at age 12 were to complete university, 0 otherwise.
- $Skills_{i,15}$: is a vector of skills measurement that controls for cognitive achievement test scores (on math and vocabulary) and psychosocial competencies (agency and pride), all measured at age 15.
- $SES_{i,15}$: is a vector that control for household size and socio-economic status where the child was living at age 15.
- $NewSkills_{i,22}$: grit; conscientiousness and neuroticism or emotional stability scales from the Big 5 personality traits; Attitudes Toward Women Scale, all measured at age 22.
- $Techskills_{i,22}$: Team work and leadership skills measured at age 22.
- ϖ_j: cluster fixed effects.

For each country sample we estimate sequentially five models, starting with Model (1) and then adding progressively vectors so as to estimate Models (2), (3), (4) and (5). Table A10 in the Appendix presents the full results and Table A11 presents computed relative probabilities of each model for the main variables.

5.4. Sketching a profile of dependent workers

At age 22, most of the employed labour force work as dependent workers in all countries (67 per cent in India, 83 per cent in Peru and 78 per cent in Vietnam) with the exception of Ethiopia (48 per cent), and most of these dependent workers work in non-agriculture activities.

Overall, dependent workers are more likely to come from wealthier and better-educated households than own-account workers and have grown up in urban areas and smaller households.[36] They usually have higher educational aspirations, better cognitive skills, are more likely to complete secondary education by age 22, and less likely to be married/cohabiting/become parents during adolescence.

In Ethiopia, 36 per cent of dependent workers grew up in urban areas, compared to 20 per cent of own-account workers. As adolescents and young adults they are more likely to live in wealthier households than their own-account worker counterparts. Own-account workers are almost twice as likely as dependent workers to be married/cohabiting/parents by age 19. At age 15, 78 per cent of dependent workers and 64 per cent of own-account workers aspire to complete university. There is nearly double the proportion of dependent workers who have completed secondary education compared to own-account workers, but more own-account workers are currently enrolled, potentially due to being slightly behind in the education system compared to their peers. In terms of previous cognitive ability, dependent workers score better at maths at age 15 and reading tests at ages 12 and 15 than own-account workers.

36 See Table A9 in the Appendix.

In India, there are more males working as dependent workers then females. There are significantly more dependent workers who grew up and are living in urban areas than own-account workers. They come from wealthier families than own-account workers and are expected to leave the household and get married on average one year later than own-account workers. Indeed, they are less likely than own-account workers to get married/cohabit/have a child by ages 19 and 22. There are no significant differences in educational aspirations, educational attainments by age 22, and cognitive abilities among the two groups.

In Peru, dependent workers come from more-educated households than the own-account workers and by age 22 have on average higher education: 85 per cent have completed secondary education, compared to 78 per cent of own-account workers. The differences in education attainments between own-account and dependent workers mirrors the differences in aspirations their caregivers had when they were 15 years old. When asked about the level of education they hope their 15-year-old child will complete, 75 per cent of caregivers of 22-year-old dependent workers aspired for them to complete university, compared to 64 per cent of caregivers of own-account workers. Similarly, dependent workers had higher educational aspirations for themselves than own-account workers when they were 19 years old. There are no significant differences in numeracy and literacy at any age between the two groups of workers. Finally, it is worth noting that dependent workers are less likely than own-account workers to be married/cohabiting or a parent by age 22.

In Vietnam, as in the other countries, dependent workers are more likely to have come from and grown up in wealthier and better-educated households than own-account workers and to have grown up in urban areas. There were also fewer dependent workers who were stunted at age 8. Dependent workers come from smaller households with fewer siblings, and are less likely than own-account workers to be the oldest child in the family. Only 7 per cent of dependent workers were married/cohabiting or became a parent by age 19 compared to 29 per cent of own-account workers. Dependent workers (and their caregivers) consistently have higher educational aspirations than own-account workers, who are expected to support the household, be financially independent and leave the household a year earlier than dependent workers. More dependent workers (64 per cent) than own-account workers (43 per cent) have completed secondary education by age 22, and more are still in education (in contrast to Ethiopia). In terms of previous cognitive ability, dependent workers score consistently better than their own-account worker counterparts in both maths and reading tests at all ages.

5.5. Educational and job aspirations: dreams or reality?

Young Lives children have high aspirations about their future and most aspire to complete university. Nevertheless, few are able to realise their aspirations. Only one out of three children who aspire to complete university or postgraduate studies at age 12 completed university or is still enrolled by age 22.

There are substantial gender gaps and economic gradients in aspirations that need to be highlighted (Table 8). **At age 12, educational aspirations are lower for girls than for boys in both Ethiopia and India, while the opposite is true in Vietnam** where more girls than boys aspire to complete university. No gender differences are found for Peru. This shows that gender biases differ across countries, where reasons could be due to gender and family norms, and different opportunity costs for the education of boys and girls given the labour market structure. Also, **children growing up in the poorest families tend to have lower aspirations than their peers**.

It is interesting to note that aspirations change over time. In the process of forming aspirations, individuals filter and dismiss some of the unattainable options on the basis of their expectations and experiences. People would not aspire to an outcome that is perceived as inaccessible. Figure 10 shows how the proportion of children aspiring to complete university changes over time.

In all countries, children adjust their aspirations downward between ages 12 and 15. Nevertheless, after age 15 the trend in educational aspirations is substantially different when comparing Ethiopia and Peru with Vietnam and India (Figure 10). In Vietnam and India, the 'U-shaped' trend indicates a dip at age 15 (when the lowest proportion of children aspire to university) and a 'reversion' of tendency after age 15. In Ethiopia and Peru, educational aspirations keep decreasing after age 15 (the decline being sharper in Peru) when they finish secondary education and they may drop out of education.

Table 8. *Percentage of 12 year olds aspiring to complete university, by gender and wealth tertiles*

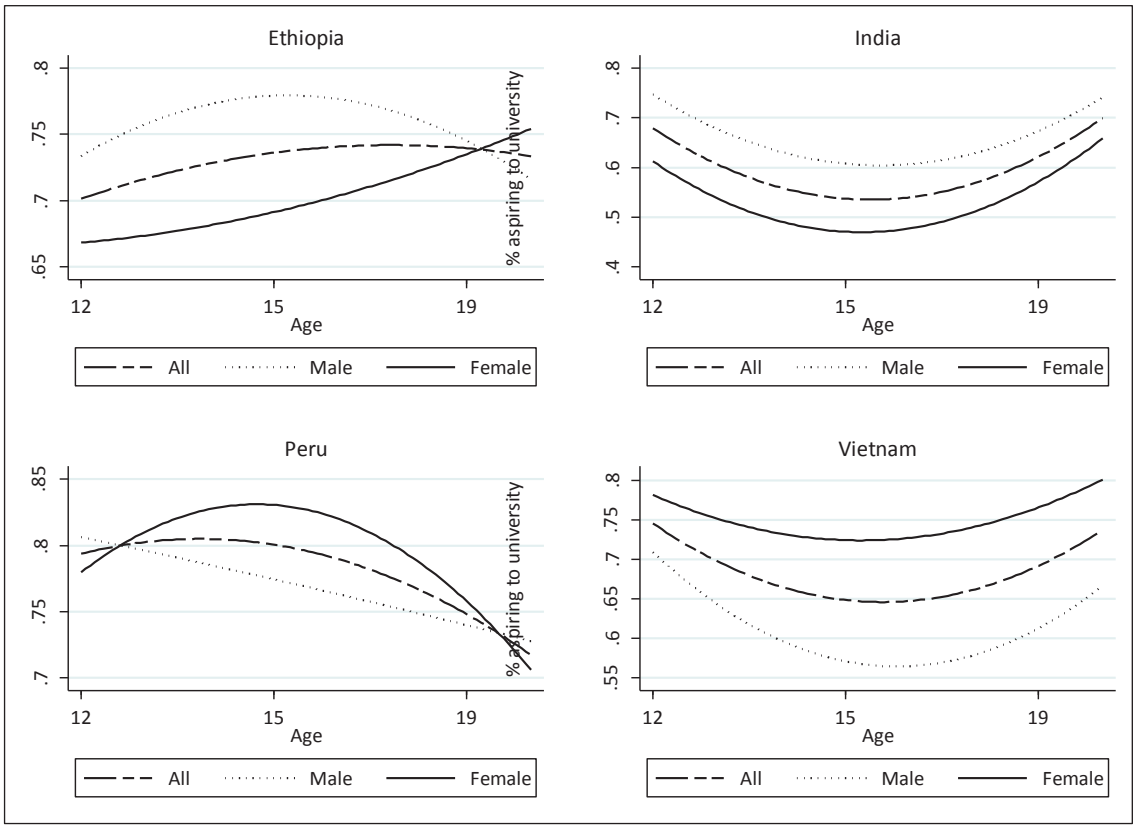
	Male		Female		p-value	Bottom wealth tertile		Other tertiles		p-value
	(%)	SD	(%)	SD		(%)	SD	(%)	SD	
Ethiopia	73	0.020	67	0.022	0.029	63	0.028	73	0.018	0.002
India	75	0.021	61	0.023	0.000	63	0.029	70	0.019	0.053
Peru	81	0.021	78	0.023	0.396	71	0.025	88	0.018	0.000
Vietnam	71	0.021	78	0.019	0.010	58	0.028	82	0.015	0.000

Note: Contemporaneous wealth tertiles were used except at age 12, where wealth tertile from Round 1 (2002) was used.

Interestingly, boys and girls adjust their aspirations differently, and likely because their expectations of being able to enrol in further education change according to their experiences. Ethiopia is probably the most interesting case. While there is an average downward trend in aspirations, this is mostly driven by boys, who at ages 12 and 15 have higher aspirations than girls but by age 19 have the same aspirations. After age 15, boys are more likely than girls to drop out of school and adjust their aspirations accordingly. The higher enrolment rate among girls at age 19 can be explained by the division of labour, which in Ethiopia is markedly gendered: girls do primarily domestic work within the household and boys tend to work predominantly outside the household, mainly in herding or farming activities (Favara 2017).

Despite India and Vietnam exhibiting the same 'U-shaped' trend (for both boys and girls), the gender narratives are flipped. In India, young men consistently have higher aspirations than young women, and the reverse is true in Vietnam. Notably, in Vietnam, similar to what has been discussed for Ethiopia, the proportion of boys aspiring to complete university decreases dramatically (and more so than for girls) after age 15, possibly reflecting a relatively higher opportunity cost to be in education for males than females, given the labour market structure.

Figure 10. *Percentage of children aspiring to complete university across time in country sites*



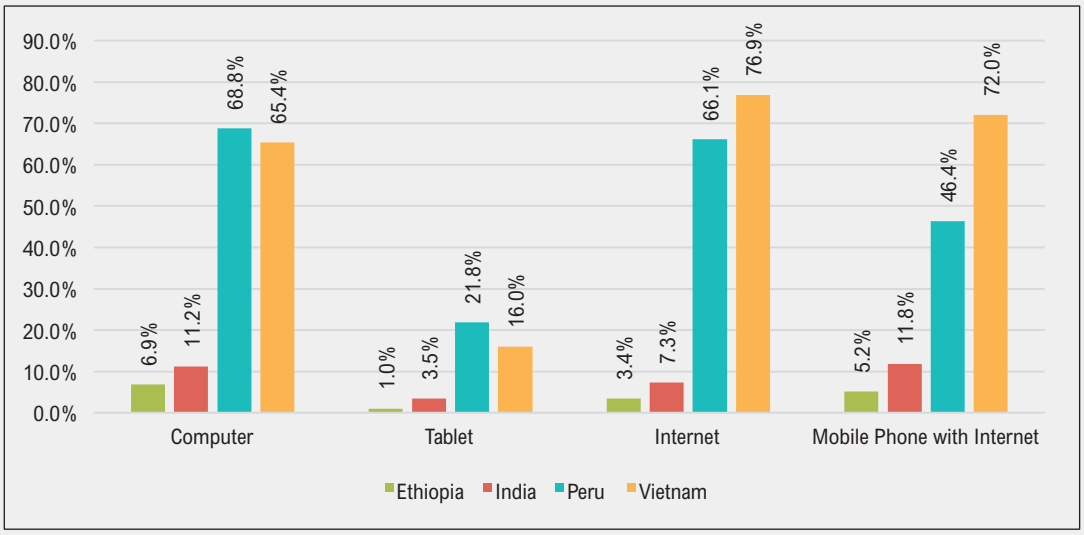
Box 3: Inequalities in digital access, use and skills in Young Lives countries[37]

In the Young Lives Round 5 household survey, a digital module was included for both cohorts (average age of 15 years for the Younger Cohort and 22 years for the Older Cohort). This module included questions on access to digital technology (computers, tablets, internet and mobile phones), frequency of use, age of first use and computer (off-line) and internet skills, among other questions.

Preliminary results show large differences among countries (Cueto et al. 2018). For example, in Peru 69 per cent of adolescents in the Younger Cohort reported that they had had access to computers. In Vietnam the figure was similar (65 per cent); however, in India it was only 11 per cent and in Ethiopia just 7 per cent (Figure 11). Interestingly, these figures were slightly lower for the Older Cohort for Peru and Vietnam, but higher for India and Ethiopia; however, even for this cohort there was a large difference in access favouring Peru and Vietnam.

37 This box is based on Cueto, Felipe and Leon (2018).

Figure 11. *Access to digital devices and internet by country – Younger Cohort (%)*



Note: Percentage saying they had used each of the devices 'many times in their lives'.
Source: Cueto et al. 2018.

Age of first use of computers for the Younger Cohort also favoured those in Peru and Vietnam (ages 10 years and 11.3 years, respectively), over those in Ethiopia and India (11.2 and 12.2 years, respectively). Age of first use was higher in all countries for the Older Cohort (12.3 years in Peru, 14.1 in Vietnam, 16.8 in India and 17.2 in Ethiopia).

However, there were also large inequalities within countries. For the Younger Cohort, the variables that predicted access across countries were the wealth index (administered in Round 1 of Young Lives, 14 years before), maternal education and mathematics skills. There were also some predictors that were specific to some countries, for example favouring boys (particularly in India) and being a member of a majority ethnic group (in Vietnam and Ethiopia) and some castes in India. We found a similar pattern for the Older Cohort, except that access to post-secondary education was also statistically significant. However, the interpretation of this result is challenging. It may be that those with access to computers and the internet early are more likely to access post-secondary education, that having access to post-secondary education facilitates access to computers, or a combination of both factors.

In regards to skills, we only ran analysis for those reporting frequent use, and thus the sample was much smaller than the one we used for access, where we included the whole Young Lives sample. For both cohorts, some of the predictors that were significant for access were also significant for skills. The main two variables with significance across countries were age of first use and frequency of use. Overall, more practice is linked with higher skills.

Finally, our results suggest large inequalities across and within countries, something that has been sometimes called the "digital divide", with large segments of the population not having access to computers and other digital technology, or if they do, showing lower levels of skills. How to overcome these inequalities is a big challenge for both developing countries and international agencies such as the World Bank and UNESCO.[38]

38 The Broadband Commission for Sustainable Development has issued several goals for 2025, see www.broadbandcommission.org/Documents/publications/wef2018.pdf. The World Bank´s 2016 Annual Report focuses on 'digital dividends', see www.worldbank.org/en/publication/wdr2016.

6. Conclusions

Young Lives has tracked the livelihoods of two cohorts of children in four low- and middle-income countries over a period of 15 years. The study design makes three types of analysis possible. First, we can compare results from the Younger Cohort and the Older Cohort to look at how educational trajectories have changed in recent years in each country. Second, results from the Older Cohort from ages 8 to 22 allow us to document the transition from school to the labour market and post-secondary education, and to sketch a skills profile of those individuals who have been more successful in this transition. Third, the richness of the data collected allows us to model the studying versus working decision during early adulthood as a function of early-life characteristics, aspirations, skills accumulated over the life course, and other contemporaneous characteristics, including family formation and child-bearing decisions.

Our results allow us to generate some important conclusions. Across the four country samples (Ethiopia, India, Peru and Vietnam) we observe some common patterns.

First, education outcomes have improved overall. Both primary and secondary school enrolment and school completion rates have improved over the last seven years. Children spend more time in school than in the past, and complete more years of education. Beyond the school period, an important proportion of young adults (between three and five out of 10 depending on the country sample) completed or is enrolled in some form of post-secondary education, which evidences the key role that young people and their families assign to this level of education. Gender gaps in basic education have reduced across these countries; however, gender gaps appear relevant in access to post-secondary education.

Second, there are socio-economic gradients, particularly in secondary completion rates and in enrolment and completion at university. These gradients have reduced over time, but for the majority of indicators they remain sizable across the four countries.

Third, we observe that those young adults that access post-secondary education report having higher cognitive test scores (especially numeracy), higher socio-emotional competencies and higher educational aspirations than their counterparts prior to college entry.

Fourth, by the age of 22, a large proportion of individuals (between seven and nine out of 10 depending on the country) is employed. With the exception of India, we find that young people are moving away from agriculture. Males start their transition from education to work earlier than women, and for this reason by the age of 19 a pro-male gap in participation in the labour market is observed in all countries. Those that study only or that combine work and study at ages 19 and 22 are more likely to come from more privileged backgrounds. In addition, conditional on working, those that work as dependent workers are more likely to come from higher socio-economic backgrounds.

Beyond these commonalities, as expected we find certain differences across the four countries, which in turn are due to their different levels of economic development (Ethiopia is a low-income country, whereas India is lower-middle income, and Peru and Vietnam are upper-middle income) as well as due to other differences, including previous evidence of a ‘institutionalised’ pro-male gap in India, the important role played by the public sector in the Vietnamese economy, and the high level of urbanisation observed in Peru, among other factors.

In the case of Ethiopia, while children spend more time in school than in the past, more than two out of three children are over-aged, which in turn is related to a substantial delay in age of school enrolment and slow grade progression. Ethiopia is also exceptional in that it is the only Young Lives country in which most of the youth is self-employed. This raises an important question as to

what extent those individuals currently enrolled in post-secondary education will be able to eventually enter into the formal labour market.

In the case of India, most of the improvement observed in primary school completion rates is due to improvements in completion among girls, which have reduced the gender gap. Notwithstanding this, India is the Young Lives country with the largest pro-male gap in labour market participation. India also has the largest level of NEET among females. Both phenomena are in turn related to early family formation. This early pro-male gap might have important implications for future gaps in earnings in later stages of life. In addition, it is important to note that while improvements in access to education have been observed, we also find evidence that over-age might have increased over time.

Vietnam is an interesting case study in the light of the fact that gender gaps in access to basic education have reduced or disappeared over time. Moreover, a marked pro-female gap is observed in enrolment/completion in post-secondary education. In addition, it is the country sample in which the best conditions in terms of access to formal jobs are observed: six out of 10 youth employees having signed a written contract. This is due to the important role played by publicly-owned enterprises in Vietnam.

Peru – which like Vietnam is an upper-middle income country – reports the lowest proportion of young adults working in the agriculture sector, which is consistent with its large level of urbanisation. At the same time, Peru reports relatively high levels of informality, which again imposes important constraints for young Peruvians to enter into the labour market. While no gender gaps in access to basic education are reported in Peru, a pro-male gap is observed in labour market participation.

Two additional aspects are worth mentioning. First, in all countries we observe that approximately two out of 10 individuals have received some form of job training beyond formal education. This is relevant, as it provides an opportunity through which those that are not able to attend to post-secondary education can continue accumulating skills. Second, our evidence shows that young people might not be acquiring the right skills. For instance, we find that only a very small proportion of young people in Ethiopia and India know how to use digital technology. This is worrying, especially in a context in which young people are moving out of the agricultural sector.

It is important to note some limitations of this analysis. First, we observe individuals at a relatively early stage of adulthood. As the cohorts age, some of the gaps observed (e.g. the pro-male gap in India, or the urban–rural gap in Ethiopia) will likely amplify as those that are still attending university, technical institutes or vocational institutes enter the labour market. Second, country samples are not meant to be nationally representative, but rather they are informative of living standard conditions in each of the four countries. Third, given that Young Lives is an observational study, our findings should be interpreted as associations rather than as causal links.

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Appendices

Table A1. *Definitions of the main individual and household level characteristics used in the analysis*

Demographic indicators	
Female	Dummy variable equal to 1 if the YL child is female, 0 if male.
Age	Age of YL child (in months).
Urban	Dummy variable equal to 1 if the YL child lives in urban areas and 0 in rural areas.
Height for age (z-score, HAZ)	Height-for-age is used as an indicator of malnutrition. These indicators are standardised according with age and gender-specific child growth standards provided by WHO and are universally comparable. See WHO Child Growth Standards report (www.who.int/childgrowth/en) for a detailed description on the methods used to construct the standards for height-for-age.
Household characteristics	
Maternal and paternal education	Corresponds to the highest level of education completed by the YL mother/father. It identifies those who have (a) primary incomplete or less; (b) complete primary or secondary; (c) higher education (post-secondary).
Household size	Indicates the number of household members living with the YL child.
Single parent	Dummy variable equal to 1 if the YL child is in a household with only one parent and equal to 0 when the YL child has both parents present (regardless of if they are the biological parents or not).
Wealth index	A composite index of living standards. The variable takes values between 0 and 1; a larger value reflects a wealthier household. The wealth index is the simple average of three sub-indices: (1) a housing quality index (quality of floor, wall, roof, and number of rooms per capita); (2) an access to services index (access to drinking water, electricity, sewage, and type of cooking fuel used); and (3) a consumer durables index (TV, radio, fridge, microwave, computer, etc.). In the analysis we used three dummies corresponding to the bottom, mid, and top tertiles of the wealth index distribution.
Marital status	
Married/cohabiting/parent	Dummy variable equal 1 if the YL child has either got married, cohabited or had a child (by age 19 and/or 22), and equal to 0 otherwise.
Education	
Completed secondary education	Dummy variable equal 1 if the YL child has completed secondary education by age 22, and equal to 0 otherwise.
Currently enrolled in school	Dummy variable equal 1 if the YL child is currently enrolled an academic institution in the academic year and 0 otherwise.
Cognitive skills	
Mathematics score	Percentage of questions answered correctly, out of the total number of questions in that survey round. The score was computed at age 12 to age 19 (2008 to 2013).
Peabody Picture and Vocabulary Test (PPVT)	The PPVT is a reading test. The raw score is calculated via the number of questions the YL child answered correctly, which was then standardised by age, at ages 12 and 15.
Non-cognitive skills	
Young Lives collected information on a number of non-cognitive skills (or psychosocial competencies), as listed below together with the corresponding items used to compute the scores. The non-cognitive skills listed here are pride, agency, Rosenberg self-esteem scale, the Generalised self-efficacy scale, grit, the Big 5 Inventory and depression. The procedure adopted to compute each non-cognitive score is as follows: (i) all relevant questions are re-coded to be positive outcomes; (ii) all relevant questions are normalised to z-score (mean subtracted and divided by std. deviation); (iii) an average of the relevant z-score is taken across the non-missing values of the questions. All questions are on Likert-type scales, with some variations in phrasing between survey rounds, as well as exclusion of some questions in later rounds as specified below:	
Pride *Indicates they are present in all rounds, except Round 1 where questions may be phrased differently across rounds	1) I feel proud to show my friends where I live 2) I am ashamed of my clothes* 3) I am ashamed of my shoes* 4) I feel proud of the job done by the head of household 5) I am proud of my achievements at school 6) I am embarrassed by the work I have to do 7) The job I do makes me feel proud* 8) I am often embarrassed because I do not have the right supplies for school 9) I am worried that I don't have the correct uniform 10) I feel my clothing is right for all occasions*
Agency	1) I have no choice about the work I do 2) If I study hard I will be rewarded with a better job in the future 3) I like to make plans for my future studies and work, other people in my family make all the decisions about how I spend my time 4) If I try hard I can improve my situation in life
Self-esteem (Rosenberg scale)	Individuals' judgement of their own self-value or self-worth. 1) I do lots of important things 2) In general, I like being the way I am 3) Overall, I have a lot to be proud of 4) I can do things as well as most people 5) Other people think I am a good person 6) A lot of things about me are good 7) I'm as good as most other people 8) When I do something, I do it well

Generalised self-efficacy scale	One's belief in their capabilities to produce given attainments and to cope with adversity. 1) I can always manage to solve difficult problems if I try hard enough 2) If someone opposes me, I can find the means and ways to get what I want 3) It is easy for me to stick to my aims and accomplish my goals 4) I am confident that I could deal efficiently with unexpected events 5) Thanks to my resourcefulness, I know how to handle unforeseen situations 6) I can solve most problems if I invest the necessary effort 7) I can remain calm when facing difficulties because I can rely on my coping abilities 8) When I am confronted with a problem, I can usually find several solutions 9) If I am in trouble, I can usually think of a solution 10) I can usually handle whatever comes my way
Grit	1) New ideas and projects sometimes distract me from previous ones 2) I have been obsessed with a certain idea or project for a short time but later lost interest 3) I often set a goal but later choose to pursue a different one 4) I have difficulty maintaining my focus on projects that take more than a few months 5) Setbacks don't discourage me 6) I am a hard worker 7) I finish whatever I begin 8) I am diligent
The Big Five Inventory (John et al. 1991; John et al. 2008) identifies five broad dimensions of personality: (i) openness to experience; (ii) conscientiousness; (iii) extraversion; (iv) agreeableness; and (v) neuroticism. In Young Lives, only two out of these five traits are measured.	
Big 5: Neuroticism (emotional stability)	Emotional stability is 'predictability and consistency in emotional reactions, with absence of rapid mood changes'. Neuroticism is 'a chronic level of emotional instability and proneness to psychological distress'. 1) I am someone who is depressed, blue 2) I am someone who is relaxed, handles stress well 3) I am someone who can be tense 4) I am someone who worries a lot 5) I am someone who is emotionally stable, not easily upset 6) I am someone who can be moody 7) I am someone who remains calm in tense situations 8) I am someone who gets nervous easily
Big 5: Conscientiousness	The tendency to be organised, responsible and hardworking. 1) I am someone who does a thorough job 2) I am someone who can be somewhat careless 3) I am someone who is a reliable worker 4) I am someone who tends to be disorganised 5) I am someone who tends to be lazy 6) I am someone who perseveres until the task is finished 7) I am someone who does things efficiently 8) I am someone who makes plans and follows through with them 9) I am someone who is easily distracted
Depression	1) I worry a lot 2) I have many fears, I am easily scared 3) I get a lot of headaches, stomach aches or sickness 4) I am often unhappy, downhearted or tearful 5) I am nervous in new situations
Technical skills	
Cooperative teamwork – leadership abilities (2016)	1) I like cooperating in a team 2) I cooperate well when working in a team 3) I am good at cooperating with team members
Personal effectiveness – leadership abilities (2016)	1) I can be a good leader 2) I am capable of being a good leader 3) I am seen as a capable leader
Gender roles/beliefs	
Attitude Towards Women Scale (AWSA)	1) Swearing is worse for a girl than for a boy 2) On a date, the boy should be expected to pay all expenses 3) On the average, girls are as smart as boys 4) More encouragement in a family should be given to sons than daughters to go to college 5) It is all right for a girl to want to play rough sports like football 6) In general, the father should have greater authority than the mother in making family decisions 7) It is all right for a girl to ask a boy out on a date 8) It is more important for boys than girls to do well in school 9) If both husband and wife have jobs, the husband should do a share of the housework such as washing dishes and doing the laundry 10) Boys are better leaders than girls 11) Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career 12) Girls should have the same freedoms as boys*

Aspirations and expectations	
Aspiration to complete university (for child and caregiver)	Dummy variable equal to 1 if the YL child or caregiver's educational aspiration for the YL child is to aspire to complete university, and 0 otherwise.
Caregiver's expectations	The age at which the main caregiver expects the YL child to: a) Support the household b) Be financially independent c) Be married or leave the household

Table A2. *Enrolment rate and highest grade completed at ages 12 and 15, comparing the two cohorts across different groups*

Part I. *India*

	Percentage enrolled in school (%)				Highest grade completed (grade level)				Sample size							
									Percentage enrolled in school (%)				Highest grade completed (grade level)			
	12 years old		15 years old		12 years old		15 years old		12 years old		15 years old		12 years old		15 years old	
	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)
Gender																
Female	89	97	74	89	5.6	5.7	8.2	8.6	463	871	469	845	471	865	465	833
Male	92	97	83	93	5.6	5.3	8.2	8.2	445	1017	446	986	446	1014	440	996
Caregiver's education (child age 12)																
Incomplete primary or less	89	96	75	88	5.6	5.4	8.1	8.2	739	1399	745	1345	747	1391	737	1342
Completed primary and any secondary	99	100	94	99	5.9	5.7	8.6	8.7	140	435	140	433	140	434	139	433
Higher education	99	100	94	99	5.9	5.7	8.6	8.7	140	435	140	433	140	434	139	433
Household wealth tertile (child age 8)																
Bottom wealth tertile	84	96	68	86	5.3	5.4	7.7	8.1	320	637	323	611	325	633	319	612
Middle wealth tertile	93	97	79	92	5.8	5.5	8.3	8.4	297	643	300	622	300	641	298	624
Top wealth tertile	95	99	88	95	5.8	5.6	8.5	8.5	291	603	292	593	292	600	288	588
Household location (child age 8)																
Urban	95	99	87	95	5.8	5.6	8.5	8.5	211	451	212	440	212	449	208	436
Rural	89	97	76	90	5.6	5.4	8.1	8.3	697	1437	703	1391	705	1430	697	1393
Region (child age 8)																
Andhra Pradesh	91	98	79	91	5.9	5.7	8.4	8.6	585	1233	587	1202	588	1225	583	1190
Telangana	89	96	76	92	5.1	5.1	7.7	7.9	323	655	328	629	329	654	322	639
Average all children	90	97	78	91	5.6	5.5	8.2	8.4								
Sample size	908	1888	915	1831	917	1879	905	1829								

Part II. *Ethiopia*

	Percentage enrolled in school (%)				Highest grade completed (grade level)				Sample size							
									Percentage enrolled in school (%)				Highest grade completed (grade level)			
	12 years old		15 years old		12 years old		15 years old		12 years old		15 years old		12 years old		15 years old	
	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)
Gender																
Female	98	97	91	94	3.2	3.6	5.6	6.1	356	856	364	838	363	846	362	834
Male	97	94	88	91	3.0	3.4	5.2	5.7	398	959	412	926	413	945	408	926
Caregiver's education (child age 12)																
Incomplete primary or less	97	94	88	92	2.9	3.3	5.3	5.7	612	1543	630	1495	630	1518	625	1490
Completed primary and any secondary	99	100	94	99	4.0	4.4	6.4	7.1	71	225	72	224	72	226	72	224
Higher education	99	100	94	99	4.0	4.4	6.4	7.1	71	225	72	224	72	226	72	224
Household wealth tertile (child age 8)																
Bottom wealth tertile	96	94	83	91	2.2	2.5	4.5	4.6	251	624	272	602	272	607	267	598
Middle wealth tertile	97	93	86	90	3.0	3.6	5.3	6.0	266	593	268	572	267	585	266	571
Top wealth tertile	99	99	99	98	4.2	4.5	6.7	7.1	236	576	235	569	236	577	236	569
Household location (child age 8)																
Urban	99	99	98	97	4.1	4.6	6.6	7.2	256	612	255	604	256	612	255	606
Rural	97	93	85	91	2.6	3.0	4.8	5.2	498	1203	521	1160	520	1179	515	1154
Region (child age 8)																
Addis Ababa	100	100	99	99	4.5	4.9	7.0	7.3	101	254	101	250	101	254	101	251
Amhara	97	92	85	93	3.3	3.5	5.5	6.0	158	360	167	348	168	346	166	345
Oromia	94	98	88	90	2.6	2.9	4.8	5.3	158	365	159	362	158	364	158	356
SNNP	98	97	91	95	2.5	2.4	4.7	4.5	184	463	191	447	191	456	189	448
Tigray	99	91	86	87	3.2	4.5	5.8	7.1	153	373	158	357	158	371	156	360
Average all children	97	95	89	93	3.08	3.50	5.42	5.88								
Sample size	754	1815	776	1764	776	1791	770	1760								

Part III. *Peru*

	Percentage enrolled in school (%)				Highest grade completed (grade level)				Sample size							
									Percentage enrolled in school (%)				Highest grade completed (grade level)			
	12 years old		15 years old		12 years old		15 years old		12 years old		15 years old		12 years old		15 years old	
	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)
Gender																
Female	98	100	96	97%	6.0	6.0	8.7	9.0	273	896	273	890	268	891	269	870
Male	98	100	93	96%	6.0	6.0	8.6	8.9	305	911	305	909	300	909	301	877
Caregiver's education (child age 12)																
Incomplete primary or less	97	100	92	94%	5.6	5.6	8.1	8.6	209	640	209	634	202	636	204	605
Completed primary and any secondary	100	100	95	98%	6.2	6.2	8.9	9.1	288	878	288	876	287	875	287	857
Higher education	100	100	95	98%	6.2	6.2	8.9	9.1	288	878	288	876	287	875	287	857
Household wealth tertile (child age 8)																
Bottom wealth tertile	97	100	92	95%	5.6	5.7	8.1	8.7	281	932	281	925	272	927	274	885
Middle wealth tertile	99	100	94	98%	6.3	6.2	9.0	9.2	159	496	159	496	158	495	158	486
Top wealth tertile	100	100	99	99%	6.5	6.4	9.4	9.4	133	375	133	374	133	374	133	372
Household location (child age 8)																
Urban	99	100	95	97%	6.2	6.2	8.9	9.1	442	1232	442	1231	437	1228	437	1202
Rural	96	100	92	95%	5.5	5.6	8.0	8.5	136	575	136	568	131	572	133	545
Average all children	98	100	94	97%	6.0	6.0	8.7	9.0								
Sample size	578	1785	567	1798	568	1800	570	1747								

Part IV. *Vietnam*

	Percentage enrolled in school (%)				Highest grade completed (grade level)				Sample size							
									Percentage enrolled in school (%)				Highest grade completed (grade level)			
	12 years old		15 years old		12 years old		15 years old		12 years old		15 years old		12 years old		15 years old	
	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)	2006 (OC)	2013 (YC)	2009 (OC)	2016 (YC)
Gender																
Female	97	98	81	86	5.6	5.7	8.4	8.6	439	919	431	898	438	910	433	890
Male	97	97	75	79	5.6	5.7	8.2	8.5	391	969	387	935	391	957	381	925
Caregiver's education (child age 12)																
Incomplete primary or less	94	92	64	71	5.1	5.5	7.8	8.1	269	578	263	530	268	559	265	529
Completed primary and any secondary	98	100	85	86	5.8	5.8	8.6	8.7	519	1223	514	1216	519	1221	508	1199
Higher education	98	100	85	86	5.8	5.8	8.6	8.7	519	1223	514	1216	519	1221	508	1199
Household wealth tertile (child age 8)																
Bottom wealth tertile	93	93	62	72	5.1	5.5	7.7	8.2	278	649	273	601	277	628	272	597
Middle wealth tertile	98	99	82	83	5.7	5.8	8.5	8.7	290	652	285	646	290	652	285	635
Top wealth tertile	100	100	91	92	5.9	5.9	8.8	8.8	261	587	259	586	261	587	256	583
Household location (child age 8)																
Urban	100	100	90	93	5.8	5.8	8.6	8.7	150	346	148	343	150	346	147	344
Rural	96	97	76	80	5.5	5.7	8.2	8.5	680	1542	670	1490	679	1521	667	1471
Region (child age 8)																
Northern Uplands	96	94	70	78	5.3	5.5	8.1	8.3	174	377	169	349	174	361	169	350
Red River Delta	99	99	82	86	6.0	5.9	8.8	8.9	168	389	165	387	168	389	163	386
Central Coastal Urban	100	100	90	93	5.8	5.8	8.6	8.7	150	346	148	343	150	346	147	344
Central Coastal Rural	94	96	69	75	5.5	5.7	8.0	8.4	163	389	161	378	163	388	161	376
Mekong River Delta	97	97	82	81	5.3	5.6	8.1	8.4	175	387	175	376	174	383	174	359
Average all children	97	97	78	82	5.6	5.7	8.3	8.5								
Sample size	830	1888	818	1833	829	1867	814	1815								

Notes: Data only include children who were present in all five survey rounds, for both cohorts of children. Data for Older Cohort children were from when they were 12 years old in 2006 (Round 2) and 15 years old in 2009 (Round 3), while for the Younger Cohort children, it is when they were 12 years old in 2013 (Round 4) and 15 years old in 2016 (Round 5). Information for enrolment is obtained from the current enrolment status, at time of interview. Information on highest grade completed is obtained from the household roster, answered by the caregiver. In the case of Peru, the highest grade achieved was not present for the Older Cohort in 2009 (Round 3).Consequently, the information had to be obtained from the child's education history in 2013 (Round 4). Information on primary caregiver's education was taken from 2006 (Round 2), wealth tertiles were calculated separately for each cohort using household wealth index of the panel sample in 2002 (Round 1), region and location information is obtained from household's location in 2002 (Round 1). Sample sizes may differ due to missing responses.

Table A3. *Highest grade completed, comparing 22 year olds with their parents*

Part I. *Ethiopia*

	Highest parental education			Child's education			Sample size
	Average grade (Grades 1 to 12)	Percentage with no education (%)	Percentage with post-secondary (%)	Average grade (Grades 1 to 12)	Percentage with no education (%)	Percentage with post-secondary (%)	
Gender							
Female	5.3	23.1	6	8.4	1.9	30.1	362
Male	5.4	19.2	6.8	8	4.9	20.9	411
Household wealth index (age 8)							
Bottom tercile	4.6	24.5	1.1	7.3	7.1	9	266
Middle tercile	4.5	32.1	4.6	8	2	20.4	250
Top tercile	7	6	14.1	9.8	1.2	46.9	256
Location (age 8)							
Rural	4.8	27.1	3.2	7.7	4.6	14.5	519
Urban	6.6	7.5	13.6	9.6	1.2	47.2	254
Region (age 8)							
Addis Ababa	6.9	5.7	9.1	9.4	0	56.4	101
Amhara	4.3	23.4	7.8	8.4	4.8	26.5	166
Oromia	4.7	9.2	9.2	7.3	1.3	15.9	157
SNNP	6.6	15.1	5.9	8.1	6.8	17.3	191
Tigray	4.4	46.7	1.3	8.5	2.5	22.8	158
Average of all children	5.4	21	6.4	8.2	3.5	25.2	.
Sample size	532	733	733	551	773	773	773

Notes: Data only include children who were present in all five survey rounds. Data for the Older Cohort children are from when they were 22 years old in 2016 (Round 5). Information on primary caregiver's education was taken from 2006 (Round 2). Household wealth tertiles were calculated separately for each cohort using the household wealth index of the panel sample in 2002. Region and location information refers to the household's location in 2002 (Round 1). Sample sizes differ for different outcomes due to differences in the number of missing responses for each outcome. Highest parental education refers to the highest grade completed by any biological parent who was present in the household roster in 2006 (Round 2).

Part II. *India (split by gender of Older Cohort child)*

	Paternal education								Male index child								Sample size	
	None (%)	Incomplete primary (%)	Lower primary (%)	Upper primary (%)	Secondary (%)	Higher secondary (%)	Vocational (%)	Higher education (%)	None (%)	Incomplete primary (%)	Lower primary (%)	Upper primary (%)	Secondary (%)	Higher secondary (%)	Vocational (%)	Higher education (%)	Fathers	Male index child
Caste																		
Scheduled Castes	58.70	13.04	6.52	9.24	6.52	4.35	0.00	1.63	0.00	5.15	3.09	12.37	22.68	30.93	8.25	17.53	184	97
Scheduled Tribes	61.80	8.99	8.99	6.74	3.37	3.37	1.12	5.62	0.00	4.44	11.11	11.11	4.44	42.22	8.89	17.78	89	45
Backward Classes	43.41	11.22	13.41	11.71	11.22	2.68	0.73	5.61	0.00	1.92	4.81	9.13	16.83	29.33	8.17	29.81	410	208
Other Castes	13.48	7.30	12.36	17.98	26.97	7.30	3.37	11.24	0.00	2.35	3.53	8.24	15.29	30.59	9.41	30.59	178	85
Household wealth index (age 8)																		
Bottom tertile	64.79	13.73	7.75	6.34	4.93	1.76	0.00	0.70	0.00	4.90	9.79	16.78	15.38	32.87	6.29	13.99	284	143
Middle tertile	47.06	10.73	14.19	11.76	11.42	1.73	0.69	2.42	0.00	2.78	3.47	9.03	20.14	31.25	8.33	25.00	289	144
Top tertile	15.63	7.29	11.81	17.71	21.53	8.68	2.78	14.58	0.00	1.35	1.35	4.05	14.19	29.73	10.81	38.51	288	148
Location (age 8)																		
Urban	15.35	7.92	10.40	17.82	21.29	10.40	2.97	13.86	0.00	1.89	0.94	6.60	18.87	30.19	10.38	31.13	202	106
Rural	50.68	11.38	11.53	10.17	10.02	2.12	0.61	3.49	0.00	3.34	6.08	10.94	15.81	31.61	7.90	24.32	659	329
Region (age 8)																		
New Andhra Pradesh	38.93	10.71	12.86	12.68	13.93	2.32	1.79	6.79	0.00	2.15	5.73	8.24	16.49	30.11	10.39	26.88	560	279
Telangana	48.84	10.30	8.31	10.63	10.30	7.31	0.00	4.32	0.00	4.49	3.21	12.82	16.67	33.33	5.13	24.36	301	156
Full sample	42.39	10.57	11.27	11.96	12.66	4.07	1.16	5.92	0.00	2.99	4.83	9.89	16.55	31.26	8.51	25.98	861	435
Sample size	861	861	861	861	861	861	861	861	435	435	435	435	435	435	435	435	861	435

	Maternal education								Female index child								Sample size	
	None (%)	Incomplete primary (%)	Lower primary (%)	Upper primary (%)	Secondary (%)	Higher secondary (%)	Vocational (%)	Higher education (%)	None (%)	Incomplete primary (%)	Lower primary (%)	Upper primary (%)	Secondary (%)	Higher secondary (%)	Vocational (%)	Higher education (%)	Mothers	Female index child
Caste																		
Scheduled Castes	78.53	9.42	5.76	3.66	1.57	0.52	0.00	0.52	1.04	3.13	9.38	14.58	25.00	26.04	5.21	15.63	191	96
Scheduled Tribes	72.55	5.88	9.80	2.94	6.86	0.98	0.00	0.98	0.00	7.27	5.45	18.18	9.09	32.73	7.27	20.00	102	55
Backward Classes	60.34	11.78	9.86	9.62	5.05	0.96	0.00	2.16	0.48	4.33	10.10	16.83	25.96	18.75	3.85	19.71	416	208
Other Castes	33.51	10.81	14.05	20.00	12.43	2.70	1.62	4.86	0.00	0.00	2.02	10.10	10.10	19.19	5.05	53.54	185	99
Household wealth index (age 8)																		
Bottom tertile	80.68	8.81	6.78	3.39	0.34	0.00	0.00	0.00	0.00	8.67	10.00	18.67	23.33	24.67	6.00	8.67	295	150
Middle tertile	64.12	16.28	8.31	7.64	3.32	0.33	0.00	0.00	0.64	1.28	6.41	18.59	23.72	18.59	3.85	26.92	301	156
Top tertile	35.57	6.04	14.43	18.12	14.43	3.36	1.01	6.71	0.66	0.66	6.58	7.89	13.82	23.03	4.61	42.76	298	152
Location (age 8)																		
Urban	33.97	4.31	11.96	19.62	16.75	3.83	0.96	8.13	0.95	0.95	5.71	6.67	14.29	21.90	3.81	45.71	209	105
Rural	68.03	12.26	9.20	6.72	2.77	0.44	0.15	0.44	0.28	4.25	8.22	17.56	22.10	22.10	5.10	20.40	685	353
Region (age 8)																		
New Andhra Pradesh	53.09	13.75	12.03	9.97	6.01	1.37	0.52	3.26	0.00	1.98	8.25	14.19	19.14	22.44	5.94	28.05	582	303
Telangana	73.08	4.17	5.77	9.29	6.09	0.96	0.00	0.32	1.29	6.45	6.45	16.77	22.58	21.29	2.58	22.58	312	155
Full sample	60.07	10.40	9.84	9.73	6.04	1.23	0.34	2.24	0.44	3.49	7.64	15.07	20.31	22.05	4.80	26.20	894	458
Sample size	894	894	894	894	894	894	894	894	458	458	458	458	458	458	458	458	894	458

Notes: Data only children from the Older Cohort that are present in all survey rounds. All categorical variables are fixed in 2002 (Round 1), except for maternal education which is fixed in 2006 (Round 2). Sample sizes differ where there are missing responses for each outcome. Highest parental education refers to the highest grade completed by any biological parent who was present in the household roster in 2006 (Round 2). If parental education was missing in 2006, this was replaced with information from other survey rounds. 'None' refers to no education, 'Incomplete primary' refers to Grades 1 to 4, 'Lower primary' refers to Grades 5 and 6, 'Upper primary' refers to Grades 7 to 9. 'Lower secondary' refers to Grades 10 and 11, 'Upper secondary' refers to Grade 12, 'Vocational' refers to vocational or post-secondary technological institute, 'Higher education' refers to a completed degree, diploma, Masters or PhD. For boys, 'other' grades such as 'bank coaching' and 'pre-secondary technological' are considered as upper secondary education.

Part III. *Peru*

	Secondary completed (or more)			Higher education			Years of schooling			Full sample size	Female sample size
	Parent	YL child	Differences	Parent	YL child	Differences	Parent	YL child	Differences		
Location (age 8)											
Rural	14.54	82.29	-67.75***	1.56	34.48	-32.93***	5.82	10.43	-4.61***	133	66
Urban	57.58	90.02	-32.44***	18.63	54.45	-35.82***	8.93	10.83	-1.9***	427	201
Gap	43.03***	7.73**	35.31	17.07***	19.96***	-2.89	3.12***	0.41***	2.71	.	.
Household wealth index (age 8)											
Bottom tertile	15.05	80.88	-65.83***	1.35	33.64	-32.28***	5.91	10.43	-4.52***	173	92
Middle tertile	48.61	90.02	-41.41***	11.80	48.57	-36.77***	8.54	10.82	-2.29***	188	80
Top tertile	86.72	96.08	-41.41***	38.34	71.59	-33.24***	10.58	10.97	-0.39***	194	93
Gap	71.67***	15.2***	56.47	36.99***	37.95***	-0.96	4.67***	0.54***	4.13	.	.
Mother's first language (ethnicity proxy)											
Indigenous	22.11	86.22	-64.11***	3.90	40.56	-36.67***	6.10	10.59	-4.49***	166	80
Spanish	51.59	86.87	-35.28***	16.43	50.03	-33.6***	8.66	10.70	-2.04***	390	185
Gap	29.47***	0.65	28.82	12.53***	9.46	3.07	2.57***	0.12	2.45	.	.
Average of full sample	39.17	86.71		11.33	45.91		7.60	10.66		148.45	153.16

Notes: ***indicates a significant gap at the 1% level. Data only includes Older Cohort children present in all five survey rounds. Data for the Older Cohort children are from when they were 22 years old in 2016 (Round 5). Highest parental education refers to the highest grade completed by any biological parent who was present in the household roster in 2006 (Round 2). Household wealth tertiles were calculated for the Older Cohort using household wealth index of the panel sample in 2002 (Round 1). Region and location information refers to household's location in 2002 (Round 1). Sample sizes differ for different outcomes due to differences in the number of missing responses for each outcome. Higher education includes information for those who have completed or are still enrolled in higher education, and includes having achieved a degree in a technical institution, university or CETPRO.

Part IV. *Vietnam*

	Highest parental education			Child education			Sample size	
	No education (%)	Post-secondary (%)	Grade 1-12 (years of education)	No education (%)	Post-secondary (%)	Grade 1-12 (years of education)	Parents	Children
Gender								
Male	6.4	9.8	8.0	1.0	24.4	9.8	388	390
Female	3.7	8.5	8.1	1.1	40.0	10.0	436	437
Ethnicity								
Majority Kinh	0.6	10.5	8.4	0.1	35.4	10.2	715	718
Ethnic minority groups	33.9	0.0	5.2	7.3	14.7	8.2	109	109
Household wealth index (age 8)								
Bottom tertile	13.5	2.9	6.4	3.3	16.7	9.0	275	276
Middle tertile	1.1	5.4	8.2	0.0	36.3	10.1	276	278
Top tertile	0.4	19.1	9.6	0.0	44.9	11.0	272	272
Location (age 8)								
Urban	0.0	19.6	9.1	0.0	32.7	10.7	148	150
Rural	6.1	6.8	7.8	1.3	32.6	9.7	676	677
Region (age 8)								
Northern Uplands	20.3	5.2	6.9	4.7	28.5	9.6	172	172
Red River Delta	0.6	7.2	9.8	0.0	45.5	10.7	167	167
Central Coastal Urban	0.0	19.6	9.1	0.0	32.7	10.7	148	150
Central Coastal Rural	3.1	6.2	7.2	0.0	30.7	9.1	162	163
Mekong River Delta	0.0	8.6	7.3	0.6	26.3	9.8	175	175
Full sample	5.0	9.1	8.0	1.1	32.6	9.9	824	827
Sample size	824	824	708	827	827	548	824	827

Notes: Data only includes Older Cohort children present in all five survey rounds. Data for the Older Cohort children are from when they were 22 years old in 2016 (Round 5). Highest parental education refers to the highest grade completed by any biological parent who was present in the household roster in 2006 (Round 2). No education denotes the percentage of parents and children who reported having completed no education. Post-secondary education refers to parents and children whose highest grade completed was higher than Grade 12, or secondary education. Grades 1-12 (years of education) refers to the average years of education attained by parents and children who had attained grades below post-secondary education and had been in education. Household wealth tertiles were calculated for the Older Cohort using household wealth index of the panel sample in 2002 (Round 1). Region and location information refers to household's location in 2002 (Round 1). Sample sizes differ for different outcomes due to differences in the number of missing responses for each outcome.

Table A4. *Post-secondary education studies currently enrolled in/completed at age 22, across all country sites*

	Ethiopia				India				Peru				Vietnam			
	University		Vocational/ Technical		University		Vocational/ Technical		University		Vocational/ Technical		University		Vocational/ Technical	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Gender																
Female	16	387	19	387	30	474	6	474	26	288	27	288	37	464	21	464
Male	15	427	12	427	37	448	10	448	25	320	25	320	26	446	23	446
Caregiver's education																
Incomplete primary or less	12	661	14	661	28	751	7	751	15	220	24	220	16	293	12	293
Completed primary and any secondary	37	76	21	76	60	141	13	141	28	298	29	298	37	568	26	568
Higher education	56	9	33	9	72	18	17	18	61	61	23	61	87	30	50	30
Household wealth index at age 8																
Bottom tertile	7	285	6	285	22	327	7	327	13	299	24	299	15	302	10	302
Middle tertile	10	278	15	278	32	302	8	302	26	165	31	165	32	313	25	313
Top tertile	32	250	24	250	48	293	9	293	50	139	26	139	47	294	32	294
Location at age 8																
Urban	29	269	26	269	48	213	9	213	30	462	27	462	42	172	31	172
Rural	9	545	10	545	29	709	7	709	13	146	25	146	29	738	20	738
Total	15%	814	15%	814	34%	922	8%	922	26%	608	26%	608	31%	910	22%	910

Notes: Sample sizes differ depending on missing values of categorical variables, particularly caregiver's education. All figures report the percentage of Older Cohort children at age 22 (Round 5, 2016) who are currently enrolled or have completed post-secondary education. The table does not report the percentage of Older Cohort children who have enrolled in post-secondary education but dropped out before completion. Vocational/technical in Peru includes CETPRO. Those who are enrolled/completed university are required to have completed upper secondary education upon entry. Those who are enrolled/completed vocational/technical studies are required to have completed lower secondary education upon entry, but may have also enrolled in higher grades prior to entry into vocational/technical institutes. Household wealth tertiles were calculated for the Older Cohort using household wealth index of the panel sample in 2002 (Round 1). Region and location information refers to household's location in 2002 (Round 1).

Table A5. *Characteristics comparing those enrolled in post-secondary education to those who have never enrolled in post-secondary education*

Part I. *Ethiopia*

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	p-value	
Demographic characteristics					
Child: Female	0.48	0.45	0.55	0.010	814
Child: age in Round 5	264.30	264.31	264.28	0.920	814
Early childhood socio-economic characteristics at age 8					
Urban	0.33	0.23	0.59	0.000	814
Maternal education: Primary incomplete or less	0.89	0.93	0.77	0.000	746
Maternal education: Complete primary or secondary	0.10	0.06	0.20	0.000	746
Maternal education: Higher education	0.01	0.01	0.03	0.010	746
Paternal education: Primary incomplete or less	0.82	0.87	0.71	0.000	607
Paternal education: Complete primary or secondary	0.14	0.12	0.20	0.020	607
Paternal education: Higher education	0.03	0.01	0.09	0.000	607
Wealth index: Bottom tertile	0.35	0.43	0.15	0.000	813
Wealth index: Middle tertile	0.34	0.37	0.28	0.030	813
Wealth index: Top tertile	0.31	0.21	0.57	0.000	813
Height-for-age z-score	-1.54	-1.65	-1.27	0.000	785
Original family: household characteristics (at age 8)					
Household size	6.48	6.60	6.17	0.010	814
Child order - oldest child	0.88	0.90	0.85	0.060	814
Number of siblings	3.24	3.40	2.83	0.000	814
Single-parent family	0.30	0.28	0.35	0.050	811
Recent (lagged) socio-economic status (at ages 15, 19 and 22)					
Urban (at age 15)	0.40	0.29	0.66	0.000	810
Wealth index: Bottom tertile (at age 15)	0.34	0.43	0.12	0.000	809
Wealth index: Middle tertile (at age 15)	0.34	0.34	0.35	0.790	809
Wealth index: Top tertile (at age 15)	0.31	0.23	0.53	0.000	809
Urban (at age 19)	0.45	0.35	0.68	0.000	785
Wealth index: Bottom tertile (at age 19)	0.36	0.44	0.16	0.000	780
Wealth index: Middle tertile (at age 19)	0.34	0.36	0.30	0.140	780
Wealth index: Top tertile (at age 19)	0.30	0.21	0.54	0.000	780
Urban (at age 22)	0.56	0.45	0.82	0.000	814
Wealth index: Bottom tertile (at age 22)	0.34	0.41	0.15	0.000	809
Wealth index: Middle tertile (at age 22)	0.34	0.35	0.31	0.220	809
Wealth index: Top tertile (at age 22)	0.32	0.23	0.54	0.000	809
Recent household characteristics (at ages 15, 19 and 22)					
Household size (at age 15)	6.39	6.50	6.12	0.020	810
Household size (at age 19)	5.40	5.48	5.22	0.140	785
Married/cohabiting/parent (at age 19)	0.08	0.11	0.02	0.000	785
Household size (at age 22)	4.60	4.60	4.60	0.990	810
Married/cohabiting/parent (at age 22)	0.21	0.26	0.07	0.000	814
Cognitive skills (at ages 12, 15 and 19)					
Maths score (% correct) at age 12	55.82	49.85	69.69	0.000	761
Maths score (% correct) at age 15	16.93	12.36	28.42	0.000	809
Maths score (% correct) at age 19	47.44	40.70	62.62	0.000	745
PPVT raw score at age 12	74.77	69.83	87.24	0.000	792
PPVT raw score at age 15	148.24	139.60	169.86	0.000	802
PPVT z-score at age 12	-0.04	-0.23	0.43	0.000	792
PPVT z-score at age 15	-0.06	-0.29	0.53	0.000	802

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19 and 22)					
Pride (at age 12)	0.00	-0.05	0.10	0.000	812
Pride (at age 15)	-0.03	-0.07	0.07	0.010	810
Pride (at age 19)	0.00	0.00	0.00	0.960	785
Pride (at age 22)	0.00	0.00	0.00	0.960	814
Agency (at age 12)	0.00	-0.04	0.08	0.000	811
Agency (at age 15)	0.00	-0.02	0.06	0.040	810
Agency (at age 19)	0.00	-0.09	0.21	0.000	785
Agency (at age 22)	0.00	-0.07	0.18	0.000	814
(Rosenberg) Self-esteem scale (at age 19)	0.00	-0.02	0.07	0.060	785
(Rosenberg) Self-esteem scale (at age 22)	0.00	-0.01	0.02	0.440	814
(Generalised) Self-efficacy scale (at age 19)	-0.01	-0.04	0.06	0.020	785
(Generalised) Self-efficacy scale (at age 22)	0.00	-0.02	0.05	0.100	814
AWSA (at age 22)	0.00	-0.04	0.10	0.000	814
Grit (at age 22)	0.00	-0.02	0.06	0.040	814
(Big 5) Neuroticism (at age 22)	0.00	-0.02	0.04	0.070	814
(Big 5) Conscientiousness (at age 22)	0.00	-0.02	0.05	0.050	814
Depression (age 19)	0.00	0.00	0.00	1.000	785
Depression (age 22)	0.00	0.04	-0.11	0.000	814
Aspirations (at ages 12, 15, 19, and 22)					
Child: aspiring to complete university (age 12)	0.69	0.64	0.79	0.000	770
Child: aspiring to complete university (age 15)	0.72	0.64	0.92	0.000	807
Child: aspiring to complete university (age 19)	0.71	0.62	0.93	0.000	785
Caregiver: aspiring to university for her child (age 12)	0.74	0.70	0.83	0.000	803
Caregiver: aspiring to university for her child (age 15)	0.78	0.73	0.90	0.000	798
Caregiver expectations: age to support household (age 12)	22.76	22.55	23.30	0.016	770
Caregiver expectations: age to be financially independent (age 12)	23.54	23.43	23.81	0.163	767
Caregiver expectations: age to leave the household/marry (age 12)	25.64	25.43	26.16	0.014	762
Technical skills (z-score) (at age 22)					
Teamwork	0.00	0.00	0.00	0.944	814
Leadership	0.00	-0.07	0.16	0.000	813
Educational attainment (at age 22)					
Completed secondary education	0.46	0.33	0.81	0.000	814
Currently enrolled	0.35	0.19	0.77	0.000	813
	814	584	230		

Part II. *India*

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Demographic characteristics					
Child: female	0.51	0.56	0.44	0.000	922
Child: age in Round 5	263.99	264.01	263.97	0.897	922
Early childhood socio-economic characteristics at age 8					
Urban	0.23	0.18	0.32	0.000	922
Maternal education: Primary incomplete or less	0.83	0.91	0.69	0.000	910
Maternal education: Complete primary or secondary	0.15	0.08	0.27	0.000	910
Maternal education: Higher education	0.02	0.01	0.04	0.000	910
Paternal education: Primary incomplete or less	0.68	0.78	0.52	0.000	877
Paternal education: Complete primary or secondary	0.27	0.22	0.36	0.000	877
Paternal education: Higher education	0.05	0.01	0.12	0.000	877
Wealth index: Bottom tertile	0.35	0.42	0.25	0.000	922
Wealth index: Middle tertile	0.33	0.34	0.31	0.391	922
Wealth index: Top tertile	0.32	0.24	0.44	0.000	922
Height-for-age z-score	-1.57	-1.60	-1.50	0.159	922
Original family: household characteristics (at age 8)					
Household size	5.55	5.58	5.51	0.622	922
Child order - oldest child	0.65	0.70	0.58	0.000	922
Number of siblings	1.81	1.92	1.63	0.000	922
Single-parent family	0.09	0.11	0.07	0.087	922
Recent (lagged) socio-economic status (at ages 15, 19 and 22)					
Urban (at age 15)	0.24	0.19	0.32	0.000	915
Wealth index: Bottom tertile (at age 15)	0.34	0.40	0.25	0.000	911
Wealth index: Middle tertile (at age 15)	0.34	0.39	0.26	0.000	911
Wealth index: Top tertile (at age 15)	0.32	0.21	0.49	0.000	911
Urban (at age 19)	0.30	0.26	0.36	0.001	916
Wealth index: Bottom tertile (at age 19)	0.34	0.38	0.27	0.001	918
Wealth index: Middle tertile (at age 19)	0.34	0.38	0.29	0.005	918
Wealth index: Top tertile (at age 19)	0.32	0.25	0.44	0.000	918
Urban (at age 22)	0.33	0.29	0.40	0.000	914
Wealth index: Bottom tertile (at age 22)	0.34	0.42	0.21	0.000	921
Wealth index: Middle tertile (at age 22)	0.33	0.33	0.33	0.897	921
Wealth index: Top tertile (at age 22)	0.33	0.25	0.46	0.000	921
Recent household characteristics (at ages 15, 19 and 22)					
Household size (at age 15)	5.05	5.05	5.06	0.930	919
Household size (at age 19)	4.72	4.79	4.62	0.195	918
Married/cohabiting/parent (at age 19)	0.20	0.31	0.01	0.000	918
Household size (at age 22)	4.73	4.77	4.65	0.378	921
Married/cohabiting/parent (at age 22)	0.34	0.51	0.08	0.000	922
Cognitive skills (at ages 12, 15 and 19)					
Maths score (% correct) at age 12	62.68	57.00	71.07	0.000	878
Maths score (% correct) at age 15	29.27	21.06	42.38	0.000	919
Maths score (% correct) at age 19	46.95	37.39	60.78	0.000	866
PPVT raw score at age 12	90.59	84.30	100.60	0.000	904
PPVT raw score at age 15	131.00	119.25	149.90	0.000	892
PPVT z-score at age 12	0.01	-0.25	0.43	0.000	904
PPVT z-score at age 15	0.01	-0.29	0.48	0.000	892

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Non-cognitive skills (at ages 12, 15, 19 and 22)					
Pride (at age 12)	0.00	-0.07	0.10	0.000	922
Pride (at age 15)	0.00	-0.01	0.00	0.832	917
Pride (at age 19)	0.00	-0.04	0.07	0.029	918
Pride (at age 22)	0.00	-0.03	0.05	0.134	922
Agency (at age 12)	0.00	-0.08	0.13	0.000	921
Agency (at age 15)	0.01	-0.04	0.10	0.000	917
Agency (at age 19)	0.01	-0.16	0.28	0.000	918
Agency (at age 22)	0.00	-0.15	0.24	0.000	922
(Rosenberg) Self-esteem scale (at age 19)	0.00	-0.03	0.05	0.018	918
(Rosenberg) Self-esteem scale (at age 22)	0.00	-0.03	0.04	0.053	922
(Generalised) Self-efficacy scale (at age 19)	0.01	-0.11	0.18	0.000	917
(Generalised) Self-efficacy scale (at age 22)	0.00	-0.09	0.13	0.000	922
AWSA (at age 22)	0.00	0.00	0.00	0.840	921
Grit (at age 22)	0.00	-0.03	0.05	0.005	922
(Big 5) Neuroticism (at age 22)	0.00	0.00	0.00	0.987	920
(Big 5) Conscientiousness (at age 22)	0.00	0.02	-0.03	0.112	922
Depression (age 19)	0.00	0.11	-0.17	0.000	918
Depression (age 22)	0.00	0.04	-0.06	0.031	922
Aspirations (at ages 12, 15, 19, and 22)					
Child: aspiring to complete university (age 12)	0.68	0.56	0.84	0.000	826
Child: aspiring to complete university (age 15)	0.54	0.46	0.66	0.000	903
Child: aspiring to complete university (age 19)	0.65	0.53	0.84	0.000	918
Caregiver: aspiring to university for her child (age 12)	0.54	0.40	0.78	0.000	893
Caregiver: aspiring to university for her child (age 15)					
Caregiver expectations: age to support household (age 12)	20.71	19.62	22.35	0.000	728
Caregiver expectations: age to be financially independent (age 12)	22.29	21.57	23.38	0.000	766
Caregiver expectations: age to leave the household/marry (age 12)	23.07	22.35	24.25	0.000	834
Technical skills (z-score) (at age 22)					
Teamwork	-0.01	-0.14	0.20	0.000	910
Leadership	0.00	-0.13	0.20	0.000	921
Educational attainment (at age 22)					
Completed secondary education	0.50	0.20	1.00	0.000	922
Currently enrolled	0.21	0.01	0.53	0.000	922
	922	568	354		

Part III. *Peru*

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Demographic characteristics					
Child: Female	0.47	0.46	0.48	0.627	608
Child: age in Round 5	263.11	263.33	262.88	0.271	608
Early childhood socio-economic characteristics at age 8					
Urban	0.76	0.69	0.83	0.000	608
Maternal education: Primary incomplete or less	0.38	0.49	0.27	0.000	579
Maternal education: Complete primary or secondary	0.51	0.47	0.56	0.035	579
Maternal education: Higher education	0.11	0.04	0.17	0.000	579
Paternal education: Primary incomplete or less	0.27	0.37	0.19	0.000	458
Paternal education: Complete primary or secondary	0.59	0.57	0.60	0.534	458
Paternal education: Higher education	0.14	0.06	0.21	0.000	458
Wealth index: Bottom tertile	0.50	0.63	0.36	0.000	603
Wealth index: Middle tertile	0.27	0.25	0.30	0.135	603
Wealth index: Top tertile	0.23	0.12	0.34	0.000	603
Height-for-age z-score	-1.41	-1.63	-1.18	0.000	604
Original family: household characteristics (at age 8)					
Household size	5.65	5.96	5.34	0.000	608
Child order - oldest child	0.68	0.76	0.61	0.000	608
Number of siblings	2.07	2.40	1.75	0.000	608
Single-parent family	0.22	0.26	0.18	0.018	608
Recent (lagged) socio-economic status (at ages 15, 19 and 22)					
Urban (at age 15)	0.78	0.70	0.86	0.000	599
Wealth index: Bottom tertile (at age 15)	0.30	0.42	0.19	0.000	596
Wealth index: Middle tertile (at age 15)	0.35	0.37	0.33	0.250	596
Wealth index: Top tertile (at age 15)	0.35	0.21	0.49	0.000	596
Urban (at age 19)	0.84	0.77	0.91	0.000	587
Wealth index: Bottom tertile (at age 19)	0.20	0.27	0.13	0.000	582
Wealth index: Middle tertile (at age 19)	0.35	0.42	0.29	0.001	582
Wealth index: Top tertile (at age 19)	0.45	0.31	0.58	0.000	582
Urban (at age 22)	0.87	0.81	0.92	0.000	608
Wealth index: Bottom tertile (at age 22)	0.14	0.21	0.07	0.000	607
Wealth index: Middle tertile (at age 22)	0.41	0.46	0.35	0.003	607
Wealth index: Top tertile (at age 22)	0.45	0.33	0.58	0.000	607
Recent household characteristics (at ages 15, 19 and 22)					
Household size (at age 15)	5.37	5.59	5.15	0.003	599
Household size (at age 19)	4.72	4.80	4.65	0.402	583
Married/cohabiting/parent (at age 19)	0.17	0.29	0.06	0.000	574
Household size (at age 22)	4.30	4.32	4.28	0.801	608
Married/cohabiting/parent (at age 22)	0.35	0.54	0.16	0.000	598
Cognitive skills (at ages 12, 15 and 19)					
Maths score (% correct) at age 12	72.55	65.19	79.87	0.000	596
Maths score (% correct) at age 15	44.09	36.22	51.98	0.000	593
Maths score (% correct) at age 19	58.86	49.40	67.68	0.000	557
PPVT raw score at age 12	72.68	67.11	78.28	0.000	591
PPVT raw score at age 15	96.81	90.57	103.02	0.000	575
PPVT z-score at age 12	0.02	-0.32	0.35	0.000	591
PPVT z-score at age 15	0.00	-0.36	0.36	0.000	575

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19 and 22)					
Pride (at age 12)	0.00	0.06	-0.07	0.001	599
Pride (at age 15)	-0.01	-0.07	0.04	0.018	594
Pride (at age 19)	0.00	-0.10	0.09	0.001	572
Pride (at age 22)	0.00	-0.14	0.14	0.000	596
Agency (at age 12)	0.01	0.00	0.01	0.892	599
Agency (at age 15)	0.01	-0.14	0.15	0.000	594
Agency (at age 19)	0.01	-0.19	0.21	0.000	572
Agency (at age 22)	-0.01	-0.18	0.14	0.000	596
(Rosenberg) Self-esteem scale (at age 19)	0.00	-0.11	0.10	0.000	572
(Rosenberg) Self-esteem scale (at age 22)	0.00	-0.13	0.13	0.000	596
(Generalised) Self-efficacy scale (at age 19)	0.00	-0.15	0.15	0.000	572
(Generalised) Self-efficacy scale (at age 22)	0.00	-0.16	0.16	0.000	596
AWSA (at age 22)	0.00	-0.10	0.10	0.000	596
Grit (at age 22)	0.00	-0.10	0.10	0.000	596
(Big 5) Neuroticism (at age 22)	0.00	0.00	0.00	0.923	596
(Big 5) Conscientiousness (at age 22)	0.00	0.04	-0.04	0.009	596
Depression (age 19)	-0.03	-0.11	0.05	0.007	554
Depression (age 22)	-0.01	-0.10	0.07	0.008	553
Aspirations (at ages 12, 15, 19, and 22)					
Child: aspiring to complete university (age 12)	0.79	0.71	0.87	0.000	592
Child: aspiring to complete university (age 15)	0.78	0.70	0.87	0.000	595
Child: aspiring to complete university (age 19)	0.71	0.52	0.89	0.000	574
Caregiver: aspiring to university for her child (age 12)	0.76	0.67	0.85	0.000	601
Caregiver: aspiring to university for her child (age 15)	0.73	0.63	0.82	0.000	595
Caregiver expectations: age to support household (age 12)	20.88	19.98	21.78	0.000	596
Caregiver expectations: age to be financially independent (age 12)	22.84	22.19	23.48	0.000	593
Caregiver expectations: age to leave the household/marry (age 12)	26.42	26.05	26.78	0.014	561
Technical skills (z-score) (age 22)					
Teamwork	0.00	-0.15	0.15	0.000	596
Leadership	0.00	-0.15	0.14	0.000	596
Educational attainment (age 22)					
Completed secondary education	0.84	0.67	1.00	0.000	608
Currently enrolled	0.39	0.05	0.74	0.000	608
	608	304	304		

Part IV. *Vietnam*

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Demographic characteristics					
Child: Female	0.51	0.46	0.58	0.000	910
Child: age in Round 5	267.35	266.86	268.03	0.000	907
Early childhood socio-economic characteristics at age 8					
Urban	0.19	0.16	0.23	0.005	910
Maternal education: Primary incomplete or less	0.33	0.43	0.18	0.000	891
Maternal education: Complete primary or secondary	0.64	0.56	0.74	0.000	891
Maternal education: Higher education	0.03	0.00	0.07	0.000	891
Paternal education: Primary incomplete or less	0.26	0.38	0.11	0.000	870
Paternal education: Complete primary or secondary	0.69	0.61	0.79	0.000	870
Paternal education: Higher education	0.05	0.01	0.10	0.000	870
Wealth index: Bottom tertile	0.33	0.45	0.17	0.000	909
Wealth index: Middle tertile	0.34	0.32	0.38	0.056	909
Wealth index: Top tertile	0.32	0.23	0.45	0.000	909
Height-for-age z-score	-1.47	-1.59	-1.29	0.000	910
Original family: household characteristics (at age 8)					
Household size	4.92	5.07	4.73	0.001	910
Child order- oldest child	0.55	0.62	0.46	0.000	910
Number of siblings	1.60	1.76	1.37	0.000	910
Single-parent family	0.05	0.06	0.04	0.184	910
Recent (lagged) socio-economic status (at ages 15, 19 and 22)					
Urban (at age 15)	0.19	0.16	0.23	0.015	898
Wealth index: Bottom tertile (at age 15)	0.34	0.45	0.18	0.000	879
Wealth index: Middle tertile (at age 15)	0.33	0.30	0.38	0.016	879
Wealth index: Top tertile (at age 15)	0.33	0.24	0.44	0.000	879
Urban (at age 19)	0.21	0.19	0.23	0.159	760
Wealth index: Bottom tertile (at age 19)	0.34	0.43	0.21	0.000	856
Wealth index: Middle tertile (at age 19)	0.33	0.30	0.36	0.088	856
Wealth index: Top tertile (at age 19)	0.33	0.26	0.43	0.000	856
Urban (at age 22)	0.40	0.28	0.57	0.000	909
Wealth index: Bottom tertile (at age 22)	0.35	0.42	0.26	0.000	909
Wealth index: Middle tertile (at age 22)	0.32	0.31	0.34	0.450	909
Wealth index: Top tertile (at age 22)	0.33	0.27	0.41	0.000	909
Recent household characteristics (at ages 15, 19 and 22)					
Household size (at age 15)	4.53	4.62	4.41	0.024	898
Household size (at age 19)	4.15	4.28	3.97	0.002	858
Married/cohabiting/parent (at age 19)	0.12	0.21	0.01	0.000	832
Household size (at age 22)	3.68	4.07	3.13	0.000	909
Married/cohabiting/parent (at age 22)	0.31	0.43	0.14	0.000	910
Cognitive skills (at ages 12, 15 and 19)					
Maths score (% correct) at age 12	81.98	74.99	91.59	0.000	896
Maths score (% correct) at age 15	58.90	49.41	72.26	0.000	895
Maths score (% correct) at age 19	45.56	37.96	54.98	0.000	797
PPVT raw score at age 12	137.43	130.16	147.06	0.000	867
PPVT raw score at age 15	167.61	159.97	178.11	0.000	874
PPVT z-score at age 12	0.00	-0.28	0.36	0.000	867
PPVT z-score at age 15	0.02	-0.25	0.39	0.000	874

	Mean			T-test	N
	All	Never enrolled in post-secondary education	Is or was enrolled in post-secondary education	P-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19 and 22)					
Pride (at age 12)	0.00	-0.07	0.11	0.000	904
Pride (at age 15)	0.00	-0.09	0.12	0.000	894
Pride (at age 19)	-0.01	-0.06	0.07	0.009	833
Pride (at age 22)	0.00	-0.07	0.09	0.001	910
Agency (at age 12)	0.00	0.00	0.00	0.912	899
Agency (at age 15)	0.00	-0.08	0.12	0.000	894
Agency (at age 19)	0.02	-0.08	0.16	0.000	833
Agency (at age 22)	0.00	-0.12	0.16	0.000	910
(Rosenberg) Self-esteem scale (at age 19)	0.00	-0.03	0.05	0.047	833
(Rosenberg) Self-esteem scale (at age 22)	0.00	-0.03	0.04	0.037	909
(Generalised) Self-efficacy scale (at age 19)	0.00	-0.03	0.05	0.035	833
(Generalised) Self-efficacy scale (at age 22)	0.00	-0.02	0.03	0.157	909
AWSA (at age 22)	0.00	-0.07	0.10	0.000	910
Grit (at age 22)	0.00	-0.01	0.01	0.658	910
(Big 5) Neuroticism (at age 22)	0.00	0.02	-0.02	0.112	910
(Big 5) Conscientiousness (at age 22)	0.00	0.04	-0.06	0.000	910
Depression (age 19)	-0.01	0.10	-0.15	0.000	833
Depression (age 22)	0.00	0.06	-0.09	0.001	909
Aspirations (at ages 12, 15, 19, and 22)					
Child: aspiring to complete university (age 12)	0.75	0.62	0.91	0.000	876
Child: aspiring to complete university (age 15)	0.65	0.48	0.88	0.000	882
Child: aspiring to complete university (age 19)	0.71	0.52	0.97	0.000	833
Caregiver: aspiring to university for her child (age 12)	0.73	0.60	0.91	0.000	899
Caregiver: aspiring to university for her child (age 15)	0.60	0.44	0.85	0.000	118
Caregiver expectations: age to support household (age 12)	22.51	21.85	23.47	0.000	833
Caregiver expectations: age to be financially independent (age 12)	24.78	24.34	25.35	0.000	800
Caregiver expectations: age to leave the household/marry (age 12)	25.37	25.03	25.85	0.000	880
Technical skills (z-score) (at age 22)					
Teamwork	0.00	-0.13	0.18	0.000	908
Leadership	0.00	-0.19	0.26	0.000	906
Educational attainment (at age 22)					
Completed secondary education	0.60	0.32	0.99	0.000	910
Currently enrolled	0.15	0.02	0.34	0.000	910
	910	530	380		

Notes: Wealth index is a composite index of living standards. Height-for-age is standardised according with age and gender-specific child growth standards provided by WHO. PPVT: Peabody Picture and Vocabulary Test; AWSA: Attitude Toward Women Scale. Depression: number of depressive symptoms (z-score). See Table A1 for list of definitions of categorical variables.

Table A6. *Employment status, working and studying status and type of main activity at ages 19 and 22, by gender*

Part I: *Ethiopia*

	Age 19								Age 22							
	Total		Male		Female		t-test	N	Total		Male		Female		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value		Mean	Std	Mean	Std	Mean	Std	p-value	
Employment status																
Inactive	24%	0.014	15%	0.016	34%	0.023	(0.000)	908	17%	0.013	12%	0.015	23%	0.021	(0.000)	813
Housewife/caring for others	13%	0.019	2%	0.012	20%	0.028	(0.000)	319	21%	0.025	2%	0.012	35%	0.037	(0.000)	277
Student	78%	0.023	85%	0.033	74%	0.031	(0.025)	319	64%	0.029	83%	0.035	50%	0.039	(0.000)	277
Others*	9%	0.016	14%	0.032	6%	0.017	(0.030)	319	15%	0.022	15%	0.034	15%	0.028	(0.964)	277
Employed	74%	0.015	84%	0.017	64%	0.024	(0.000)	908	78%	0.014	86%	0.017	70%	0.023	(0.000)	813
Involved in at least one paid activity	58%	0.019	64%	0.024	49%	0.031	(0.000)	673	69%	0.018	73%	0.023	63%	0.029	(0.011)	636
Involved in no paid activities	42%	0.019	36%	0.024	52%	0.031	(0.000)	673	31%	0.018	27%	0.023	37%	0.029	(0.011)	636
Unemployed	2%	0.005	1%	0.005	3%	0.008	(0.080)	908	5%	0.008	3%	0.008	7%	0.013	(0.004)	813
Working and studying status																
Studying only	22%	0.014	14%	0.016	30%	0.022	(0.000)	908	15%	0.012	12%	0.016	17%	0.019	(0.050)	813
Working only	36%	0.016	41%	0.022	31%	0.022	(0.001)	908	57%	0.017	59%	0.024	54%	0.025	(0.105)	813
Working and studying	38%	0.016	42%	0.022	33%	0.023	(0.005)	908	22%	0.014	26%	0.021	17%	0.019	(0.001)	813
NEET	4%	0.007	2%	0.006	7%	0.012	(0.001)	908	7%	0.009	2%	0.007	13%	0.017	(0.000)	813
Main activity																
Own-account workers	63%	0.019	63%	0.024	64%	0.030	(0.919)	673	52%	0.020	55%	0.026	49%	0.030	(0.206)	636
Paid	11%	0.012	13%	0.017	8%	0.016	(0.020)	673	15%	0.014	17%	0.020	13%	0.020	(0.102)	636
Unpaid	52%	0.019	50%	0.025	56%	0.030	(0.119)	673	37%	0.019	37%	0.025	37%	0.029	(0.926)	636
Dependent workers	37%	0.019	37%	0.024	37%	0.030	(0.919)	673	48%	0.020	46%	0.026	51%	0.030	(0.206)	636
Paid	34%	0.018	33%	0.023	34%	0.029	(0.910)	673	44%	0.020	43%	0.026	45%	0.030	(0.552)	636
Unpaid	3%	0.007	3%	0.009	3%	0.010	(0.556)	673	4%	0.007	3%	0.008	5%	0.013	(0.071)	636

Part II: *India*

	Age 19								Age 22							
	Total		Male		Female		t-test	N	Total		Male		Female		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value		Mean	Std	Mean	Std	Mean	Std	p-value	
Employment status																
Inactive	37%	0.016	26%	0.020	47%	0.023	(0.000)	952	29%	0.015	14%	0.016	43%	0.023	(0.000)	922
Housewife/caring for other	19%	0.019	1%	0.006	31%	0.028	(0.000)	437	42%	0.028	0%	0.000	58%	0.032	(0.000)	321
Student	73%	0.021	94%	0.019	61%	0.029	(0.000)	437	49%	0.028	90%	0.032	33%	0.031	(0.000)	321
Others*	7%	0.012	6%	0.018	8%	0.017	(0.277)	437	9%	0.016	10%	0.032	9%	0.019	(0.740)	321
Employed	62%	0.016	74%	0.020	51%	0.023	(0.000)	952	67%	0.016	81%	0.018	53%	0.023	(0.000)	922
Involved in at least one paid activity	71%	0.021	73%	0.026	68%	0.034	(0.207)	485	81%	0.017	85%	0.020	74%	0.029	(0.003)	563
Involved in no paid activities	29%	0.021	27%	0.026	32%	0.034	(0.207)	485	19%	0.017	15%	0.020	26%	0.029	(0.003)	563
Unemployed	1%	0.004	1%	0.004	2%	0.006	(0.097)	952	4%	0.007	5%	0.010	4%	0.009	(0.613)	922
Working and studying status																
Studying only	27%	0.014	24%	0.020	29%	0.021	(0.056)	950	11%	0.010	11%	0.015	12%	0.015	(0.676)	922
Working only	40%	0.016	41%	0.023	40%	0.022	(0.751)	950	57%	0.016	66%	0.022	49%	0.023	(0.000)	922
Working and studying	22%	0.013	33%	0.022	12%	0.015	(0.000)	950	10%	0.010	16%	0.017	4%	0.009	(0.000)	922
NEET	11%	0.010	2%	0.007	19%	0.018	(0.000)	950	22%	0.014	8%	0.013	35%	0.022	(0.000)	922
Main activity																
Own-account workers	47%	0.023	46%	0.029	49%	0.036	(0.529)	485	33%	0.020	26%	0.024	43%	0.033	(0.000)	561
Paid	7%	0.011	5%	0.013	9%	0.020	(0.117)	485	5%	0.009	5%	0.012	6%	0.016	(0.553)	561
Unpaid	41%	0.022	41%	0.029	40%	0.035	(0.880)	485	27%	0.019	21%	0.022	37%	0.032	(0.000)	561
Dependent workers	53%	0.023	54%	0.029	51%	0.036	(0.529)	485	67%	0.020	74%	0.024	57%	0.033	(0.000)	561
Paid	47%	0.023	52%	0.029	39%	0.035	(0.003)	485	64%	0.020	71%	0.025	53%	0.034	(0.000)	561
Unpaid	6%	0.011	2%	0.008	12%	0.024	(0.000)	485	3%	0.008	3%	0.009	4%	0.013	(0.480)	561

Part III: *Peru*

	Age 19								Age 22							
	Total		Male		Female		t-test	N	Total		Male		Female		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value		Mean	Std	Mean	Std	Mean	Std	p-value	
Employment status																
Inactive	23%	0.017	17%	0.021	29%	0.027	(0.000)	619	13%	0.014	8%	0.015	19%	0.023	(0.000)	596
Housewife/caring for other	21%	0.024	1%	0.008	36%	0.037	(0.000)	293	39%	0.037	2%	0.015	61%	0.047	(0.000)	174
Student	68%	0.027	86%	0.032	55%	0.039	(0.000)	293	56%	0.038	91%	0.036	34%	0.046	(0.000)	174
Others*	11%	0.019	14%	0.031	10%	0.023	(0.277)	293	6%	0.018	8%	0.033	5%	0.020	(0.421)	174
Employed	73%	0.018	79%	0.023	66%	0.028	(0.000)	619	84%	0.015	90%	0.017	77%	0.025	(0.000)	596
Involved in at least one paid activity	88%	0.015	92%	0.017	83%	0.027	(0.002)	451	94%	0.011	95%	0.013	92%	0.018	(0.210)	500
Involved in no paid activities	12%	0.015	8%	0.017	17%	0.027	(0.002)	451	6%	0.011	5%	0.013	8%	0.018	(0.210)	500
Unemployed	5%	0.008	4%	0.011	5%	0.013	(0.746)	619	3%	0.007	2%	0.008	4%	0.012	(0.174)	596
Working and studying status																
Studying only	18%	0.015	15%	0.020	21%	0.024	(0.064)	619	9%	0.012	9%	0.016	9%	0.017	(0.960)	596
Working only	39%	0.020	40%	0.027	38%	0.028	(0.587)	619	51%	0.020	57%	0.028	45%	0.030	(0.006)	596
Working and studying	34%	0.019	39%	0.027	28%	0.026	(0.004)	619	33%	0.019	33%	0.027	32%	0.028	(0.695)	596
NEET	9%	0.012	6%	0.013	13%	0.020	(0.002)	619	7%	0.010	1%	0.006	14%	0.020	(0.000)	596
Main activity																
Own-account workers	20%	0.019	19%	0.024	22%	0.030	(0.381)	451	17%	0.017	18%	0.023	16%	0.025	(0.566)	500
Paid	8%	0.013	10%	0.018	6%	0.017	(0.129)	451	11%	0.014	13%	0.020	7%	0.018	(0.032)	500
Unpaid	12%	0.015	9%	0.018	16%	0.027	(0.019)	451	6%	0.011	5%	0.013	9%	0.019	(0.070)	500
Dependent workers	80%	0.019	82%	0.024	78%	0.030	(0.381)	451	83%	0.017	82%	0.023	84%	0.025	(0.566)	500
Paid	77%	0.020	79%	0.025	74%	0.032	(0.196)	451	79%	0.018	78%	0.025	80%	0.027	(0.500)	500
Unpaid	3%	0.008	2%	0.009	4%	0.014	(0.264)	451	4%	0.009	5%	0.013	4%	0.013	(0.766)	500

Part IV: *Vietnam*

	Age 19								Age 22							
	Total		Male		Female		t-test	N	Total		Male		Female		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value		Mean	Std	Mean	Std	Mean	Std	p-value	
Employment status																
Inactive	16%	0.012	12%	0.016	19%	0.018	(0.008)	880	6%	0.008	5%	0.010	7%	0.012	(0.177)	910
Housewife/caring for other	15%	0.019	6%	0.019	22%	0.028	(0.000)	373	34%	0.032	8%	0.029	51%	0.044	(0.000)	221
Student	68%	0.024	68%	0.038	67%	0.032	(0.950)	373	38%	0.033	46%	0.053	33%	0.041	(0.043)	221
Others*	17%	0.020	27%	0.036	11%	0.021	(0.000)	373	29%	0.030	46%	0.053	17%	0.033	(0.000)	221
Employed	83%	0.013	86%	0.017	80%	0.019	(0.017)	880	92%	0.009	93%	0.012	91%	0.014	(0.165)	910
Involved in at least one paid activity	68%	0.018	72%	0.024	65%	0.026	(0.033)	699	89%	0.011	89%	0.015	89%	0.016	(0.703)	835
Involved in no paid activities	32%	0.018	28%	0.024	36%	0.026	(0.033)	699	11%	0.011	11%	0.015	11%	0.016	(0.703)	835
Unemployed	2%	0.005	2%	0.007	2%	0.006	(0.678)	880	2%	0.005	2%	0.006	2%	0.007	(0.696)	910
Working and studying status																
Studying only	14%	0.012	12%	0.017	15%	0.017	(0.383)	828	5%	0.007	6%	0.011	3%	0.008	(0.117)	910
Working only	49%	0.017	54%	0.025	44%	0.024	(0.003)	828	78%	0.014	79%	0.019	76%	0.020	(0.205)	910
Working and studying	33%	0.016	31%	0.023	35%	0.023	(0.216)	828	14%	0.012	14%	0.016	15%	0.016	(0.673)	910
NEET	5%	0.007	2%	0.008	7%	0.012	(0.004)	828	4%	0.006	1%	0.005	6%	0.011	(0.000)	910
Main activity																
Own-account workers	41%	0.019	38%	0.026	43%	0.027	(0.223)	698	22%	0.014	23%	0.021	21%	0.020	(0.448)	835
Paid	7%	0.009	7%	0.014	7%	0.013	(0.896)	698	7%	0.009	6%	0.012	9%	0.014	(0.158)	833
Unpaid	34%	0.018	31%	0.025	36%	0.026	(0.183)	698	15%	0.012	17%	0.018	12%	0.016	(0.052)	833
Dependent workers	60%	0.019	62%	0.026	57%	0.027	(0.223)	698	78%	0.014	77%	0.021	79%	0.020	(0.448)	835
Paid	52%	0.019	54%	0.027	51%	0.027	(0.407)	698	75%	0.015	73%	0.022	76%	0.021	(0.301)	834
Unpaid	7%	0.010	8%	0.014	6%	0.013	(0.472)	698	3%	0.006	4%	0.009	3%	0.008	(0.427)	834

Notes: *Others' includes illness/disabled, waiting for recall/reply from employer, seasonal, not interested, idle, preparing for exams/work and/or experienced a shock/institutionalised. Data is obtained from the full sample in Round 4 (age 19) and Round 5 (age 22). Discrepancies in observations between employment/working statuses compared to the main activity is due to missing information in the survey, where employment/working status was reported but information on the main activity was missing.

Table A7. *Main activity characteristics in the last 12 months*

Part I: *Ethiopia*

	Age 19					Age 22				
	Mean			t-test	N	Mean			t-test	N
	Total	Male	Female	p-value		Total	Male	Female	p-value	
Duration worked in main activity (months)	53.38	54.19	52.15	0.571	674	46.82	51.48	40.58	0.031	636
Categories of activity										
Self-employed (Agriculture)	43%	45%	39%	0.096	673	29%	34%	23%	0.004	636
Dependent worker (Agriculture)	4%	4%	3%	0.230	673	4%	5%	4%	0.717	636
Self-employed (Non-agriculture)	21%	18%	25%	0.031	673	23%	21%	26%	0.112	636
Dependent worker, regular salaried (Non-agriculture)	17%	15%	20%	0.145	673	27%	24%	31%	0.028	636
Dependent worker, unsalaried (Non-agriculture)	16%	17%	14%	0.315	673	16%	17%	15%	0.473	636
Total number of working activities	1.57	1.63	1.47	0.003	673	1.37	1.40	1.34	0.140	637
Main activity										
Work excess hours	32%	34%	28%	0.073	673	49%	48%	51%	0.367	636
Job entails some form of hazard	89%	89%	88%	0.630	675	83%	90%	74%	0.000	637
Average number of job hazards	3.07	3.35	2.65	0.000	675	2.83	3.40	2.06	0.000	637
Working arrangements of waged main activity										
Has a written contract	15%	11%	20%	0.072	205	24%	20%	27%	0.182	255
Number of benefits received	1.67	1.66	1.68	0.946	204	1.92	1.82	2.03	0.419	255
Has at least one basic/necessities-type benefit	49%	50%	47%	0.745	204	46%	48%	44%	0.528	255
Has at least one debt relief/social security/insurance benefit	30%	32%	27%	0.499	204	37%	33%	42%	0.126	255
Has at least one paid (more formal) benefit	23%	20%	26%	0.312	204	38%	29%	49%	0.001	255

Part II: *India*

	Age 19					Age 22				
	Mean			t-test	N	Mean			t-test	N
	Total	Male	Female	p-value		Total	Male	Female	p-value	
Duration worked in main activity (months)	39.46	39.26	39.76	0.859	486	53.35	48.96	59.99	0.004	557
Categories of activity										
Self-employed (Agriculture)	39%	38%	40%	0.791	485	24%	19%	32%	0.000	555
Dependent worker (Agriculture)	18%	11%	27%	0.000	485	10%	6%	16%	0.000	555
Self-employed (Non-agriculture)	8%	8%	9%	0.501	485	9%	8%	10%	0.287	555
Dependent worker, regular salaried (Non-agriculture)	23%	27%	15%	0.002	485	38%	45%	29%	0.000	555
Dependent worker, unsalaried (Non-agriculture)	12%	15%	8%	0.024	485	19%	23%	13%	0.002	555
Total number of working activities	1.52	1.52	1.52	0.957	485	1.51	1.56	1.44	0.027	557
Main activity										
Work excess hours	38%	42%	31%	0.016	485	50%	60%	36%	0.000	556
Job entails some form of hazard	86%	89%	83%	0.072	486	81%	84%	77%	0.058	557
Average number of job hazards	3.11	3.39	2.69	0.001	486	3.55	3.96	2.94	0.000	557
Working arrangements of waged main activity										
Has a written contract	2%	2%	3%	0.769	201	6%	7%	6%	0.765	330
Number of benefits received	1.37	1.50	1.10	0.091	201	1.18	1.36	0.80	0.001	330
Has at least one basic/necessities-type benefit	46%	52%	35%	0.026	201	35%	38%	28%	0.061	330
Has at least one debt relief/social security/insurance benefit	18%	18%	19%	0.854	201	17%	19%	13%	0.251	330
Has at least one paid (more formal) benefit	27%	28%	25%	0.671	201	23%	28%	13%	0.004	330

Part III: *Peru*

	Age 19					Age 22				
	Mean			t-test	N	Mean			t-test	N
	Total	Male	Female	p-value		Total	Male	Female	p-value	
Duration worked in main activity (months)	22.77	23.73	21.47	0.444	451	28.16	29.94	25.89	0.183	500
Categories of activity										
Self-employed (Agriculture)	8%	7%	8%	0.696	451	5%	4%	5%	0.420	500
Dependent worker (Agriculture)	10%	12%	7%	0.079	451	8%	11%	5%	0.006	500
Self-employed (Non-agriculture)	12%	11%	14%	0.453	451	12%	14%	10%	0.243	500
Dependent worker, regular salaried (Non-agriculture)	69%	68%	69%	0.833	451	73%	68%	78%	0.013	500
Dependent worker, unsalaried (Non-agriculture)	1%	1%	2%	0.429	451	2%	3%	1%	0.369	500
Total number of working activities	1.55	1.58	1.49	0.191	451	1.46	1.47	1.45	0.712	500
Main activity										
Work excess hours	42%	43%	41%	0.636	451	45%	50%	38%	0.010	500
Job entails some form of hazard	75%	87%	59%	0.000	451	72%	84%	58%	0.000	500
Average number of job hazards	2.54	3.29	1.53	0.000	451	2.60	3.39	1.59	0.000	500
Working arrangements of waged main activity										
Has a written contract	16%	17%	15%	0.521	299	34%	39%	28%	0.017	365
Number of benefits received	1.97	2.26	1.57	0.023	198	1.86	2.17	1.49	0.002	365
Has at least one basic/necessities-type benefit	56%	57%	55%	0.753	198	56%	59%	53%	0.260	365
Has at least one debt relief/social security/insurance benefit	33%	42%	21%	0.002	198	30%	37%	20%	0.000	365
Has at least one paid (more formal) benefit	35%	39%	29%	0.113	198	30%	36%	23%	0.006	365

Part IV: *Vietnam*

	Age 19					Age 22				
	Mean			t-test	N	Mean			t-test	N
	Total	Male	Female	p-value		Total	Male	Female	p-value	
Duration worked in main activity (months)	37.21	37.99	36.43	0.564	696	21.80	23.00	20.63	0.124	835
Categories of activity										
Self-employed (Agriculture)	30%	29%	30%	0.704	698	13%	16%	10%	0.008	835
Dependent worker (Agriculture)	5%	8%	2%	0.000	698	3%	4%	2%	0.104	835
Self-employed (Non-agriculture)	11%	9%	12%	0.171	698	9%	7%	11%	0.048	835
Dependent worker, regular salaried (Non-agriculture)	35%	32%	38%	0.100	698	62%	58%	66%	0.010	835
Dependent worker, unsalaried (Non-agriculture)	20%	22%	18%	0.167	698	13%	15%	10%	0.053	835
Total number of working activities	1.47	1.53	1.41	0.008	700	1.43	1.47	1.40	0.062	835
Main activity										
Work excess hours	43%	43%	43%	0.937	673	61%	59%	62%	0.397	835
Job entails some form of hazard	80%	87%	72%	0.000	698	70%	82%	59%	0.000	835
Average number of job hazards	2.57	3.08	2.06	0.000	698	2.35	3.14	1.56	0.000	835
Working arrangements of waged main activity										
Has a written contract	47%	33%	62%	0.000	224	62%	54%	69%	0.001	479
Number of benefits received	3.13	2.55	3.71	0.001	224	3.32	2.96	3.63	0.008	479
Has at least one basic/necessities-type benefit	63%	65%	62%	0.706	224	56%	61%	51%	0.032	479
Has at least one debt relief/social security/insurance benefit	52%	38%	67%	0.000	224	57%	54%	60%	0.187	479
Has at least one paid (more formal) benefit	59%	49%	70%	0.001	224	58%	49%	67%	0.000	479

Notes: Data are obtained from the full sample in Round 4 (age 19) and Round 5 (age 22). All main activity characteristics refer only to those who are employed in the last 12 months. Dependency of work is defined through a combination of who the YL child works for, the type of activity, and the payment received. Working arrangements are only recorded for respondents who at 19 years old were waged workers, part-time labourers or housekeepers. Working arrangements at 22 years old were only recorded for respondents who were in wage employment (agriculture), a part-time agricultural labourer, a waged worker, a part-time labourer or a housekeeper.

Table A8. *Descriptive statistics comparing working status at age 22*

Part I: *Ethiopia*

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Demographic characteristics																					
Child: female	0.49	0.46	0.56	0.050	813	0.84	0.36	0.001	813	0.50	0.44	0.146	1000	0.51	0.45	0.105	813	0.45	0.84	0.000	813
Child: age (months)	264.30	264.22	264.77	0.142	813	264.52	263.90	0.109	813	264.33	264.25	0.765	813	264.30	264.31	0.956	813	264.29	264.52	0.652	813
Early childhood socio-economic characteristics at age 8																					
Urban	0.35	0.29	0.56	0.000	813	0.45	0.31	0.559	813	0.29	0.41	0.000	1000	0.42	0.26	0.000	813	0.32	0.45	0.049	813
Maternal education: Primary incomplete or less	0.88	0.91	0.74	0.000	745	0.88	0.87	0.559	745	0.93	0.82	0.000	914	0.83	0.93	0.000	745	0.89	0.88	0.803	745
Maternal education: Complete primary or secondary	0.11	0.08	0.24	0.000	745	0.11	0.09	0.765	745	0.07	0.15	0.001	914	0.14	0.07	0.001	745	0.10	0.11	0.905	745
Maternal education: Higher education	0.01	0.01	0.03	0.099	745	0.02	0.03	0.012	745	0.00	0.03	0.001	914	0.03	0.00	0.001	745	0.01	0.02	0.695	745
Paternal education: Primary incomplete or less	0.81	0.85	0.66	0.000	606	0.85	0.80	0.357	606	0.86	0.75	0.000	734	0.77	0.87	0.001	606	0.82	0.85	0.652	606
Paternal education: Complete primary or secondary	0.16	0.13	0.25	0.007	606	0.13	0.17	0.417	606	0.12	0.20	0.009	734	0.18	0.12	0.019	606	0.15	0.13	0.768	606
Paternal education: Higher education	0.03	0.02	0.09	0.001	606	0.02	0.04	0.709	606	0.02	0.06	0.010	734	0.05	0.02	0.023	606	0.03	0.02	0.698	606
Wealth index: Bottom tertile	0.34	0.38	0.15	0.000	812	0.29	0.38	0.352	812	0.39	0.29	0.005	997	0.29	0.40	0.001	812	0.36	0.29	0.338	812
Wealth index: Middle tertile	0.34	0.35	0.30	0.270	812	0.31	0.31	0.366	812	0.36	0.31	0.113	997	0.31	0.37	0.071	812	0.34	0.31	0.608	812
Wealth index: Top tertile	0.33	0.27	0.55	0.000	812	0.40	0.31	0.972	812	0.25	0.40	0.000	997	0.40	0.23	0.000	812	0.30	0.40	0.129	812
Height-for-age z-score	-1.48	-1.57	-1.41	0.239	784	-1.35	-1.72	0.048	784	-1.52	-1.60	0.408	964	-1.55	-1.54	0.862	784	-1.56	-1.35	0.232	784
Original family: household characteristics (at age 8)																					
Household size	6.44	6.57	5.97	0.005	813	6.66	6.58	0.477	813	6.56	6.33	0.143	1000	6.39	6.55	0.281	813	6.46	6.66	0.512	813
Child order - oldest child	0.88	0.89	0.84	0.118	813	0.91	0.87	0.559	813	0.90	0.86	0.100	1000	0.87	0.89	0.234	813	0.88	0.91	0.436	813
Number of siblings	3.17	3.35	2.64	0.000	813	3.53	3.32	0.550	813	3.35	3.05	0.040	1000	3.13	3.33	0.162	813	3.22	3.53	0.253	813
Single-parent family	0.31	0.28	0.45	0.000	810	0.24	0.26	0.198	810	0.28	0.34	0.099	997	0.32	0.29	0.292	810	0.31	0.24	0.294	810
Recent (lagged) socio-economic status (at ages 15, 19 and 22)																					
Urban (at age 15)	0.41	0.35	0.68	0.000	809	0.52	0.35	0.134	809	0.35	0.48	0.000	974	0.49	0.33	0.000	809	0.39	0.52	0.049	809
Wealth index: Bottom tertile (at age 15)	0.34	0.38	0.15	0.000	808	0.31	0.32	0.524	808	0.39	0.26	0.000	971	0.26	0.40	0.000	808	0.35	0.31	0.575	808
Wealth index: Middle tertile (at age 15)	0.33	0.34	0.33	0.839	808	0.31	0.36	0.605	808	0.34	0.35	0.768	971	0.34	0.34	0.988	808	0.34	0.31	0.603	808
Wealth index: Top tertile (at age 15)	0.33	0.28	0.51	0.000	808	0.38	0.32	0.902	808	0.27	0.40	0.000	971	0.39	0.25	0.000	808	0.31	0.38	0.269	808
Urban (at age 19)	0.48	0.40	0.72	0.000	784	0.56	0.41	0.298	784	0.39	0.53	0.000	909	0.54	0.37	0.000	784	0.44	0.56	0.067	784
Wealth index: Bottom tertile (at age 19)	0.33	0.40	0.13	0.000	779	0.33	0.37	0.714	779	0.41	0.27	0.000	902	0.28	0.42	0.000	779	0.36	0.33	0.621	779
Wealth index: Middle tertile (at age 19)	0.33	0.33	0.41	0.083	779	0.31	0.29	0.154	779	0.34	0.34	0.957	902	0.34	0.34	0.836	779	0.34	0.31	0.614	779
Wealth index: Top tertile (at age 19)	0.33	0.27	0.46	0.000	779	0.36	0.34	0.276	779	0.25	0.39	0.000	902	0.38	0.24	0.000	779	0.30	0.36	0.300	779
Urban (at age 22)	0.56	0.51	0.83	0.000	813	0.72	0.49	0.069	813	0.51	0.63	0.001	814	0.64	0.49	0.000	813	0.54	0.72	0.007	813
Wealth index: Bottom tertile (at age 22)	0.33	0.37	0.17	0.000	806	0.28	0.29	0.126	806	0.39	0.24	0.000	834	0.25	0.41	0.000	806	0.34	0.28	0.285	806
Wealth index: Middle tertile (at age 22)	0.33	0.35	0.27	0.079	806	0.33	0.39	0.079	806	0.34	0.34	0.824	834	0.34	0.34	0.906	806	0.34	0.33	0.853	806
Wealth index: Top tertile (at age 22)	0.33	0.28	0.56	0.000	806	0.40	0.31	0.822	806	0.27	0.41	0.000	834	0.41	0.25	0.000	806	0.32	0.40	0.203	806
Recent household characteristics (at ages 15, 19 and 22)																					
Household size (at age 15)	6.35	6.51	5.70	0.000	809	6.67	6.57	0.204	809	6.49	6.22	0.087	974	6.30	6.46	0.267	809	6.37	6.67	0.289	809
Household size (at age 19)	5.37	5.48	4.97	0.025	784	5.51	5.75	0.023	784	5.39	5.43	0.773	909	5.45	5.37	0.642	784	5.40	5.51	0.720	784
Married/cohabiting/parent (at age 19)	0.08	0.09	0.03	0.018	784	0.16	0.01	0.000	784	0.12	0.01	0.000	908	0.04	0.11	0.000	784	0.07	0.16	0.018	784
Household size (at age 22)	4.65	4.62	4.55	0.758	806	4.10	5.22	0.000	806	4.42	4.95	0.001	835	4.81	4.46	0.029	806	4.65	4.10	0.075	806
Married/cohabiting/parent (at age 22)	0.21	0.23	0.07	0.000	813	0.60	0.05	0.000	813	0.29	0.05	0.000	817	0.14	0.26	0.000	813	0.18	0.60	0.000	813
Cognitive skills (at ages 12, 15 and 19)																					
Maths score (% correct) at age 12	56.75	54.32	64.44	0.000	760	57.09	60.43	0.010	760	52.27	62.11	0.000	919	61.29	51.64	0.000	760	55.79	57.09	0.716	760
Maths score (% correct) at age 15	17.26	15.51	25.35	0.000	808	17.12	21.50	0.000	808	13.46	23.04	0.000	973	22.08	13.00	0.000	808	16.93	17.12	0.931	808
Maths score (% correct) at age 19	48.50	45.47	58.37	0.000	744	46.70	53.59	0.000	744	42.50	55.55	0.000	866	54.15	41.95	0.000	744	47.54	46.70	0.783	744
PPVT raw score at age 12	75.87	72.72	87.25	0.000	791	74.60	75.99	0.506	791	71.63	80.53	0.000	953	79.52	71.24	0.000	791	74.83	74.60	0.950	791
PPVT raw score at age 15	154.44	149.01	166.92	0.000	801	155.32	155.94	0.331	801	146.26	161.04	0.000	457	160.18	144.88	0.000	801	152.32	155.32	0.675	801
PPVT z-score at age 12	0.00	-0.12	0.43	0.000	791	-0.05	0.00	0.506	791	-0.16	0.18	0.000	953	0.14	-0.18	0.000	791	-0.04	-0.05	0.950	791
PPVT z-score at age 15	0.00	-0.15	0.35	0.000	801	0.02	0.04	0.331	801	-0.23	0.19	0.000	457	0.16	-0.27	0.000	801	-0.06	0.02	0.675	801

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)																					
Pride (at age 12)	0.00	-0.02	0.08	0.064	811	-0.01	-0.05	0.196	811	-0.01	0.00	0.798	979	0.00	-0.01	0.822	811	0.00	-0.01	0.965	811
Pride (at age 15)	-0.01	-0.03	0.01	0.499	809	-0.03	-0.09	0.193	809	-0.02	-0.05	0.535	973	-0.05	-0.01	0.528	809	-0.03	-0.03	0.954	809
Pride (at age 19)	0.00	0.01	-0.04	0.523	784	0.02	-0.07	0.180	784	0.04	-0.06	0.105	908	-0.04	0.04	0.144	784	0.00	0.02	0.822	784
Pride (at age 22)	0.00	-0.02	0.14	0.027	813	0.03	-0.10	0.052	813	0.00	0.00	0.963	814	0.00	0.00	0.914	813	0.00	0.03	0.768	813
Agency (at age 12)	0.00	-0.01	0.02	0.609	810	0.09	0.01	0.753	810	-0.01	0.01	0.519	978	0.03	-0.03	0.155	810	-0.01	0.09	0.126	810
Agency (at age 15)	0.00	0.00	0.03	0.555	809	-0.04	-0.03	0.304	809	0.01	-0.01	0.654	973	-0.01	0.02	0.424	809	0.01	-0.04	0.485	809
Agency (at age 19)	0.00	-0.04	0.20	0.000	784	-0.08	0.10	0.004	784	-0.09	0.14	0.000	908	0.11	-0.09	0.000	784	0.00	-0.08	0.311	784
Agency (at age 22)	0.00	-0.03	0.20	0.000	813	-0.16	0.15	0.000	813	-0.09	0.17	0.000	814	0.11	-0.09	0.000	813	0.01	-0.16	0.027	813
Self-esteem (at age 12)	0.00	0.00	0.06	0.285	784	-0.04	0.07	0.107	784	-0.03	0.06	0.030	908	0.05	-0.03	0.075	784	0.01	-0.04	0.520	784
Self-esteem (at age 15)	0.00	-0.01	0.04	0.339	813	-0.07	0.05	0.183	813	-0.03	0.05	0.066	814	0.03	-0.02	0.213	813	0.01	-0.07	0.299	813
Self-efficacy (at age 19)	0.00	-0.02	0.04	0.330	784	-0.05	0.04	0.220	784	-0.04	0.04	0.076	908	0.02	-0.03	0.157	784	-0.01	-0.05	0.548	784
Self-efficacy (at age 22)	0.00	0.00	0.01	0.834	813	-0.08	0.05	0.160	813	-0.02	0.03	0.174	814	0.02	-0.01	0.468	813	0.01	-0.08	0.255	813
AWSA (at age 22)	0.00	-0.01	0.09	0.011	813	0.01	0.03	0.207	813	-0.03	0.05	0.003	814	0.05	-0.03	0.003	813	0.00	0.01	0.836	813
Grit (at age 22)	0.00	0.00	0.03	0.508	813	-0.16	0.03	0.380	813	-0.01	0.03	0.215	814	0.00	0.01	0.830	813	0.02	-0.16	0.006	813
Neuroticism (at age 22)	0.00	-0.01	0.05	0.161	813	0.06	-0.03	0.207	813	0.00	0.00	0.955	814	0.01	-0.01	0.588	813	0.00	0.06	0.251	813
Conscientiousness (at age 22)	0.00	-0.01	0.07	0.050	813	0.07	-0.05	0.104	813	0.00	0.00	0.966	814	0.01	-0.01	0.492	813	0.00	0.07	0.214	813
Depression (at age 19)	0.00	0.01	-0.07	0.203	784	0.16	-0.03	0.454	784	0.03	-0.05	0.113	908	-0.02	0.01	0.586	784	-0.01	0.16	0.053	784
Depression (at age 22)	0.00	0.02	-0.13	0.016	813	0.19	-0.06	0.128	813	0.05	-0.09	0.002	814	-0.04	0.03	0.079	813	-0.01	0.19	0.018	813
Aspirations (at ages 12, 15, 19, and 22)																					
Child: aspiring to complete university (age 12)	0.70	0.67	0.79	0.013	769	0.81	0.67	0.507	769	0.67	0.72	0.196	934	0.73	0.66	0.025	769	0.68	0.81	0.054	769
Child: aspiring to complete university (age 15)	0.74	0.70	0.87	0.000	806	0.59	0.80	0.009	806	0.66	0.83	0.000	970	0.79	0.67	0.000	806	0.73	0.59	0.016	806
Child: aspiring to complete university (age 19)	0.73	0.67	0.93	0.000	784	0.67	0.83	0.000	784	0.62	0.87	0.000	908	0.84	0.61	0.000	784	0.72	0.67	0.494	784
Caregiver: aspiring to university for her child (age 12)	0.74	0.72	0.83	0.012	802	0.77	0.76	0.379	802	0.71	0.79	0.009	967	0.79	0.70	0.005	802	0.73	0.77	0.586	802
Caregiver: aspiring to university for her child (age 15)	0.78	0.75	0.91	0.000	797	0.65	0.81	0.196	797	0.73	0.85	0.000	961	0.82	0.74	0.007	797	0.79	0.65	0.024	797
Caregiver expectations: age to support household (age 12)	22.75	22.68	23.25	0.150	769	21.44	23.11	0.184	769	22.53	23.17	0.028	930	22.89	22.66	0.421	769	22.86	21.44	0.010	769
Caregiver expectations: age to be financially independent (age 12)	23.57	23.43	24.15	0.039	766	23.33	23.45	0.692	766	23.43	23.73	0.237	927	23.67	23.44	0.362	766	23.56	23.33	0.643	766
Caregiver expectations: age to be married/leave the household (age 12)	25.66	25.49	26.45	0.011	761	24.63	25.73	0.690	761	25.41	26.01	0.028	919	25.79	25.50	0.272	761	25.70	24.63	0.043	761
Technical skills (z-score) (at age 22)																					
Team work	0.00	0.01	-0.08	0.229	813	-0.06	0.10	0.060	813	-0.01	0.03	0.467	814	0.01	-0.01	0.692	813	0.00	-0.06	0.552	813
Leadership	0.00	-0.03	0.14	0.038	812	0.01	0.13	0.015	812	-0.08	0.13	0.000	813	0.11	-0.09	0.000	812	-0.01	0.01	0.851	812
Educational attainments (at age 22)																					
Completed secondary education	0.46	0.44	0.59	0.002	813	0.57	0.38	0.013	813	0.46	0.47	0.922	813	0.48	0.45	0.337	813	0.46	0.57	0.096	813
Observations	**813**	**695**	**118**			**637**	**176**			**519**	**294**			**352**	**461**			**755**	**58**		

Part II: *India*

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Demographic characteristics																					
Child: female	0.51	0.51	0.53	0.704	913	0.55	0.43	0.000	913	0.55	0.39	0.000	1008	0.61	0.44	0.000	913	0.43	0.83	0.000	913
Child: age (months)	263.99	264.02	263.64	0.382	913	264.01	263.96	0.527	913	264.06	263.67	0.254	922	263.86	264.07	0.466	913	263.96	264.05	0.797	913
Early childhood socio-economic characteristics at age 8																					
Urban	0.25	0.21	0.43	0.000	913	0.24	0.21	0.321	913	0.21	0.32	0.001	1008	0.32	0.17	0.000	913	0.21	0.33	0.000	913
Maternal education: primary incomplete or less	0.82	0.85	0.61	0.000	901	0.82	0.85	0.876	901	0.85	0.71	0.000	988	0.73	0.90	0.000	901	0.85	0.74	0.001	901
Maternal education: complete primary or secondary	0.16	0.14	0.30	0.000	901	0.16	0.13	0.944	901	0.13	0.24	0.000	988	0.24	0.10	0.000	901	0.13	0.24	0.000	901
Maternal education: higher education	0.02	0.01	0.09	0.000	901	0.02	0.02	0.544	901	0.01	0.05	0.000	988	0.04	0.01	0.003	901	0.02	0.02	0.943	901
Paternal education: primary incomplete or less	0.68	0.71	0.44	0.000	869	0.68	0.71	0.730	869	0.71	0.54	0.000	950	0.55	0.77	0.000	869	0.71	0.55	0.000	869
Paternal education: complete primary or secondary	0.27	0.25	0.45	0.000	869	0.27	0.24	0.963	869	0.25	0.37	0.001	950	0.37	0.20	0.000	869	0.24	0.37	0.000	869
Paternal education: higher education	0.05	0.04	0.12	0.001	869	0.05	0.05	0.411	869	0.04	0.10	0.002	950	0.08	0.03	0.000	869	0.05	0.07	0.129	869
Wealth index: Bottom tertile	0.34	0.37	0.19	0.000	913	0.35	0.39	0.374	913	0.37	0.28	0.028	1008	0.24	0.43	0.000	913	0.39	0.20	0.000	913
Wealth index: Middle tertile	0.33	0.34	0.24	0.036	913	0.33	0.33	0.513	913	0.34	0.29	0.246	1008	0.31	0.35	0.210	913	0.33	0.32	0.725	913
Wealth index: Top tertile	0.33	0.29	0.57	0.000	913	0.33	0.28	0.117	913	0.29	0.42	0.001	1008	0.45	0.22	0.000	913	0.28	0.48	0.000	913
Height-for-age z-score	-1.57	-1.59	-1.45	0.201	913	-1.55	-1.62	0.034	913	-1.56	-1.61	0.593	1008	-1.51	-1.62	0.137	913	-1.62	-1.42	0.020	913
Original family: household characteristics (at age 8)																					
Household size	5.54	5.58	5.33	0.243	913	5.58	5.57	0.138	913	5.62	5.29	0.047	1008	5.38	5.68	0.030	913	5.57	5.47	0.521	913
Child order - oldest child	0.65	0.67	0.54	0.013	913	0.65	0.66	0.640	913	0.67	0.58	0.023	1008	0.61	0.69	0.014	913	0.66	0.63	0.497	913
Number of siblings	1.81	1.85	1.53	0.010	913	1.83	1.85	0.123	913	1.88	1.58	0.002	1008	1.64	1.95	0.000	913	1.85	1.69	0.104	913
Single-parent family	0.10	0.09	0.10	0.903	913	0.09	0.10	0.942	913	0.09	0.09	0.966	1008	0.09	0.10	0.633	913	0.10	0.08	0.538	913
Recent (lagged) socio-economic status (at ages 15, 19 and 22)																					
Urban (at age 15)	0.25	0.22	0.42	0.000	906	0.24	0.21	0.373	906	0.22	0.32	0.004	972	0.33	0.18	0.000	906	0.21	0.34	0.001	906
Wealth index: Bottom tertile (at age 15)	0.34	0.37	0.15	0.000	902	0.33	0.37	0.036	902	0.36	0.29	0.065	967	0.26	0.40	0.000	902	0.37	0.24	0.000	902
Wealth index: Middle tertile (at age 15)	0.34	0.35	0.23	0.013	902	0.35	0.35	0.063	902	0.37	0.24	0.001	967	0.27	0.39	0.000	902	0.35	0.30	0.181	902
Wealth index: Top tertile (at age 15)	0.33	0.28	0.62	0.000	902	0.32	0.28	0.810	902	0.28	0.47	0.000	967	0.47	0.21	0.000	902	0.28	0.46	0.000	902
Urban (at age 19)	0.30	0.27	0.50	0.000	907	0.31	0.27	0.061	907	0.28	0.37	0.023	949	0.38	0.24	0.000	907	0.27	0.40	0.000	907
Wealth index: Bottom tertile (at age 19)	0.34	0.36	0.17	0.000	909	0.32	0.38	0.002	909	0.34	0.31	0.506	952	0.25	0.40	0.000	909	0.38	0.19	0.000	909
Wealth index: Middle tertile (at age 19)	0.34	0.35	0.29	0.195	909	0.35	0.34	0.047	909	0.36	0.27	0.014	952	0.31	0.37	0.071	909	0.34	0.35	0.786	909
Wealth index: Top tertile (at age 19)	0.32	0.29	0.54	0.000	909	0.33	0.29	0.254	909	0.30	0.42	0.002	952	0.44	0.24	0.000	909	0.29	0.46	0.000	909
Urban (at age 22)	0.33	0.31	0.52	0.000	905	0.35	0.29	0.012	905	0.32	0.38	0.129	914	0.43	0.26	0.000	905	0.29	0.48	0.000	905
Wealth index: Bottom tertile (at age 22)	0.34	0.36	0.14	0.000	912	0.34	0.39	0.824	912	0.36	0.24	0.001	928	0.20	0.44	0.000	912	0.39	0.16	0.000	912
Wealth index: Middle tertile (at age 22)	0.33	0.33	0.29	0.364	912	0.32	0.33	0.105	912	0.32	0.34	0.638	928	0.33	0.32	0.797	912	0.33	0.32	0.876	912
Wealth index: Top tertile (at age 22)	0.33	0.30	0.57	0.000	912	0.34	0.28	0.066	912	0.31	0.42	0.005	928	0.47	0.23	0.000	912	0.28	0.52	0.000	912
Recent household characteristics (at ages 15, 19 and 22)																					
Household size (at age 15)	5.05	5.08	4.85	0.248	910	5.06	5.09	0.831	910	5.09	4.92	0.291	976	4.92	5.15	0.074	910	5.09	4.92	0.272	910
Household size (at age 19)	4.72	4.78	4.30	0.018	909	4.71	4.75	0.532	909	4.77	4.55	0.164	952	4.59	4.82	0.064	909	4.75	4.62	0.398	909
Married/cohabiting/parent (at age 19)	0.20	0.22	0.01	0.000	909	0.22	0.16	0.000	909	0.25	0.02	0.000	952	0.17	0.22	0.080	909	0.16	0.32	0.000	909
Household size (at age 22)	4.73	4.76	4.44	0.130	912	4.69	4.75	0.152	912	4.73	4.70	0.889	928	4.67	4.76	0.514	912	4.75	4.64	0.520	912
Married/cohabiting/parent (at age 22)	0.35	0.39	0.02	0.000	913	0.38	0.26	0.000	913	0.43	0.03	0.000	926	0.33	0.35	0.592	913	0.26	0.63	0.000	913
Cognitive skills (at ages 12, 15 and 19)																					
Maths score (% correct) at age 12	62.29	61.60	71.24	0.000	869	61.92	62.21	0.001	869	60.47	70.72	0.000	943	67.74	58.80	0.000	869	62.21	64.71	0.178	869
Maths score (% correct) at age 15	29.08	27.30	45.17	0.000	910	28.29	29.06	0.000	910	25.81	42.47	0.000	977	36.45	24.05	0.000	910	29.06	30.49	0.412	910
Maths score (% correct) at age 19	46.72	44.72	63.75	0.000	857	45.88	47.21	0.000	857	43.05	60.70	0.000	899	53.60	41.63	0.000	857	47.21	46.49	0.714	857
PPVT raw score at age 12	90.27	89.25	101.27	0.000	896	89.92	90.23	0.008	896	88.27	99.36	0.000	971	95.65	86.81	0.000	896	90.23	92.05	0.355	896
PPVT raw score at age 15	123.55	121.43	145.70	0.000	883	122.30	123.33	0.001	883	119.43	141.62	0.000	867	133.33	117.20	0.000	883	123.33	125.61	0.507	883
PPVT z-score at age 12	0.00	-0.04	0.45	0.000	896	-0.01	0.00	0.008	896	-0.08	0.37	0.000	971	0.22	-0.14	0.000	896	0.00	0.07	0.355	896
PPVT z-score at age 15	0.00	-0.05	0.55	0.000	883	-0.03	-0.01	0.001	883	-0.10	0.45	0.000	867	0.24	-0.16	0.000	883	-0.01	0.05	0.507	883

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)																					
Pride (at age 12)	0.00	-0.02	0.13	0.009	913	-0.02	-0.02	0.087	913	-0.04	0.11	0.001	994	0.08	-0.07	0.000	913	-0.02	0.04	0.198	913
Pride (at age 15)	-0.01	-0.01	-0.01	0.961	908	-0.01	-0.03	0.445	908	-0.01	0.01	0.606	974	0.04	-0.04	0.058	908	-0.03	0.06	0.078	908
Pride (at age 19)	0.00	-0.03	0.19	0.003	909	0.01	-0.04	0.140	909	-0.02	0.05	0.222	952	0.10	-0.08	0.000	909	-0.04	0.15	0.001	909
Pride (at age 22)	0.00	-0.02	0.13	0.061	913	0.02	-0.04	0.047	913	0.00	0.00	0.980	922	0.08	-0.06	0.004	913	-0.04	0.16	0.001	913
Agency (at age 12)	-0.01	-0.01	0.06	0.297	912	-0.01	-0.02	0.126	912	-0.02	0.08	0.054	993	0.07	-0.05	0.004	912	-0.02	0.06	0.127	912
Agency (at age 15)	0.01	0.00	0.10	0.050	908	0.01	0.01	0.730	908	0.00	0.07	0.075	974	0.05	-0.01	0.067	908	0.01	0.03	0.667	908
Agency (at age 19)	0.01	-0.03	0.36	0.000	909	-0.01	0.04	0.000	909	-0.07	0.31	0.000	952	0.10	-0.06	0.000	909	0.04	-0.10	0.001	909
Agency (at age 22)	0.00	-0.04	0.33	0.000	913	-0.03	0.01	0.000	913	-0.08	0.31	0.000	922	0.13	-0.10	0.000	913	0.01	-0.04	0.248	913
Self-esteem (at age 12)	0.00	-0.01	0.11	0.029	909	0.00	0.00	0.555	909	-0.01	0.04	0.204	952	0.02	-0.01	0.397	909	0.00	-0.01	0.807	909
Self-esteem (at age 15)	0.00	-0.01	0.07	0.163	913	0.00	0.00	0.791	913	-0.01	0.03	0.371	922	0.02	-0.01	0.274	913	0.00	0.02	0.669	913
Self-efficacy (at age 19)	0.00	-0.02	0.23	0.000	908	-0.01	0.02	0.105	908	-0.04	0.17	0.000	951	0.06	-0.04	0.018	908	0.02	-0.05	0.173	908
Self-efficacy (at age 22)	0.00	-0.02	0.16	0.002	913	-0.01	0.00	0.069	913	-0.04	0.13	0.000	922	0.07	-0.05	0.001	913	0.00	0.00	0.925	913
AWSA (at age 22)	0.00	0.00	0.03	0.316	912	0.00	-0.01	0.690	912	0.00	0.01	0.622	921	0.03	-0.02	0.059	912	-0.01	0.04	0.075	912
Grit (at age 22)	0.00	-0.01	0.05	0.280	913	0.00	0.01	0.421	913	-0.01	0.04	0.154	922	0.00	0.00	0.755	913	0.01	-0.05	0.073	913
Neuroticism (at age 22)	0.00	0.00	-0.04	0.301	911	-0.01	0.01	0.207	911	0.00	0.00	0.914	920	-0.02	0.01	0.305	911	0.01	-0.03	0.181	911
Conscientiousness (at age 22)	0.00	0.01	-0.09	0.016	913	-0.01	0.00	0.375	913	0.01	-0.03	0.217	922	-0.02	0.02	0.128	913	0.00	-0.02	0.547	913
Depression (at age 19)	0.00	0.03	-0.19	0.001	909	0.02	-0.04	0.004	909	0.05	-0.19	0.000	952	-0.01	0.01	0.521	909	-0.04	0.16	0.000	909
Depression (at age 22)	0.00	0.00	-0.01	0.847	913	0.02	-0.03	0.099	913	0.02	-0.06	0.178	922	0.03	-0.02	0.315	913	-0.03	0.12	0.011	913
Aspirations (at ages 12, 15, 19, and 22)																					
Child: aspiring to complete university (age 12)	0.68	0.67	0.81	0.004	817	0.67	0.69	0.001	817	0.64	0.82	0.000	885	0.75	0.63	0.000	817	0.69	0.68	0.840	817
Child: aspiring to complete university (age 15)	0.53	0.52	0.67	0.004	894	0.52	0.55	0.037	894	0.50	0.65	0.000	959	0.57	0.51	0.089	894	0.55	0.48	0.089	894
Child: aspiring to complete university (age 19)	0.65	0.63	0.82	0.000	909	0.63	0.66	0.000	909	0.60	0.82	0.000	952	0.71	0.60	0.000	909	0.66	0.60	0.135	909
Caregiver: aspiring to university for her child (age 12)	0.54	0.52	0.77	0.000	884	0.52	0.57	0.000	884	0.48	0.80	0.000	960	0.63	0.48	0.000	884	0.57	0.47	0.022	884
Caregiver: aspiring to university for her child (age 15)																					
Caregiver expectations: age to support household (age 12)	20.67	20.48	22.46	0.000	719	20.53	20.65	0.000	719	20.26	22.35	0.000	771	21.64	20.02	0.000	719	20.65	20.91	0.461	719
Caregiver expectations: age to be financially independent (age 12)	22.24	22.13	23.45	0.001	757	22.19	22.27	0.017	757	22.00	23.30	0.000	817	22.85	21.87	0.000	757	22.27	22.36	0.752	757
Caregiver expectations: age to be married/leave the household (age 12)	23.05	22.91	24.38	0.000	825	22.93	23.35	0.000	825	22.72	24.46	0.000	889	23.25	22.96	0.220	825	23.35	22.10	0.000	825
Technical skills (z-score) (at age 22)																					
Team work	-0.01	-0.06	0.39	0.000	902	-0.02	0.03	0.095	902	-0.08	0.27	0.000	910	0.07	-0.06	0.016	902	0.03	-0.13	0.008	902
Leadership	0.00	-0.03	0.21	0.005	912	-0.03	0.03	0.009	912	-0.06	0.22	0.000	921	0.04	-0.04	0.196	912	0.03	-0.14	0.013	912
Educational attainments (at age 22)																					
Completed secondary education	0.50	0.44	0.96	0.000	913	0.45	0.51	0.000	913	0.37	0.96	0.000	922	0.71	0.34	0.000	913	0.51	0.46	0.269	913
Observations	**913**	**808**	**105**			**824**	**89**			**719**	**194**			**392**	**521**			**715**	**198**		

Part III. *Peru*

	All	Mean		t-test	N	t-test		Mean	t-test	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value	p-value	Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Demographic characteristics																					
Child: female	0.46	0.48	0.48	0.960	596	0.93	0.47	0.695	596	0.48	0.47	0.731	714	0.54	0.42	0.006	596	0.44	0.93	0.000	596
Child: age (months)	263.11	263.09	262.13	0.170	596	262.95	263.12	0.683	596	263.07	262.91	0.682	608	262.91	263.09	0.659	596	263.01	262.95	0.943	596
Early childhood socio-economic characteristics at age 8																					
Urban	0.74	0.75	0.81	0.324	596	0.67	0.82	0.016	596	0.72	0.82	0.004	714	0.80	0.72	0.038	596	0.77	0.67	0.142	596
Maternal education: primary incomplete or less	0.38	0.39	0.31	0.301	567	0.59	0.29	0.002	567	0.44	0.30	0.000	650	0.34	0.42	0.037	567	0.37	0.59	0.005	567
Maternal education: complete primary or secondary	0.51	0.52	0.51	0.938	567	0.39	0.54	0.406	567	0.50	0.53	0.455	650	0.51	0.52	0.905	567	0.52	0.39	0.097	567
Maternal education: higher education	0.10	0.10	0.18	0.076	567	0.02	0.17	0.000	567	0.06	0.17	0.000	650	0.15	0.06	0.000	567	0.11	0.02	0.083	567
Paternal education: primary incomplete or less	0.28	0.28	0.19	0.184	450	0.43	0.19	0.007	450	0.34	0.19	0.001	520	0.23	0.32	0.026	450	0.26	0.43	0.032	450
Paternal education: complete primary or secondary	0.58	0.59	0.51	0.279	450	0.51	0.58	0.999	450	0.60	0.57	0.505	520	0.56	0.61	0.257	450	0.59	0.51	0.382	450
Paternal education: higher education	0.15	0.12	0.30	0.001	450	0.06	0.22	0.001	450	0.06	0.24	0.000	520	0.21	0.07	0.000	450	0.15	0.06	0.134	450
Wealth index: Bottom tertile	0.51	0.51	0.30	0.002	591	0.71	0.41	0.004	591	0.57	0.38	0.000	708	0.43	0.55	0.003	591	0.48	0.71	0.003	591
Wealth index: Middle tertile	0.27	0.27	0.35	0.201	591	0.14	0.26	0.402	591	0.28	0.28	0.961	708	0.26	0.30	0.277	591	0.29	0.14	0.043	591
Wealth index: Top tertile	0.22	0.22	0.35	0.026	591	0.14	0.34	0.000	591	0.15	0.34	0.000	708	0.31	0.15	0.000	591	0.24	0.14	0.164	591
Height-for-age z-score	-1.41	-1.41	-1.43	0.875	592	-1.60	-1.21	0.001	592	-1.52	-1.25	0.001	710	-1.30	-1.51	0.014	592	-1.39	-1.60	0.191	592
Original family: household characteristics (at age 8)																					
Household size	5.70	5.64	5.80	0.569	596	6.12	5.25	0.000	596	5.86	5.37	0.003	714	5.47	5.82	0.032	596	5.62	6.12	0.109	596
Child order- oldest child	0.69	0.70	0.57	0.063	596	0.83	0.63	0.042	596	0.73	0.62	0.002	714	0.65	0.72	0.059	596	0.68	0.83	0.033	596
Number of siblings	2.07	2.07	2.00	0.740	596	2.67	1.77	0.001	596	2.24	1.82	0.001	714	1.94	2.18	0.051	596	2.02	2.67	0.008	596
Single-parent family	0.24	0.23	0.13	0.105	596	0.12	0.18	0.127	596	0.25	0.17	0.016	714	0.16	0.27	0.001	596	0.22	0.12	0.112	596
Recent (lagged) socio-economic status (at ages 15, 19 and 22)																					
Urban (at age 15)	0.77	0.77	0.81	0.509	678	0.67	0.84	0.009	587	0.73	0.83	0.004	678	0.81	0.74	0.054	587	0.78	0.67	0.081	587
Wealth index: Bottom tertile (at age 15)	0.31	0.31	0.23	0.213	675	0.46	0.23	0.007	584	0.36	0.23	0.001	675	0.26	0.34	0.038	584	0.29	0.46	0.019	584
Wealth index: Middle tertile (at age 15)	0.34	0.36	0.25	0.101	675	0.27	0.33	0.569	584	0.37	0.31	0.135	675	0.31	0.39	0.041	584	0.35	0.27	0.270	584
Wealth index: Top tertile (at age 15)	0.35	0.33	0.53	0.005	675	0.27	0.44	0.001	584	0.27	0.46	0.000	675	0.43	0.27	0.000	584	0.36	0.27	0.250	584
Urban (at age 19)	0.84	0.84	0.85	0.864	635	0.71	0.92	0.001	578	0.80	0.90	0.001	635	0.87	0.81	0.033	578	0.85	0.71	0.020	578
Wealth index: Bottom tertile (at age 19)	0.20	0.21	0.15	0.377	629	0.31	0.13	0.003	573	0.25	0.13	0.001	629	0.16	0.24	0.017	573	0.19	0.31	0.068	573
Wealth index: Middle tertile (at age 19)	0.36	0.35	0.35	0.942	629	0.38	0.29	0.048	573	0.38	0.31	0.054	629	0.32	0.38	0.094	573	0.35	0.38	0.671	573
Wealth index: Top tertile (at age 19)	0.43	0.44	0.50	0.435	629	0.31	0.58	0.000	573	0.37	0.56	0.000	629	0.52	0.38	0.000	573	0.46	0.31	0.060	573
Urban (at age 22)	0.87	0.86	0.91	0.365	608	0.74	0.91	0.023	596	0.84	0.91	0.007	608	0.89	0.85	0.179	596	0.88	0.74	0.010	596
Wealth index: Bottom tertile (at age 22)	0.14	0.14	0.09	0.298	607	0.26	0.09	0.020	595	0.17	0.09	0.005	607	0.12	0.16	0.119	595	0.13	0.26	0.018	595
Wealth index: Middle tertile (at age 22)	0.41	0.40	0.44	0.537	607	0.33	0.33	0.013	595	0.44	0.36	0.045	607	0.35	0.45	0.013	595	0.41	0.33	0.327	595
Wealth index: Top tertile (at age 22)	0.45	0.45	0.46	0.908	607	0.40	0.57	0.000	595	0.39	0.55	0.000	607	0.53	0.38	0.000	595	0.46	0.40	0.495	595
Recent household characteristics (at ages 15, 19 and 22)																					
Household size (at age 15)	5.38	5.39	5.19	0.457	587	5.81	5.14	0.035	587	5.52	5.15	0.015	678	5.25	5.48	0.116	587	5.33	5.81	0.106	587
Household size (at age 19)	4.70	4.74	4.62	0.707	574	4.74	4.63	0.426	574	4.80	4.63	0.329	630	4.64	4.81	0.344	574	4.73	4.74	0.975	574
Married/cohabiting/parent (at age 19)	0.17	0.18	0.09	0.109	569	0.53	0.05	0.000	569	0.26	0.06	0.000	618	0.13	0.22	0.003	569	0.15	0.53	0.000	569
Household size (at age 22)	4.30	4.31	4.11	0.499	596	4.57	4.31	0.920	596	4.32	4.27	0.766	608	4.31	4.28	0.874	596	4.27	4.57	0.376	596
Married/cohabiting/parent (at age 22)	0.36	0.37	0.15	0.001	596	0.81	0.12	0.000	596	0.52	0.12	0.000	604	0.22	0.48	0.000	596	0.32	0.81	0.000	596
Cognitive skills (at ages 12, 15 and 19)																					
Maths score (% correct) at age 12	71.87	72.05	79.43	0.012	587	61.79	79.53	0.000	584	67.78	79.51	0.000	678	77.09	68.56	0.000	584	73.50	61.79	0.001	584
Maths score (% correct) at age 15	43.79	43.41	53.47	0.000	584	36.07	50.68	0.000	581	39.39	51.29	0.000	671	49.08	39.84	0.000	581	44.95	36.07	0.004	581
Maths score (% correct) at age 19	58.48	57.86	69.03	0.000	584	49.25	66.51	0.000	553	52.71	67.06	0.000	598	64.56	53.20	0.000	553	59.65	49.25	0.001	553
PPVT raw score at age 12	72.38	72.29	77.42	0.038	584	59.45	78.12	0.000	579	68.95	77.97	0.000	673	75.48	70.17	0.000	579	73.70	59.45	0.000	579
PPVT raw score at age 15	96.92	96.54	102.40	0.019	578	88.11	103.10	0.000	563	92.80	102.94	0.000	643	100.93	93.41	0.000	563	97.73	88.11	0.001	563
PPVT z-score at age 12	0.00	-0.01	0.30	0.038	573	-0.78	0.34	0.000	579	-0.21	0.34	0.000	673	0.19	-0.13	0.000	579	0.08	-0.78	0.000	579
PPVT z-score at age 15	0.00	-0.02	0.32	0.019	573	-0.51	0.36	0.000	563	-0.24	0.35	0.000	643	0.23	-0.20	0.000	563	0.05	-0.51	0.001	563

	All	Mean		t-test	N	t-test		Mean	t-test	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value	p-value	Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)																					
Pride (at age 12)	0.00	0.01	-0.08	0.216	587	0.10	-0.05	0.096	587	0.04	-0.05	0.021	682	-0.03	0.03	0.117	587	-0.01	0.10	0.162	587
Pride (at age 15)	0.00	-0.03	0.17	0.021	582	0.07	0.02	0.338	582	-0.06	0.05	0.024	672	0.06	-0.08	0.007	582	-0.02	0.07	0.354	582
Pride (at age 19)	0.00	0.00	0.04	0.656	567	-0.07	0.02	0.679	567	-0.02	0.02	0.512	616	0.01	-0.01	0.753	567	0.01	-0.07	0.508	567
Pride (at age 22)	0.00	-0.01	0.10	0.287	595	-0.18	0.17	0.000	595	-0.11	0.15	0.000	596	0.10	-0.10	0.000	595	0.01	-0.18	0.084	595
Agency (at age 12)	0.00	0.01	-0.01	0.816	587	0.00	0.00	0.837	587	0.01	0.00	0.741	682	0.00	0.01	0.710	587	0.01	0.00	0.929	587
Agency (at age 15)	0.00	0.01	0.07	0.487	582	-0.07	0.14	0.000	582	-0.06	0.12	0.000	672	0.09	-0.06	0.001	582	0.02	-0.07	0.280	582
Agency (at age 19)	0.00	0.00	0.17	0.028	567	-0.28	0.18	0.000	567	-0.11	0.18	0.000	616	0.12	-0.09	0.000	567	0.03	-0.28	0.001	567
Agency (at age 22)	-0.01	-0.02	0.10	0.127	595	-0.28	0.12	0.000	595	-0.10	0.12	0.000	596	0.06	-0.08	0.003	595	0.01	-0.28	0.002	595
Self-esteem (at age 12)	0.00	-0.01	0.04	0.595	567	-0.02	0.04	0.175	567	-0.04	0.04	0.108	616	0.03	-0.04	0.131	567	0.00	-0.02	0.874	567
Self-esteem (at age 15)	0.00	0.00	0.03	0.653	595	-0.22	0.12	0.001	595	-0.07	0.10	0.000	596	0.06	-0.05	0.026	595	0.02	-0.22	0.015	595
Self-efficacy (at age 19)	0.00	-0.01	0.03	0.607	567	-0.23	0.14	0.000	567	-0.09	0.12	0.000	616	0.07	-0.07	0.003	567	0.01	-0.23	0.010	567
Self-efficacy (at age 22)	0.00	0.00	0.01	0.901	595	-0.34	0.15	0.000	595	-0.09	0.12	0.000	596	0.06	-0.05	0.029	595	0.02	-0.34	0.000	595
AWSA (at age 22)	0.00	0.00	0.01	0.803	595	-0.07	0.11	0.000	595	-0.06	0.09	0.000	596	0.07	-0.06	0.000	595	0.01	-0.07	0.215	595
Grit (at age 22)	0.00	0.00	0.01	0.869	595	-0.17	0.09	0.000	595	-0.05	0.07	0.001	596	0.04	-0.04	0.035	595	0.01	-0.17	0.010	595
Neuroticism (at age 22)	0.00	-0.01	0.09	0.065	595	0.11	-0.02	0.332	595	0.00	0.00	0.881	596	0.02	-0.02	0.253	595	-0.01	0.11	0.049	595
Conscientiousness (at age 22)	0.00	0.00	0.01	0.903	595	0.13	-0.05	0.037	595	0.03	-0.04	0.056	596	-0.01	0.01	0.445	595	-0.01	0.13	0.027	595
Depression (at age 19)	-0.01	-0.04	0.09	0.195	549	-0.26	0.01	0.396	549	-0.07	0.02	0.115	595	-0.01	-0.05	0.598	549	-0.01	-0.26	0.041	549
Depression (at age 22)	-0.01	-0.02	0.04	0.599	552	-0.05	0.03	0.423	552	-0.04	0.03	0.282	553	0.02	-0.04	0.370	552	-0.01	-0.05	0.736	552
Aspirations (at ages 12, 15, 19, and 22)																					
Child: aspiring to complete university (age 12)	0.79	0.79	0.83	0.490	580	0.60	0.89	0.000	580	0.73	0.88	0.000	674	0.84	0.74	0.004	580	0.80	0.60	0.002	580
Child: aspiring to complete university (age 15)	0.80	0.78	0.89	0.060	583	0.74	0.89	0.000	583	0.71	0.89	0.000	674	0.87	0.70	0.000	583	0.79	0.74	0.509	583
Child: aspiring to complete university (age 19)	0.71	0.69	0.87	0.007	569	0.55	0.90	0.000	569	0.57	0.89	0.000	619	0.84	0.57	0.000	569	0.72	0.55	0.022	569
Caregiver: aspiring to university for her child (age 12)	0.76	0.76	0.79	0.550	589	0.59	0.83	0.006	589	0.72	0.82	0.003	684	0.79	0.73	0.126	589	0.77	0.59	0.007	589
Caregiver: aspiring to university for her child (age 15)	0.72	0.72	0.79	0.265	583	0.63	0.83	0.000	583	0.66	0.83	0.000	672	0.80	0.66	0.000	583	0.73	0.63	0.166	583
Caregiver expectations: age to support household (age 12)	20.90	20.80	21.61	0.145	584	20.50	21.72	0.000	584	20.28	21.70	0.000	678	21.53	20.25	0.000	584	20.90	20.50	0.525	584
Caregiver expectations: age to be financially independent (age 12)	22.81	22.78	23.27	0.337	581	22.13	23.45	0.003	581	22.40	23.41	0.001	674	23.23	22.43	0.006	581	22.87	22.13	0.197	581
Caregiver expectations: age to be married/ leave the household (age 12)	26.39	26.40	26.46	0.910	549	24.55	26.85	0.035	549	26.14	26.77	0.037	638	26.50	26.32	0.542	549	26.52	24.55	0.002	549
Technical skills (z-score) (at age 22)																					
Team work	0.00	0.00	0.00	0.955	595	-0.40	0.15	0.001	595	-0.09	0.12	0.001	596	0.05	-0.05	0.145	595	0.03	-0.40	0.001	595
Leadership	0.00	-0.01	0.03	0.772	595	-0.23	0.13	0.005	595	-0.08	0.11	0.005	596	0.06	-0.06	0.066	595	0.01	-0.23	0.061	595
Educational attainments (at age 22)																					
Completed secondary education	0.84	0.82	0.98	0.002	596	0.62	0.97	0.000	596	0.73	0.98	0.000	608	0.92	0.75	0.000		0.85	0.62	0.000	596
Observations	**596**	**542**	**54**			**401**	**195**			**347**	**249**			**291**	**305**			**554**	**42**		

Part IV: *Vietnam*

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Demographic characteristics																					
Child: female	0.50	0.52	0.39	0.117	910	0.82	0.53	0.673	910	0.51	0.49	0.649	1000	0.55	0.50	0.205	910	0.50	0.82	0.000	910
Child: age (months)	267.35	267.33	267.71	0.554	907	267.50	266.99	0.271	907	267.39	267.16	0.503	907	267.22	267.39	0.601	907	267.34	267.50	0.820	907
Early childhood socio-economic characteristics at age 8																					
Urban	0.20	0.18	0.37	0.003	910	0.12	0.32	0.000	910	0.16	0.33	0.000	1000	0.29	0.16	0.000	910	0.19	0.12	0.279	910
Maternal education: primary incomplete or less	0.33	0.34	0.10	0.002	891	0.41	0.19	0.000	891	0.37	0.17	0.000	974	0.21	0.36	0.000	891	0.33	0.41	0.295	891
Maternal education: complete primary or secondary	0.64	0.63	0.70	0.401	891	0.59	0.72	0.033	891	0.62	0.72	0.018	974	0.70	0.62	0.055	891	0.64	0.59	0.543	891
Maternal education: higher education	0.04	0.03	0.20	0.000	891	0.00	0.09	0.000	891	0.02	0.11	0.000	974	0.10	0.02	0.000	891	0.04	0.00	0.268	891
Paternal education: primary incomplete or less	0.26	0.27	0.05	0.002	870	0.30	0.07	0.000	870	0.31	0.06	0.000	952	0.10	0.31	0.000	870	0.26	0.30	0.597	870
Paternal education: complete primary or secondary	0.69	0.69	0.73	0.610	870	0.67	0.82	0.001	870	0.66	0.80	0.001	952	0.78	0.66	0.003	870	0.69	0.67	0.783	870
Paternal education: Higher education	0.05	0.04	0.23	0.000	870	0.03	0.11	0.000	870	0.03	0.14	0.000	952	0.12	0.03	0.000	870	0.05	0.03	0.624	870
Wealth index: Bottom tertile	0.33	0.34	0.07	0.000	909	0.44	0.16	0.000	909	0.38	0.14	0.000	999	0.19	0.37	0.000	909	0.33	0.44	0.170	909
Wealth index: Middle tertile	0.34	0.35	0.32	0.707	909	0.32	0.30	0.309	909	0.35	0.31	0.267	999	0.31	0.35	0.248	909	0.35	0.32	0.795	909
Wealth index: Top tertile	0.33	0.31	0.61	0.000	909	0.24	0.54	0.000	909	0.27	0.56	0.000	999	0.50	0.27	0.000	909	0.33	0.24	0.263	909
Height-for-age z-score	-1.46	-1.48	-1.23	0.106	910	-1.58	-1.25	0.005	910	-1.52	-1.24	0.001	1000	-1.30	-1.52	0.005	910	-1.46	-1.58	0.509	910
Original family: household characteristics (at age 8)																					
Household size	4.93	4.95	4.37	0.018	910	5.09	4.52	0.001	910	5.03	4.48	0.000	1000	4.58	5.02	0.000	910	4.92	5.09	0.527	910
Child order - oldest child	0.56	0.56	0.37	0.014	910	0.74	0.46	0.019	910	0.58	0.44	0.001	1000	0.49	0.57	0.028	910	0.55	0.74	0.029	910
Number of siblings	1.62	1.62	1.00	0.001	910	1.88	1.27	0.001	910	1.69	1.21	0.000	1000	1.32	1.68	0.000	910	1.58	1.88	0.155	910
Single-parent family	0.05	0.06	0.02	0.393	910	0.03	0.07	0.388	910	0.05	0.06	0.750	1000	0.05	0.05	0.996	910	0.05	0.03	0.521	910
Recent (lagged) socio-economic status (at age 15, 19 and 22)																					
Urban (at age 15)	0.20	0.18	0.36	0.006	898	0.12	0.31	0.000	898	0.16	0.32	0.000	976	0.29	0.16	0.000	898	0.19	0.12	0.271	898
Wealth index: Bottom tertile (at age 15)	0.34	0.35	0.08	0.001	879	0.30	0.16	0.000	879	0.38	0.14	0.000	955	0.17	0.39	0.000	879	0.34	0.30	0.657	879
Wealth index: Middle tertile (at age 15)	0.33	0.34	0.18	0.045	879	0.36	0.32	0.762	879	0.34	0.29	0.186	955	0.30	0.34	0.285	879	0.33	0.36	0.718	879
Wealth index: Top tertile (at age 15)	0.33	0.31	0.74	0.000	879	0.33	0.52	0.000	879	0.27	0.57	0.000	955	0.53	0.27	0.000	879	0.33	0.33	0.932	879
Urban (at age 19)	0.21	0.20	0.37	0.016	760	0.14	0.29	0.016	760	0.18	0.31	0.001	809	0.28	0.19	0.005	760	0.21	0.14	0.337	760
Wealth index: Bottom tertile (at age 19)	0.34	0.35	0.05	0.000	856	0.39	0.16	0.000	856	0.39	0.13	0.000	912	0.18	0.39	0.000	856	0.34	0.39	0.505	856
Wealth index: Middle tertile (at age 19)	0.33	0.33	0.27	0.452	856	0.30	0.32	0.904	856	0.33	0.31	0.615	912	0.31	0.33	0.544	856	0.33	0.30	0.764	856
Wealth index: Top tertile (at age 19)	0.33	0.32	0.68	0.000	856	0.30	0.52	0.000	856	0.28	0.56	0.000	912	0.51	0.28	0.000	856	0.33	0.30	0.710	856
Urban (at age 22)	0.40	0.38	0.80	0.000	909	0.26	0.64	0.000	909	0.34	0.68	0.000	909	0.61	0.34	0.000	909	0.41	0.26	0.095	909
Wealth index: Bottom tertile (at age 22)	0.35	0.36	0.22	0.074	909	0.47	0.20	0.000	909	0.38	0.21	0.000	909	0.25	0.38	0.001	909	0.35	0.47	0.133	909
Wealth index: Middle tertile (at age 22)	0.32	0.32	0.34	0.777	909	0.29	0.31	0.770	909	0.32	0.32	0.912	909	0.31	0.32	0.795	909	0.32	0.29	0.730	909
Wealth index: Top tertile (at age 22)	0.33	0.32	0.44	0.125	909	0.24	0.49	0.000	909	0.29	0.48	0.000	909	0.44	0.30	0.000	909	0.33	0.24	0.237	909
Recent household characteristics (at ages 15, 19 and 22)																					
Household size (at age 15)	4.54	4.54	4.28	0.245	898	4.65	4.31	0.053	898	4.58	4.30	0.019	976	4.36	4.58	0.051	898	4.53	4.65	0.610	898
Household size (at age 19)	4.16	4.16	3.86	0.230	858	4.39	4.09	0.639	858	4.17	4.04	0.293	914	4.10	4.16	0.597	858	4.14	4.39	0.330	858
Married/cohabiting/parent (at age 19)	0.12	0.13	0.00	0.022	832	0.24	0.02	0.000	832	0.15	0.01	0.000	884	0.05	0.14	0.001	832	0.12	0.24	0.032	832
Household size (at age 22)	3.68	3.72	2.63	0.000	909	4.29	3.18	0.000	909	3.82	3.05	0.000	909	3.25	3.80	0.000	909	3.65	4.29	0.035	909
Married/cohabiting/parent (at age 22)	0.31	0.32	0.02	0.000	910	0.65	0.07	0.000	910	0.37	0.06	0.000	914	0.16	0.36	0.000	910	0.30	0.65	0.000	910
Cognitive skills (at ages 12, 15 and 19)																					
Maths score (% correct) at age 12	82.11	81.56	91.03	0.004	896	77.35	93.05	0.000	896	79.55	92.57	0.000	973	90.00	79.65	0.000	896	82.16	77.35	0.172	896
Maths score (% correct) at age 15	58.78	57.94	79.97	0.000	895	54.97	74.99	0.000	895	55.03	76.18	0.000	972	72.54	55.03	0.000	895	59.06	54.97	0.361	895
Maths score (% correct) at age 19	45.53	44.88	59.92	0.000	797	39.40	57.38	0.000	797	42.54	57.97	0.000	844	54.89	42.70	0.000	797	45.81	39.40	0.074	797
PPVT raw score at age 12	137.56	136.71	152.28	0.000	867	133.87	147.98	0.000	867	134.74	149.04	0.000	945	146.61	134.78	0.000	867	137.56	133.87	0.436	867
PPVT raw score at age 15	166.41	166.21	178.49	0.005	874	157.47	179.39	0.000	874	163.91	179.17	0.000	940	175.59	164.22	0.000	874	167.11	157.47	0.045	874
PPVT z-score at age 12	0.00	-0.03	0.56	0.000	867	-0.14	0.40	0.000	867	-0.11	0.44	0.000	945	0.35	-0.11	0.000	867	0.00	-0.14	0.436	867
PPVT z-score at age 15	0.00	-0.01	0.43	0.005	874	-0.32	0.47	0.000	874	-0.09	0.46	0.000	940	0.33	-0.08	0.000	874	0.00	-0.32	0.045	874

	All	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N	Mean		t-test	N
		Others	Studying only	p-value		Others	Working and studying	p-value		Others	Studying (all)	p-value		Others	Working only	p-value		Others	NEET	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)																					
Pride (at age 12)	-0.01	0.00	0.14	0.134	904	0.07	0.11	0.026	904	-0.02	0.12	0.005	988	0.11	-0.03	0.004	904	0.00	0.07	0.503	904
Pride (at age 15)	0.00	-0.01	0.14	0.157	894	-0.02	0.08	0.112	894	-0.03	0.09	0.030	970	0.07	-0.03	0.052	894	0.00	-0.02	0.865	894
Pride (at age 19)	0.00	-0.01	0.04	0.687	833	0.03	0.02	0.707	833	-0.01	0.02	0.583	885	0.02	-0.02	0.511	833	-0.01	0.03	0.753	833
Pride (at age 22)	0.00	-0.01	0.08	0.412	910	-0.27	0.08	0.161	910	-0.02	0.08	0.091	910	0.02	-0.01	0.588	910	0.01	-0.27	0.022	910
Agency (at age 12)	-0.01	0.00	-0.05	0.640	899	0.16	0.07	0.163	899	-0.01	0.04	0.316	983	0.06	-0.02	0.108	899	-0.01	0.16	0.138	899
Agency (at age 15)	0.00	0.00	0.15	0.073	894	-0.06	0.14	0.001	894	-0.03	0.14	0.000	970	0.11	-0.03	0.001	894	0.00	-0.06	0.507	894
Agency (at age 19)	0.02	0.02	0.07	0.610	833	-0.13	0.16	0.004	833	0.00	0.14	0.005	885	0.09	0.00	0.053	833	0.03	-0.13	0.128	833
Agency (at age 22)	0.00	-0.01	0.24	0.004	910	-0.17	0.24	0.000	910	-0.06	0.24	0.000	910	0.17	-0.05	0.000	910	0.01	-0.17	0.067	910
Self-esteem (at age 12)	0.00	0.00	0.08	0.396	833	-0.12	0.00	0.985	833	0.00	0.02	0.647	885	0.00	0.01	0.885	833	0.01	-0.12	0.218	833
Self-esteem (at age 15)	0.00	0.00	0.04	0.645	909	0.00	0.05	0.291	909	-0.01	0.04	0.234	909	0.04	-0.01	0.273	909	0.00	0.00	0.967	909
Self-efficacy (at age 19)	0.00	0.00	0.09	0.343	833	-0.16	0.03	0.610	833	0.00	0.04	0.340	885	0.01	0.00	0.958	833	0.01	-0.16	0.072	833
Self-efficacy (at age 22)	0.00	-0.01	0.10	0.206	909	-0.13	0.03	0.419	909	-0.01	0.05	0.163	909	0.02	-0.01	0.526	909	0.00	-0.13	0.134	909
AWSA (at age 22)	0.00	-0.01	0.15	0.008	910	-0.08	0.10	0.000	910	-0.03	0.11	0.000	910	0.08	-0.02	0.000	910	0.00	-0.08	0.180	910
Grit (at age 22)	0.00	0.00	0.00	0.986	910	-0.13	-0.02	0.570	910	0.00	-0.02	0.605	910	-0.04	0.01	0.238	910	0.00	-0.13	0.125	910
Neuroticism (at age 22)	0.00	0.00	-0.03	0.603	910	0.06	-0.08	0.010	910	0.02	-0.07	0.010	910	-0.05	0.01	0.046	910	0.00	0.06	0.353	910
Conscientiousness (at age 22)	0.00	0.00	-0.06	0.264	910	0.09	-0.10	0.001	910	0.02	-0.09	0.000	910	-0.06	0.02	0.008	910	0.00	0.09	0.154	910
Depression (at age 19)	0.00	0.01	-0.32	0.003	833	0.32	-0.06	0.299	833	0.02	-0.12	0.014	885	-0.05	0.00	0.342	833	-0.02	0.32	0.004	833
Depression (at age 22)	0.00	0.01	-0.23	0.022	909	0.30	-0.08	0.124	909	0.03	-0.12	0.009	909	-0.05	0.01	0.213	909	-0.01	0.30	0.008	909
Aspirations (at ages 12, 15, 19, and 22)																					
Child: aspiring to complete university (age 12)	0.75	0.75	0.83	0.256	876	0.73	0.90	0.000	876	0.72	0.88	0.000	952	0.86	0.72	0.000	876	0.75	0.73	0.771	876
Child: aspiring to complete university (age 15)	0.65	0.64	0.87	0.003	882	0.64	0.89	0.000	882	0.60	0.88	0.000	957	0.84	0.60	0.000	882	0.65	0.64	0.860	882
Child: aspiring to complete university (age 19)	0.71	0.70	1.00	0.000	833	0.58	0.97	0.000	833	0.65	0.97	0.000	885	0.91	0.66	0.000	833	0.72	0.58	0.075	833
Caregiver: aspiring to university for her child (age 12)	0.72	0.72	0.95	0.001	899	0.74	0.89	0.000	899	0.69	0.90	0.000	981	0.88	0.69	0.000	899	0.73	0.74	0.929	899
Caregiver: aspiring to university for her child (age 15)	0.60	0.58	1.00	0.041	118	0.80	0.84	0.019	118	0.53	0.88	0.001	135	0.87	0.51	0.000	118	0.59	0.80	0.359	118
Caregiver expectations: age to support household (age 12)	22.53	22.43	24.34	0.001	833	22.72	23.53	0.000	833	22.25	23.72	0.000	913	23.56	22.22	0.000	833	22.51	22.72	0.722	833
Caregiver expectations: age to be financially independent (age 12)	24.79	24.71	26.35	0.004	800	24.00	25.70	0.001	800	24.53	25.85	0.000	872	25.55	24.55	0.000	800	24.81	24.00	0.180	800
Caregiver expectations: age to be married/leave the household (age 12)	25.36	25.32	26.41	0.031	880	25.05	26.18	0.001	880	25.17	26.23	0.000	964	26.05	25.18	0.000	880	25.38	25.05	0.560	880
Technical skills (z-score) (at age 22)																					
Team work	0.00	-0.01	0.13	0.294	908	-0.40	0.18	0.007	908	-0.04	0.17	0.003	908	0.07	-0.02	0.137	908	0.01	-0.40	0.004	908
Leadership	0.00	-0.01	0.32	0.016	906	-0.51	0.28	0.000	906	-0.06	0.29	0.000	906	0.16	-0.04	0.002	906	0.02	-0.51	0.000	906
Educational attainments (at age 22)																					
Completed secondary education	0.60	0.59	0.98	0.000	910	0.44	0.97	0.000	910	0.52	0.97	0.000	910	0.88	0.52	0.000	910	0.61	0.44	0.049	910
Observations	**910**	**869**	**41**			**781**	**129**			**740**	**170**			**204**	**706**			**876**	**34**		

Notes: Information is obtained from the Older Cohort at age 22. 'All' encompasses all those who are working and not working in the last 12 months. 'NEET' refers to those who were neither employed, in education nor in training in the last 12 months. 'Studying (all)' refers to all those who are involved in studying, i.e. 'working and studying' along with 'studying only'. 'Working only' refers to those who were employed in the last 12 months, regardless of the type of payment received for the activity. Wealth index is a composite index of living standards. Height-for-age is standardised according with age and gender-specific child growth standards provided by WHO. PPVT: Peabody Picture and Vocabulary Test; AWSA: Attitude Toward Women Scale. Depression: number of depressive symptoms (z-score). See Table A1 for list of definitions of categorical variables.

Table A9. *Descriptive statistics comparing dependency of work at age 22*

Part I: *Ethiopia*

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Demographic characteristics								
Child: female	0.48	0.018	0.45	0.029	0.40	0.027	0.206	636
Child: age (months)	264.3	0.131	264.23	0.214	264.17	0.203	0.832	636
Early childhood socio-economic characteristics at age 8								
Urban	0.33	0.017	0.36	0.028	0.20	0.022	0.000	636
Maternal education: Primary incomplete or less	0.89	0.012	0.90	0.018	0.93	0.015	0.335	581
Maternal education: Complete primary or secondary	0.10	0.011	0.09	0.017	0.07	0.014	0.423	581
Maternal education: Higher education	0.01	0.004	0.01	0.006	0.01	0.005	0.543	581
Paternal education: Primary incomplete or less	0.82	0.016	0.83	0.026	0.86	0.021	0.472	483
Paternal education: Complete primary or secondary	0.15	0.014	0.13	0.023	0.13	0.021	0.915	483
Paternal education: Higher education	0.03	0.007	0.04	0.013	0.01	0.006	0.048	483
Wealth index: Bottom tertile	0.35	0.017	0.32	0.027	0.46	0.027	0.000	635
Wealth index: Middle tertile	0.34	0.017	0.36	0.028	0.35	0.026	0.726	635
Wealth index: Top tertile	0.31	0.016	0.32	0.027	0.20	0.022	0.000	635
Height-for-age z-score	-1.54	0.046	-1.59	0.078	-1.58	0.071	0.931	613
Original family: household characteristics (at age 8)								
Household size	6.48	0.075	6.34	0.131	6.75	0.109	0.014	636
Child order - oldest child	0.88	0.011	0.87	0.019	0.90	0.017	0.355	636
Number of siblings	3.24	0.071	3.00	0.119	3.62	0.104	0.000	636
Single-parent family	0.30	0.016	0.35	0.027	0.22	0.023	0.000	633
Recent (lagged) socio-economic status (at ages 15, 19 and 22)								
Urban (at age 15)	0.40	0.017	0.42	0.029	0.26	0.024	0.000	632
Wealth index: Bottom tertile (at age 15)	0.34	0.017	0.35	0.028	0.41	0.027	0.088	632
Wealth index: Middle tertile (at age 15)	0.34	0.017	0.34	0.027	0.36	0.026	0.621	632
Wealth index: Top tertile (at age 15)	0.31	0.016	0.32	0.027	0.23	0.023	0.017	632
Urban (at age 19)	0.45	0.018	0.47	0.029	0.30	0.026	0.000	611
Wealth index: Bottom tertile (at age 19)	0.36	0.017	0.34	0.028	0.46	0.028	0.002	606
Wealth index: Middle tertile (at age 19)	0.34	0.017	0.33	0.028	0.33	0.026	0.943	606
Wealth index: Top tertile (at age 19)	0.30	0.016	0.33	0.028	0.21	0.023	0.001	606
Urban (at age 22)	0.55	0.017	0.65	0.027	0.34	0.026	0.000	636
Wealth index: Bottom tertile (at age 22)	0.34	0.017	0.26	0.026	0.48	0.027	0.000	631
Wealth index: Middle tertile (at age 22)	0.34	0.017	0.38	0.028	0.33	0.026	0.120	631
Wealth index: Top tertile (at age 22)	0.32	0.016	0.35	0.028	0.20	0.022	0.000	631
Recent household characteristics (at ages 15, 19 and 22)								
Household size (at age 15)	6.39	0.074	6.28	0.127	6.68	0.111	0.016	632
Household size (at age 19)	5.40	0.080	5.31	0.131	5.62	0.127	0.094	611
Married/cohabiting/parent (at age 19)	0.08	0.010	0.06	0.013	0.11	0.017	0.017	611
Household size (at age 22)	4.61	0.080	4.20	0.139	5.10	0.120	0.000	631
Married/cohabiting/parent (at age 22)	0.21	0.014	0.15	0.021	0.24	0.023	0.007	636
Cognitive skills (at ages 12, 15 and 19)								
Maths score (% correct) at age 12	55.88	0.927	55.82	1.472	52.61	1.492	0.127	587
Maths score (% correct) at age 15	16.95	0.553	16.55	0.805	14.34	0.851	0.061	632
Maths score (% correct) at age 19	47.48	0.787	46.74	1.238	44.08	1.252	0.133	575
PPVT raw score at age 12	74.81	0.928	75.53	1.493	69.77	1.449	0.006	618
PPVT raw score at age 15	152.55	1.892	153.31	2.774	140.76	3.717	0.006	268
PPVT z-score at age 12	-0.04	0.035	-0.01	0.057	-0.23	0.055	0.006	618
PPVT z-score at age 15	-0.05	0.053	-0.03	0.078	-0.39	0.105	0.006	268

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)								
Pride (at age 12)	-0.01	0.019	-0.01	0.032	-0.03	0.031	0.751	634
Pride (at age 15)	-0.03	0.024	0.03	0.040	-0.09	0.038	0.028	632
Pride (at age 19)	0.00	0.028	-0.02	0.045	0.03	0.045	0.405	611
Pride (at age 22)	0.00	0.026	-0.05	0.045	0.00	0.040	0.420	636
Agency (at age 12)	0.00	0.018	-0.02	0.028	-0.02	0.028	0.984	633
Agency (at age 15)	0.00	0.017	0.05	0.028	-0.03	0.026	0.032	632
Agency (at age 19)	0.00	0.019	-0.04	0.032	-0.03	0.031	0.881	611
Agency (at age 22)	0.00	0.020	0.01	0.033	-0.05	0.031	0.145	636
Self-esteem (at age 12)	0.00	0.021	-0.03	0.032	0.02	0.033	0.254	611
Self-esteem (at age 15)	0.00	0.019	-0.06	0.030	0.05	0.032	0.009	636
Self-efficacy (at age 19)	-0.01	0.020	-0.04	0.030	0.01	0.031	0.261	611
Self-efficacy (at age 22)	0.00	0.019	-0.02	0.030	0.03	0.032	0.208	636
AWSA (at age 22)	0.00	0.014	0.03	0.021	-0.06	0.023	0.003	636
Grit (at age 22)	0.00	0.017	0.02	0.026	0.01	0.027	0.649	636
Neuroticism (at age 22)	0.00	0.013	0.03	0.022	-0.05	0.022	0.013	636
Conscientiousness (at age 22)	0.00	0.015	0.01	0.022	-0.05	0.025	0.062	636
Depression (at age 19)	0.00	0.023	-0.01	0.036	0.01	0.038	0.633	611
Depression (at age 22)	0.00	0.022	-0.01	0.034	0.02	0.036	0.557	636
Aspirations (at ages 12, 15, 19, and 22)								
Child: aspiring to complete university (age 12)	0.69	0.017	0.67	0.028	0.65	0.027	0.659	599
Child: aspiring to complete university (age 15)	0.72	0.016	0.78	0.024	0.64	0.026	0.000	629
Child: aspiring to complete university (age 19)	0.71	0.016	0.74	0.026	0.62	0.027	0.001	611
Caregiver: aspiring to university for her child (age 12)	0.74	0.016	0.72	0.026	0.71	0.025	0.797	627
Caregiver: aspiring to university for her child (age 15)	0.78	0.015	0.79	0.024	0.74	0.024	0.205	624
Caregiver expectations: age to support household (age 12)	22.76	0.140	22.77	0.217	22.82	0.235	0.879	601
Caregiver expectations: age to be financially independent (age 12)	23.54	0.124	23.45	0.199	23.42	0.201	0.907	596
Caregiver expectations: age to be married/leave the hh (age 12)	25.63	0.133	25.74	0.208	25.42	0.213	0.284	598
Technical skills (at age 22)								
Team work	0.00	0.027	0.01	0.043	0.03	0.043	0.833	636
Leadership	0.00	0.028	-0.08	0.043	0.01	0.045	0.181	635
Educational attainments (at age 22)								
Completed secondary education	0.46	0.018	0.54	0.029	0.33	0.026	0.000	636
Currently enrolled	0.35	0.017	0.23	0.024	0.30	0.025	0.033	635
Observations	**636**		**303**		**333**			

Part II: *India*

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Demographic characteristics								
Child: female	0.52	0.017	0.34	0.025	0.52	0.037	0.000	555
Child: age (months)	263.98	0.14	264.09	0.216	263.63	0.299	0.217	555
Early childhood socio-economic characteristics at age 8								
Urban	0.23	0.014	0.22	0.021	0.07	0.018	0.000	555
Maternal education: Primary incomplete or less	0.82	0.013	0.89	0.017	0.90	0.022	0.612	547
Maternal education: Complete primary or secondary	0.16	0.012	0.11	0.016	0.09	0.022	0.669	547
Maternal education: Higher education	0.02	0.005	0.01	0.005	0.01	0.006	0.736	547
Paternal education: Primary incomplete or less	0.68	0.016	0.77	0.023	0.77	0.032	0.871	524
Paternal education: Complete primary or secondary	0.27	0.015	0.21	0.022	0.21	0.031	0.987	524
Paternal education: Higher education	0.05	0.008	0.03	0.009	0.02	0.011	0.699	524
Wealth index: Bottom tertile	0.35	0.016	0.44	0.026	0.45	0.037	0.858	555
Wealth index: Middle tertile	0.33	0.016	0.30	0.024	0.40	0.036	0.021	555
Wealth index: Top tertile	0.32	0.015	0.26	0.023	0.15	0.027	0.005	555
Height-for-age z-score	-1.57	0.035	-1.63	0.052	-1.63	0.090	0.987	555
Original family: household characteristics (at age 8)								
Household size	5.55	0.068	5.57	0.111	5.74	0.146	0.374	555
Child order - oldest child	0.65	0.016	0.67	0.024	0.71	0.034	0.268	555
Number of siblings	1.81	0.039	1.90	0.066	2.01	0.088	0.319	555
Single-parent family	0.09	0.010	0.10	0.016	0.09	0.021	0.539	555
Recent (lagged) socio-economic status (at ages 15, 19 and 22)								
Urban (at age 15)	0.24	0.014	0.23	0.022	0.08	0.020	0.000	552
Wealth index: Bottom tertile (at age 15)	0.34	0.016	0.43	0.026	0.39	0.036	0.414	550
Wealth index: Middle tertile (at age 15)	0.34	0.016	0.33	0.025	0.46	0.037	0.005	550
Wealth index: Top tertile (at age 15)	0.32	0.016	0.24	0.022	0.15	0.027	0.021	550
Urban (at age 19)	0.30	0.015	0.29	0.024	0.13	0.025	0.000	550
Wealth index: Bottom tertile (at age 19)	0.33	0.016	0.41	0.026	0.41	0.037	0.975	552
Wealth index: Middle tertile (at age 19)	0.34	0.016	0.35	0.025	0.36	0.036	0.700	552
Wealth index: Top tertile (at age 19)	0.32	0.016	0.24	0.022	0.23	0.031	0.692	552
Urban (at age 22)	0.33	0.016	0.32	0.024	0.12	0.024	0.000	551
Wealth index: Bottom tertile (at age 22)	0.34	0.016	0.46	0.026	0.43	0.037	0.589	555
Wealth index: Middle tertile (at age 22)	0.33	0.016	0.33	0.024	0.34	0.035	0.799	555
Wealth index: Top tertile (at age 22)	0.33	0.016	0.21	0.021	0.23	0.031	0.718	555
Recent household characteristics (at ages 15, 19 and 22)								
Household size (at age 15)	5.05	0.064	4.92	0.102	5.58	0.178	0.001	554
Household size (at age 19)	4.72	0.064	4.65	0.103	5.27	0.179	0.002	552
Married/cohabiting/parent (at age 19)	0.20	0.013	0.15	0.019	0.27	0.033	0.001	552
Household size (at age 22)	4.72	0.066	4.62	0.112	5.18	0.172	0.005	555
Married/cohabiting/parent (at age 22)	0.34	0.016	0.27	0.023	0.37	0.036	0.016	555
Cognitive skills (at age 12, 15 and 19)								
Maths score (% correct) at age 12	62.76	0.768	59.54	1.276	60.88	1.710	0.540	519
Maths score (% correct) at age 15	29.37	0.718	24.80	1.081	25.43	1.354	0.727	554
Maths score (% correct) at age 19	47.05	0.816	42.49	1.324	42.77	1.719	0.900	503
PPVT raw score at age 12	90.63	0.809	87.96	1.322	87.00	1.773	0.671	544
PPVT raw score at age 15	123.82	1.403	120.29	2.170	114.74	3.054	0.139	509
PPVT z-score at age 12	0.01	0.033	-0.10	0.055	-0.13	0.073	0.671	544
PPVT z-score at age 15	0.01	0.035	-0.08	0.054	-0.22	0.076	0.139	509

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Non-cognitive skills (z-score) (at ages 12, 15, 19, and 22)								
Pride (at age 12)	-0.01	0.019	-0.07	0.030	-0.04	0.040	0.614	555
Pride (at age 15)	-0.01	0.020	-0.02	0.031	-0.03	0.044	0.896	552
Pride (at age 19)	0.00	0.024	-0.10	0.036	-0.08	0.049	0.827	552
Pride (at age 22)	0.00	0.025	-0.08	0.039	-0.09	0.057	0.953	555
Agency (at age 12)	0.00	0.021	-0.04	0.035	-0.06	0.044	0.819	554
Agency (at age 15)	0.01	0.015	0.00	0.026	-0.01	0.033	0.784	552
Agency (at age 19)	0.01	0.018	0.01	0.029	-0.09	0.040	0.047	552
Agency (at age 22)	0.00	0.018	-0.05	0.029	-0.08	0.037	0.564	555
Self-esteem (at age 12)	0.00	0.018	-0.01	0.029	0.00	0.038	0.769	552
Self-esteem (at age 15)	0.00	0.018	-0.03	0.026	0.00	0.039	0.521	555
Self-efficacy (at age 19)	0.00	0.021	0.00	0.031	-0.04	0.044	0.517	551
Self-efficacy (at age 22)	0.00	0.018	-0.04	0.028	-0.02	0.044	0.817	555
AWSA (at age 22)	0.00	0.012	-0.05	0.017	0.02	0.023	0.020	554
Grit (at age 22)	0.00	0.015	0.04	0.023	-0.04	0.032	0.060	555
Neuroticism (at age 22)	0.00	0.013	0.03	0.020	-0.03	0.029	0.069	553
Conscientiousness (at age 22)	0.00	0.013	0.01	0.021	0.03	0.027	0.624	555
Depression (at age 19)	0.00	0.022	-0.01	0.035	-0.06	0.047	0.361	552
Depression (at age 22)	0.00	0.024	-0.03	0.038	-0.04	0.051	0.899	555
Aspirations (at ages 12, 15, 19, and 22)								
Child: aspiring to complete university (age 12)	0.69	0.016	0.67	0.026	0.64	0.039	0.609	478
Child: aspiring to complete university (age 15)	0.54	0.017	0.55	0.026	0.49	0.038	0.156	539
Child: aspiring to complete university (age 19)	0.65	0.016	0.64	0.025	0.60	0.036	0.312	552
Caregiver: aspiring to university for her child (age 12)	0.55	0.017	0.52	0.026	0.50	0.038	0.566	534
Caregiver: aspiring to university for her child (age 15)								
Caregiver expectations: age to support household (age 12)	20.70	0.145	20.28	0.234	20.07	0.351	0.598	444
Caregiver expectations: age to be financially independent (age 12)	22.29	0.122	22.09	0.194	21.69	0.316	0.268	465
Caregiver expectations: age to be married/leave the hh (age 12)	23.08	0.118	23.43	0.200	22.63	0.267	0.018	504
Technical skills (z-score) (at age 22)								
Team work	-0.01	0.026	-0.03	0.040	-0.06	0.055	0.658	545
Leadership	0.00	0.028	-0.02	0.044	0.02	0.058	0.686	555
Educational attainments (at age 22)								
Completed secondary education	0.5	0.017	0.39	0.025	0.45	0.037	0.185	555
Currently enrolled	0.21	0.013	0.11	0.016	0.14	0.026	0.301	555
Observations	**610**		**373**		**182**			

Part III: *Peru*

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Demographic characteristics								
Child: female	0.48	0.020	0.45	0.024	0.41	0.054	0.566	500
Child: age (months)	263.01	0.201	263.23	0.258	262.48	0.426	0.214	500
Early childhood socio-economic characteristics at age 8								
Urban	0.76	0.018	0.77	0.021	0.74	0.048	0.622	500
Maternal education: Primary incomplete or less	0.38	0.020	0.35	0.024	0.46	0.055	0.070	475
Maternal education: Complete primary or secondary	0.51	0.021	0.55	0.025	0.43	0.055	0.063	475
Maternal education: Higher education	0.10	0.013	0.10	0.015	0.11	0.034	0.862	475
Paternal education: Primary incomplete or less	0.27	0.021	0.25	0.025	0.38	0.061	0.035	368
Paternal education: Complete primary or secondary	0.58	0.023	0.63	0.028	0.45	0.063	0.008	368
Paternal education: Higher education	0.14	0.016	0.12	0.019	0.17	0.048	0.280	368
Wealth index: Bottom tertile	0.49	0.021	0.49	0.025	0.51	0.055	0.825	495
Wealth index: Middle tertile	0.28	0.018	0.29	0.022	0.23	0.046	0.250	495
Wealth index: Top tertile	0.23	0.017	0.22	0.020	0.27	0.049	0.329	495
Height-for-age z-score	-1.41	0.041	-1.35	0.050	-1.55	0.105	0.101	497
Original family: household characteristics (at age 8)								
Household size	5.65	0.080	5.63	0.099	5.45	0.193	0.448	500
Child order - oldest child	0.69	0.019	0.69	0.023	0.66	0.052	0.554	500
Number of siblings	2.07	0.062	2.00	0.074	2.12	0.148	0.512	500
Single-parent family	0.22	0.017	0.24	0.021	0.20	0.044	0.417	500
Recent (lagged) socio-economic status (at ages 15, 19 and 22)								
Urban (at age 15)	0.78	0.017	0.79	0.020	0.73	0.049	0.272	492
Wealth index: Bottom tertile (at age 15)	0.30	0.019	0.28	0.022	0.37	0.054	0.129	490
Wealth index: Middle tertile (at age 15)	0.35	0.020	0.38	0.024	0.32	0.052	0.321	490
Wealth index: Top tertile (at age 15)	0.35	0.020	0.34	0.024	0.32	0.052	0.650	490
Urban (at age 19)	0.84	0.015	0.86	0.017	0.80	0.045	0.118	483
Wealth index: Bottom tertile (at age 19)	0.20	0.017	0.19	0.020	0.24	0.047	0.260	479
Wealth index: Middle tertile (at age 19)	0.35	0.020	0.35	0.024	0.35	0.053	0.987	479
Wealth index: Top tertile (at age 19)	0.45	0.021	0.46	0.025	0.41	0.054	0.361	479
Urban (at age 22)	0.87	0.014	0.88	0.016	0.82	0.042	0.124	500
Wealth index: Bottom tertile (at age 22)	0.14	0.014	0.13	0.016	0.16	0.040	0.367	499
Wealth index: Middle tertile (at age 22)	0.41	0.020	0.41	0.024	0.39	0.053	0.703	499
Wealth index: Top tertile (at age 22)	0.46	0.020	0.46	0.025	0.45	0.054	0.810	499
Recent household characteristics (at ages 15, 19 and 22)								
Household size (at age 15)	5.37	0.076	5.40	0.091	5.12	0.193	0.211	492
Household size (at age 19)	4.73	0.090	4.77	0.116	4.60	0.206	0.540	479
Married/cohabiting/parent (at age 19)	0.17	0.016	0.14	0.018	0.21	0.046	0.122	476
Household size (at age 22)	4.30	0.086	4.25	0.108	4.49	0.204	0.341	500
Married/cohabiting/parent (at age 22)	0.35	0.020	0.32	0.023	0.44	0.054	0.033	500
Cognitive skills (at ages 12, 15 and 19)								
Maths score (% correct) at age 12	72.72	0.845	72.81	1.025	73.13	2.221	0.897	492
Maths score (% correct) at age 15	44.33	0.785	44.48	0.925	41.82	2.146	0.240	487
Maths score (% correct) at age 19	58.91	0.818	58.82	0.955	57.46	2.295	0.566	462
PPVT raw score at age 12	72.76	0.712	73.75	0.756	71.13	1.834	0.157	488
PPVT raw score at age 15	97.09	0.727	97.76	0.833	94.51	2.308	0.126	467
PPVT z-score at age 12	0.02	0.043	0.08	0.045	-0.08	0.110	0.157	488
PPVT z-score at age 15	0.01	0.042	0.05	0.048	-0.14	0.133	0.126	467

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Non-cognitive skills (at ages 12, 15, 19, and 22)								
Pride (at age 12)	0.00	0.019	0.00	0.023	-0.02	0.052	0.714	494
Pride (at age 15)	-0.01	0.025	-0.03	0.029	-0.08	0.075	0.460	490
Pride (at age 19)	0.00	0.028	-0.01	0.034	0.05	0.082	0.488	475
Pride (at age 22)	0.00	0.028	0.02	0.034	-0.08	0.087	0.206	500
Agency (at age 12)	0.01	0.022	0.00	0.026	0.04	0.046	0.568	494
Agency (at age 15)	0.02	0.022	0.03	0.026	-0.03	0.066	0.393	490
Agency (at age 19)	0.01	0.024	0.04	0.028	-0.10	0.064	0.038	475
Agency (at age 22)	-0.01	0.024	0.01	0.029	-0.04	0.052	0.488	500
Self-esteem (at age 12)	0.00	0.024	0.00	0.028	-0.03	0.070	0.725	475
Self-esteem (at age 15)	0.00	0.025	0.02	0.030	-0.04	0.059	0.387	500
Self-efficacy (at age 19)	0.00	0.024	0.03	0.027	-0.06	0.066	0.183	475
Self-efficacy (at age 22)	0.00	0.025	0.03	0.030	0.01	0.061	0.798	500
AWSA (at age 22)	0.00	0.015	0.01	0.018	0.00	0.038	0.835	500
Grit (at age 22)	0.00	0.018	0.03	0.022	-0.05	0.044	0.166	500
Neuroticism (at age 22)	0.00	0.015	-0.03	0.019	0.02	0.041	0.355	500
Conscientiousness (at age 22)	0.00	0.016	-0.01	0.019	-0.01	0.041	0.878	500
Depression (at age 19)	-0.03	0.030	-0.03	0.036	-0.01	0.088	0.881	459
Depression (at age 22)	-0.01	0.031	-0.01	0.037	-0.04	0.086	0.738	464
Aspirations (at ages 12, 15, 19, and 22)								
Child: aspiring to complete university (age 12)	0.79	0.017	0.81	0.020	0.77	0.046	0.451	488
Child: aspiring to complete university (age 15)	0.79	0.017	0.79	0.020	0.71	0.050	0.107	491
Child: aspiring to complete university (age 19)	0.71	0.019	0.72	0.023	0.60	0.055	0.032	476
Caregiver: aspiring to university for her child (age 12)	0.76	0.018	0.76	0.021	0.81	0.043	0.312	495
Caregiver: aspiring to university for her child (age 15)	0.73	0.018	0.75	0.022	0.64	0.054	0.057	489
Caregiver expectations: age to support household (age 12)	20.87	0.157	20.90	0.184	20.42	0.427	0.282	493
Caregiver expectations: age to be financially independent (age 12)	22.82	0.146	22.93	0.180	22.37	0.364	0.195	490
Caregiver expectations: age to be married/leave the hh (age 12)	26.41	0.150	26.63	0.172	26.06	0.444	0.182	466
Technical skills (z-score) (at age 22)								
Team work	0.00	0.033	0.07	0.040	-0.14	0.085	0.029	500
Leadership	0.00	0.033	0.04	0.039	-0.10	0.090	0.155	500
Educational attainments (at age 22)								
Completed secondary education	0.84	0.015	0.85	0.018	0.78	0.045	0.091	500
Currently enrolled	0.38	0.020	0.36	0.024	0.35	0.052	0.915	500
Observations	**500**		**415**		**85**			

Part IV: *Vietnam*

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Demographic characteristics								
Child: female	0.51	0.017	0.51	0.02	0.48	0.037	0.448	835
Child: age (months)	267.35	0.132	267.54	0.156	266.58	0.293	0.004	832
Early childhood socio-economic characteristics at age 8								
Urban	0.19	0.013	0.20	0.016	0.12	0.024	0.011	835
Maternal education: Primary incomplete or less	0.33	0.016	0.28	0.018	0.52	0.037	0.000	817
Maternal education: Complete primary or secondary	0.64	0.016	0.68	0.018	0.47	0.037	0.000	817
Maternal education: Higher education	0.03	0.006	0.03	0.007	0.01	0.005	0.043	817
Paternal education: Primary incomplete or less	0.26	0.015	0.21	0.016	0.49	0.038	0.000	797
Paternal education: Complete primary or secondary	0.69	0.016	0.74	0.018	0.50	0.038	0.000	797
Paternal education: Higher education	0.05	0.007	0.05	0.009	0.01	0.008	0.027	797
Wealth index: Bottom tertile	0.33	0.016	0.31	0.018	0.46	0.037	0.000	834
Wealth index: Middle tertile	0.34	0.016	0.36	0.019	0.31	0.034	0.236	834
Wealth index: Top tertile	0.32	0.016	0.34	0.019	0.23	0.031	0.005	834
Height-for-age z-score	-1.47	0.032	-1.39	0.036	-1.76	0.079	0.000	835
Original family: household characteristics (at age 8)								
Household size	4.92	0.051	4.82	0.056	5.39	0.140	0.000	835
Child order - oldest child	0.55	0.016	0.53	0.020	0.65	0.035	0.003	835
Number of siblings	1.60	0.040	1.51	0.045	1.97	0.102	0.000	835
Single-parent family	0.05	0.007	0.06	0.009	0.04	0.015	0.394	835
Recent (lagged) socio-economic status (at ages 15, 19 and 22)								
Urban (at age 15)	0.19	0.013	0.20	0.016	0.13	0.025	0.024	825
Wealth index: Bottom tertile (at age 15)	0.34	0.016	0.31	0.018	0.51	0.038	0.000	808
Wealth index: Middle tertile (at age 15)	0.33	0.016	0.36	0.019	0.25	0.033	0.007	808
Wealth index: Top tertile (at age 15)	0.33	0.016	0.33	0.019	0.23	0.032	0.015	808
Urban (at age 19)	0.21	0.015	0.22	0.018	0.15	0.030	0.104	696
Wealth index: Bottom tertile (at age 19)	0.34	0.016	0.30	0.019	0.52	0.038	0.000	786
Wealth index: Middle tertile (at age 19)	0.33	0.016	0.36	0.019	0.23	0.032	0.001	786
Wealth index: Top tertile (at age 19)	0.33	0.016	0.34	0.019	0.25	0.033	0.038	786
Urban (at age 22)	0.40	0.016	0.44	0.019	0.21	0.030	0.000	834
Wealth index: Bottom tertile (at age 22)	0.35	0.016	0.30	0.018	0.52	0.037	0.000	834
Wealth index: Middle tertile (at age 22)	0.32	0.015	0.35	0.019	0.21	0.030	0.000	834
Wealth index: Top tertile (at age 22)	0.33	0.016	0.34	0.019	0.27	0.033	0.069	834
Recent household characteristics (at ages 15, 19 and 22)								
Household size (at age 15)	4.53	0.045	4.42	0.049	4.96	0.128	0.000	825
Household size (at age 19)	4.15	0.050	4.08	0.059	4.41	0.116	0.008	788
Married/cohabiting/parent (at age 19)	0.12	0.011	0.07	0.011	0.29	0.035	0.000	763
Household size (at age 22)	3.68	0.058	3.49	0.068	4.44	0.113	0.000	834
Married/cohabiting/parent (at age 22)	0.31	0.015	0.24	0.017	0.57	0.037	0.000	835
Cognitive skills (at ages 12, 15 and 19)								
Maths score (% correct) at age 12	81.98	0.672	84.19	0.704	72.73	1.861	0.000	823
Maths score (% correct) at age 15	58.90	0.855	61.65	0.951	45.28	1.889	0.000	822
Maths score (% correct) at age 19	45.56	0.694	47.08	0.814	37.52	1.407	0.000	730
PPVT raw score at age 12	137.43	0.879	140.70	0.847	122.95	2.774	0.000	796
PPVT raw score at age 15	166.76	0.907	169.51	0.977	155.41	2.470	0.000	798
PPVT z-score at age 12	0.00	0.034	0.12	0.032	-0.56	0.106	0.000	796
PPVT z-score at age 15	0.01	0.033	0.11	0.035	-0.40	0.089	0.000	798

	All		Dependent workers		Own-account		t-test	N
	Mean	Std	Mean	Std	Mean	Std	p-value	
Non-cognitive skills (at ages 12, 15, 19, and 22)								
Pride (at age 12)	0.00	0.019	0.02	0.023	-0.11	0.045	0.005	831
Pride (at age 15)	0.00	0.021	0.00	0.024	-0.04	0.051	0.402	821
Pride (at age 19)	-0.01	0.025	-0.01	0.029	-0.03	0.057	0.755	764
Pride (at age 22)	0.00	0.023	0.05	0.027	-0.14	0.054	0.001	835
Agency (at age 12)	0.00	0.020	0.02	0.022	-0.08	0.056	0.059	826
Agency (at age 15)	0.00	0.018	0.02	0.020	-0.07	0.041	0.034	821
Agency (at age 19)	0.02	0.020	0.06	0.023	-0.09	0.042	0.001	764
Agency (at age 22)	0.00	0.018	0.05	0.021	-0.19	0.043	0.000	835
Self-esteem (at age 12)	0.00	0.020	-0.01	0.024	0.05	0.044	0.258	764
Self-esteem (at age 15)	0.00	0.018	0.01	0.021	-0.05	0.040	0.146	835
Self-efficacy (at age 19)	0.00	0.018	0.02	0.021	-0.03	0.040	0.273	764
Self-efficacy (at age 22)	0.00	0.017	0.01	0.019	-0.04	0.040	0.200	835
AWSA (at age 22)	0.00	0.012	0.03	0.014	-0.11	0.027	0.000	835
Grit (at age 22)	0.00	0.016	0.01	0.019	-0.03	0.037	0.317	835
Neuroticism (at age 22)	0.00	0.013	0.01	0.015	-0.04	0.029	0.123	835
Conscientiousness (at age 22)	0.00	0.013	-0.02	0.015	0.09	0.026	0.000	835
Depression (at age 19)	-0.01	0.023	-0.03	0.026	0.08	0.055	0.059	764
Depression (at age 22)	0.00	0.022	-0.02	0.026	0.08	0.048	0.054	835
Aspirations (at ages 12, 15, 19, and 22)								
Child: aspiring to complete university (age 12)	0.75	0.015	0.78	0.016	0.62	0.037	0.000	803
Child: aspiring to complete university (age 15)	0.65	0.016	0.67	0.019	0.53	0.038	0.000	810
Child: aspiring to complete university (age 19)	0.71	0.016	0.76	0.018	0.53	0.038	0.000	764
Caregiver: aspiring to university for her child (age 12)	0.73	0.015	0.75	0.017	0.60	0.037	0.000	825
Caregiver: aspiring to university for her child (age 15)	0.6	0.045	0.64	0.054	0.37	0.095	0.015	107
Caregiver expectations: age to support household (age 12)	22.51	0.112	22.64	0.127	21.66	0.278	0.000	769
Caregiver expectations: age to be financially independent (age 12)	24.78	0.115	24.90	0.129	24.12	0.271	0.008	736
Caregiver expectations: age to be married/leave the hh (age 12)	25.37	0.104	25.61	0.115	24.34	0.271	0.000	811
Technical skills (z-score) (at age 22)								
Team work	0.00	0.027	0.05	0.030	-0.14	0.067	0.004	834
Leadership	0.00	0.028	0.07	0.033	-0.22	0.061	0.000	833
Educational attainments (at age 22)								
Completed secondary education	0.6	0.016	0.64	0.019	0.43	0.037	0.000	835
Currently enrolled	0.15	0.012	0.13	0.013	0.08	0.02	0.063	835
Observations	**835**		**651**		**184**			

Notes: Data are obtained from Older Cohort who have worked in the last 12 months, at age 22. Sample size discrepancies seen in India are due to missing information on main activity characteristics despite reporting working status. Wealth index is a composite index of living standards. Height-for-age is standardised according with age and gender-specific child growth standards provided by WHO. PPVT: Peabody Picture and Vocabulary Test; AWSA: Attitude Toward Women Scale. Depression: number of depressive symptoms (z-score). See Table A1 for list of definitions of categorical variables.

Table A10. *Working and studying status at age 22: multinomial probit model, estimated coefficients*

Part I: *Ethiopia*

	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Sets of controls	**Basic age 8**			**Aspiration age 12**			**Skills age 15**			**Household size age 15**			**Technical skills age 22**		
Female	-0.201	-0.473***	1.002***	-0.245	-0.480***	0.989***	-0.347*	-0.557***	0.893***	-0.357*	-0.537***	0.911***	-0.317*	-0.462***	0.962***
	(0.168)	(0.154)	(0.239)	(0.182)	(0.151)	(0.248)	(0.186)	(0.163)	(0.230)	(0.187)	(0.159)	(0.224)	(0.166)	(0.167)	(0.209)
Urban age 8	-0.216	-0.208	0.472*	-0.169	-0.136	0.589**	0.095	-0.119	0.674**	0.122	-0.172	0.666**	0.128	-0.086	0.717**
	(0.430)	(0.268)	(0.246)	(0.406)	(0.247)	(0.252)	(0.482)	(0.272)	(0.289)	(0.516)	(0.290)	(0.301)	(0.507)	(0.302)	(0.321)
Mother's education: completed primary education and above	-0.723**	-0.083	-0.313	-0.738**	-0.036	-0.292	-0.638*	-0.023	-0.204	-0.664*	-0.118	-0.275	-0.654*	-0.180	-0.319
	(0.339)	(0.190)	(0.221)	(0.347)	(0.185)	(0.215)	(0.342)	(0.224)	(0.209)	(0.364)	(0.249)	(0.233)	(0.357)	(0.237)	(0.248)
Wealth index: middle tertile age 8	-0.451	-0.563**	-0.577**	-0.402	-0.525*	-0.415	-0.465**	-0.550**	-0.490*	-0.356	-0.560**	-0.452	-0.414**	-0.587**	-0.506*
	(0.278)	(0.265)	(0.288)	(0.276)	(0.277)	(0.271)	(0.230)	(0.266)	(0.261)	(0.228)	(0.271)	(0.292)	(0.211)	(0.254)	(0.300)
Wealth index: top tertile age 8	-1.146**	-0.858**	-1.062***	-1.083**	-0.802**	-0.943***	-0.913**	-0.792**	-0.745***	-0.784*	-0.873**	-0.670	-0.825*	-0.943**	-0.772*
	(0.458)	(0.336)	(0.264)	(0.440)	(0.345)	(0.279)	(0.435)	(0.361)	(0.287)	(0.439)	(0.402)	(0.434)	(0.436)	(0.421)	(0.431)
Height for age z-score age 8	0.050	-0.045	0.091	0.086	-0.040	0.103	0.155**	-0.024	0.146	0.162**	-0.028	0.150	0.157**	-0.053	0.155
	(0.074)	(0.071)	(0.091)	(0.070)	(0.071)	(0.101)	(0.072)	(0.073)	(0.105)	(0.075)	(0.073)	(0.098)	(0.073)	(0.068)	(0.100)
Household size age 8	0.100	0.033	-0.046	0.090	0.000	-0.025	0.099	0.006	-0.034	0.026	-0.095	-0.123	0.023	-0.124	-0.098
	(0.086)	(0.115)	(0.102)	(0.086)	(0.119)	(0.106)	(0.095)	(0.116)	(0.109)	(0.115)	(0.129)	(0.114)	(0.128)	(0.143)	(0.119)
Whether older sibling at age 8	0.120	-0.144	-0.012	0.138	-0.170	-0.149	0.190	-0.070	-0.156	0.144	-0.121	-0.237	0.098	-0.149	-0.231
	(0.280)	(0.241)	(0.423)	(0.292)	(0.254)	(0.394)	(0.305)	(0.253)	(0.401)	(0.291)	(0.238)	(0.393)	(0.300)	(0.238)	(0.385)
Number of siblings at age 8	-0.077	0.043	0.146	-0.067	0.080	0.155	-0.097	0.071	0.164	-0.077	0.092	0.186	-0.075	0.116	0.161
	(0.083)	(0.124)	(0.113)	(0.083)	(0.125)	(0.117)	(0.086)	(0.122)	(0.113)	(0.090)	(0.114)	(0.114)	(0.100)	(0.123)	(0.120)
Child's educ aspiration: complete university age 12				-0.379	-0.349*	0.003	-0.172	-0.272	0.171	-0.199	-0.292	0.137	-0.153	-0.229	0.046
				(0.233)	(0.201)	(0.271)	(0.228)	(0.231)	(0.296)	(0.237)	(0.248)	(0.300)	(0.232)	(0.254)	(0.314)
Maths: percentage of correct answers at age 15							-0.034***	-0.000	-0.016*	-0.034***	-0.000	-0.016*	-0.033***	0.000	-0.016*
							(0.007)	(0.007)	(0.009)	(0.006)	(0.006)	(0.009)	(0.006)	(0.006)	(0.009)
Standardised PPVT score age 15							-0.259**	-0.114	-0.282*	-0.192*	-0.065	-0.230	-0.181	-0.041	-0.236
							(0.107)	(0.135)	(0.163)	(0.113)	(0.142)	(0.166)	(0.114)	(0.138)	(0.177)
Pride index z-score age 15							0.339**	0.146	0.306	0.298**	0.103	0.273	0.277*	0.085	0.343
							(0.133)	(0.139)	(0.193)	(0.136)	(0.139)	(0.204)	(0.149)	(0.141)	(0.213)
Agency index z-score age 15							0.101	-0.218	0.033	0.102	-0.221	0.035	0.092	-0.276	0.043
							(0.246)	(0.198)	(0.208)	(0.242)	(0.194)	(0.206)	(0.235)	(0.177)	(0.212)
Wealth index: middle tertile age 15										-0.514**	-0.210	-0.244	-0.453*	-0.196	-0.233
										(0.256)	(0.140)	(0.399)	(0.253)	(0.138)	(0.408)
Wealth index: top tertile age 15										-0.380	0.071	-0.199	-0.331	0.033	-0.201
										(0.445)	(0.331)	(0.437)	(0.448)	(0.348)	(0.462)
Household size at age 15										0.110*	0.155***	0.139**	0.116**	0.171***	0.136**
										(0.056)	(0.058)	(0.061)	(0.056)	(0.061)	(0.061)
AWSA index age 22													-0.172	0.127	0.052
													(0.281)	(0.238)	(0.305)
Grit z-score at age 22													0.020	0.021	-0.556
													(0.240)	(0.210)	(0.343)
Big 5: neuroticism z-score age 22													-0.049	-0.086	0.134
													(0.177)	(0.253)	(0.451)
Big 5: conscientiousness z-score age 22													-0.271	-0.697**	-0.048
													(0.253)	(0.305)	(0.455)
Teamwork z-score age 22													0.286*	0.302**	0.313*
													(0.148)	(0.125)	(0.177)
Leadership z-score age 22													-0.333*	-0.127	-0.070
													(0.179)	(0.145)	(0.146)
Constant	1.470***	0.809*	-0.594	1.760***	1.093**	-0.844	2.274***	1.037*	-0.551	2.311***	0.801	-0.690	2.281***	0.749	-0.716
	(0.336)	(0.466)	(0.471)	(0.400)	(0.489)	(0.597)	(0.410)	(0.563)	(0.555)	(0.460)	(0.582)	(0.536)	(0.470)	(0.584)	(0.568)
Observations	**686**	**686**	**686**	**652**	**652**	**652**	**645**	**645**	**645**	**644**	**644**	**644**	**644**	**644**	**644**

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Part II: *India*

	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Sets of controls	**Basic age 8**			**Aspiration age 12**			**SES age 15**			**Household size age 15**			**Technical skills age 22**		
Female	-0.401**	-0.895***	1.043***	-0.526***	-0.895***	0.955***	-0.734***	-1.031***	0.886***	-0.732***	-1.017***	0.886***	-0.716***	-1.009***	0.881***
	(0.159)	(0.200)	(0.181)	(0.163)	(0.200)	(0.175)	(0.160)	(0.192)	(0.191)	(0.161)	(0.186)	(0.190)	(0.178)	(0.206)	(0.180)
Urban age 8	-0.128	-0.078	-0.150	-0.123	-0.069	-0.103	0.083	0.108	-0.027	0.082	0.152	-0.026	0.219	0.263	0.075
	(0.313)	(0.361)	(0.213)	(0.318)	(0.360)	(0.200)	(0.350)	(0.346)	(0.211)	(0.350)	(0.356)	(0.211)	(0.375)	(0.381)	(0.232)
Mother's education: completed primary education and above	-0.817***	-0.352	-0.402*	-0.689***	-0.356	-0.325	-0.379	-0.234	-0.244	-0.382	-0.243	-0.242	-0.342	-0.204	-0.210
	(0.261)	(0.259)	(0.232)	(0.260)	(0.257)	(0.228)	(0.276)	(0.271)	(0.231)	(0.274)	(0.271)	(0.229)	(0.294)	(0.282)	(0.238)
Wealth index: middle tertile age 8	-0.231	-0.071	0.348	-0.194	-0.068	0.328	0.084	0.201	0.477**	0.089	0.209	0.478**	0.021	0.164	0.431**
	(0.226)	(0.149)	(0.245)	(0.228)	(0.149)	(0.223)	(0.260)	(0.190)	(0.188)	(0.259)	(0.191)	(0.190)	(0.271)	(0.182)	(0.183)
Wealth index: top tertile age 8	-0.910***	-0.799***	0.345	-0.830***	-0.824***	0.284	-0.175	-0.478	0.546**	-0.172	-0.500	0.547**	-0.218	-0.505	0.552*
	(0.243)	(0.243)	(0.264)	(0.256)	(0.249)	(0.248)	(0.332)	(0.351)	(0.270)	(0.332)	(0.341)	(0.270)	(0.348)	(0.348)	(0.284)
Height for age z-score age 8	0.048	-0.090	0.114	0.050	-0.095	0.113	0.174**	-0.054	0.179*	0.173**	-0.055	0.178*	0.169**	-0.051	0.179*
	(0.079)	(0.108)	(0.087)	(0.074)	(0.108)	(0.091)	(0.074)	(0.111)	(0.099)	(0.074)	(0.112)	(0.099)	(0.076)	(0.112)	(0.099)
Household size age 8	0.026	-0.002	-0.015	0.038	-0.006	-0.022	0.048	-0.001	-0.014	0.039	-0.042	-0.014	0.054	-0.033	-0.000
	(0.034)	(0.065)	(0.041)	(0.034)	(0.067)	(0.041)	(0.041)	(0.078)	(0.042)	(0.053)	(0.078)	(0.048)	(0.056)	(0.085)	(0.045)
Whether older sibling at age 8	0.080	0.194	0.039	0.055	0.167	-0.035	0.009	0.241	-0.032	0.009	0.241	-0.032	0.074	0.303	0.040
	(0.156)	(0.174)	(0.216)	(0.153)	(0.186)	(0.209)	(0.161)	(0.213)	(0.178)	(0.161)	(0.217)	(0.178)	(0.176)	(0.232)	(0.163)
Number of siblings at age 8	0.132	-0.031	0.080	0.135*	0.030	0.149*	0.047	-0.002	0.100	0.041	-0.008	0.101	0.003	-0.050	0.069
	(0.100)	(0.073)	(0.105)	(0.079)	(0.069)	(0.087)	(0.074)	(0.082)	(0.063)	(0.072)	(0.082)	(0.067)	(0.072)	(0.088)	(0.059)
Child's educ aspiration: complete university age 12				-0.440**	0.229	-0.186	-0.407**	0.240	-0.190	-0.410**	0.236	-0.189	-0.365*	0.275	-0.134
				(0.180)	(0.279)	(0.233)	(0.193)	(0.323)	(0.258)	(0.191)	(0.319)	(0.255)	(0.198)	(0.324)	(0.250)
Maths: percentage of correct answers at age 15							-0.027***	-0.008	-0.015**	-0.027***	-0.007	-0.015**	-0.025***	-0.007	-0.012**
							(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Standardised PPVT score age 15							0.082	0.157	0.097	0.080	0.154	0.097	0.118	0.179	0.131
							(0.077)	(0.138)	(0.139)	(0.077)	(0.138)	(0.140)	(0.082)	(0.130)	(0.137)
Pride index age 15							0.009	0.205	0.115	0.008	0.200	0.111	0.018	0.226	0.107
							(0.154)	(0.151)	(0.128)	(0.154)	(0.149)	(0.128)	(0.152)	(0.146)	(0.135)
Agency index age 15							0.102	-0.197	0.161	0.107	-0.177	0.165	0.073	-0.195	0.198
							(0.241)	(0.254)	(0.225)	(0.238)	(0.246)	(0.222)	(0.232)	(0.257)	(0.226)
Wealth index: middle tertile age 15							-0.088	-0.535	0.034	-0.089	-0.539	0.032	-0.108	-0.588	0.031
							(0.276)	(0.378)	(0.338)	(0.275)	(0.379)	(0.338)	(0.275)	(0.368)	(0.349)
Wealth index: top tertile age 15							-0.883***	-0.807**	-0.210	-0.880***	-0.820**	-0.214	-0.990***	-0.959**	-0.280
							(0.306)	(0.370)	(0.402)	(0.306)	(0.377)	(0.401)	(0.323)	(0.408)	(0.410)
Household size at age 15										0.021	0.063	-0.002	0.015	0.064	-0.001
										(0.048)	(0.086)	(0.045)	(0.049)	(0.084)	(0.048)
AWSA index z-score age 22													-0.146	-0.021	-0.139
													(0.256)	(0.317)	(0.183)
Grit z-score at age 22													0.230	0.183	0.097
													(0.281)	(0.268)	(0.200)
Big 5: neuroticism z-score at age 22													0.078	-0.048	0.037
													(0.249)	(0.235)	(0.227)
Big 5: conscientiousness z-score at age 22													0.348	0.619**	0.085
													(0.266)	(0.285)	(0.209)
Teamwork z-score at age 22													-0.380***	-0.341**	-0.472***
													(0.115)	(0.158)	(0.127)
Leadership z-score atage 22													0.053	0.176	-0.046
													(0.131)	(0.170)	(0.106)
Constant	1.663***	0.492	-0.277	1.823***	0.253	-0.146	3.071***	0.811	0.476	3.023***	0.710	0.483	2.978***	0.725	0.343
	(0.394)	(0.391)	(0.364)	(0.460)	(0.490)	(0.427)	(0.542)	(0.613)	(0.587)	(0.544)	(0.655)	(0.602)	(0.565)	(0.667)	(0.630)
Observations	**896**	**896**	**896**	**801**	**801**	**801**	**769**	**769**	**769**	**769**	**769**	**769**	**765**	**765**	**765**

Notes: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Part III: *Peru*

	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Sets of controls	**Basic age 8**			**Aspiration age 12**			**SES age 15**			**Household size age 15**			**Technical skills age 22**		
Female	-0.229	0.033	1.524***	-0.225	0.015	1.522***	-0.209	0.044	1.524***	-0.208	0.046	1.529***	-0.204	-0.029	1.676***
	(0.193)	(0.227)	(0.306)	(0.192)	(0.225)	(0.326)	(0.208)	(0.250)	(0.320)	(0.207)	(0.251)	(0.321)	(0.221)	(0.241)	(0.363)
Urban age 8	0.234	0.373	0.575	0.211	0.379	0.594	0.238	0.312	0.769**	0.237	0.315	0.768**	0.324	0.412	0.891**
	(0.313)	(0.317)	(0.372)	(0.314)	(0.318)	(0.368)	(0.344)	(0.327)	(0.359)	(0.347)	(0.330)	(0.356)	(0.360)	(0.327)	(0.442)
Mother's education: completed primary education and above	-0.044	0.183	-0.360	-0.029	0.194	-0.383	0.185	0.222	-0.306	0.195	0.232	-0.299	0.208	0.208	-0.244
	(0.254)	(0.285)	(0.309)	(0.254)	(0.286)	(0.305)	(0.226)	(0.278)	(0.300)	(0.224)	(0.274)	(0.302)	(0.210)	(0.258)	(0.305)
Wealth index: middle tertile age 8	-0.554*	-0.633**	-1.129***	-0.532*	-0.720***	-1.053***	-0.363	-0.696**	-1.059***	-0.338	-0.669**	-1.026***	-0.375	-0.714***	-0.989***
	(0.302)	(0.254)	(0.288)	(0.314)	(0.245)	(0.289)	(0.417)	(0.280)	(0.375)	(0.419)	(0.276)	(0.367)	(0.405)	(0.269)	(0.363)
Wealth index: top tertile age 8	-1.163***	-0.509	-1.150**	-1.095**	-0.569*	-1.020**	-0.623	-0.392	-0.878	-0.575	-0.338	-0.808	-0.622	-0.363	-0.892
	(0.430)	(0.341)	(0.460)	(0.467)	(0.343)	(0.471)	(0.611)	(0.378)	(0.621)	(0.611)	(0.369)	(0.599)	(0.599)	(0.353)	(0.565)
Height for age z-score age 8	0.035	0.115	0.031	0.042	0.118	0.068	0.084	0.084	0.133	0.092	0.092	0.149	0.096	0.077	0.151
	(0.102)	(0.099)	(0.125)	(0.104)	(0.096)	(0.122)	(0.120)	(0.108)	(0.144)	(0.116)	(0.105)	(0.140)	(0.122)	(0.105)	(0.153)
Household size age 8	-0.046	-0.143**	-0.051	-0.028	-0.115**	-0.053	-0.019	-0.107**	-0.031	-0.033	-0.122**	-0.047	-0.052	-0.156***	-0.073
	(0.060)	(0.057)	(0.069)	(0.056)	(0.051)	(0.076)	(0.054)	(0.051)	(0.077)	(0.065)	(0.050)	(0.071)	(0.069)	(0.049)	(0.084)
Whether older sibling at age 8	0.558*	0.502*	0.944***	0.518*	0.475	0.984***	0.428	0.491	1.050***	0.424	0.487	1.048***	0.463	0.508	1.273***
	(0.296)	(0.302)	(0.314)	(0.297)	(0.298)	(0.311)	(0.311)	(0.302)	(0.305)	(0.304)	(0.302)	(0.302)	(0.317)	(0.324)	(0.324)
Number of siblings at age 8	-0.074	-0.063	-0.060	-0.099	-0.079	-0.085	-0.101	-0.104	-0.158	-0.118	-0.122	-0.184	-0.114	-0.101	-0.228*
	(0.080)	(0.076)	(0.119)	(0.079)	(0.075)	(0.121)	(0.088)	(0.082)	(0.119)	(0.088)	(0.088)	(0.131)	(0.090)	(0.089)	(0.128)
Child's educ aspiration: complete university age 12				-0.236	0.451	-0.625*	0.026	0.387	-0.249	0.042	0.403	-0.240	0.005	0.295	-0.188
				(0.313)	(0.284)	(0.324)	(0.324)	(0.292)	(0.391)	(0.309)	(0.285)	(0.382)	(0.301)	(0.300)	(0.430)
Maths: percentage of correct answers at age 15							-0.025**	-0.010	-0.018	-0.025**	-0.010	-0.018	-0.026***	-0.012	-0.020*
							(0.010)	(0.011)	(0.011)	(0.010)	(0.011)	(0.012)	(0.010)	(0.011)	(0.011)
Standardised PPVT score age 15							-0.122	0.208	-0.300	-0.131	0.198	-0.309	-0.160	0.168	-0.346
							(0.192)	(0.248)	(0.241)	(0.194)	(0.250)	(0.240)	(0.212)	(0.292)	(0.284)
Pride index age 15							-0.399**	-0.389**	-0.084	-0.409**	-0.402**	-0.096	-0.388**	-0.415**	-0.064
							(0.163)	(0.165)	(0.197)	(0.163)	(0.163)	(0.195)	(0.158)	(0.166)	(0.234)
Agency index age 15							0.033	0.288	-0.069	0.022	0.276	-0.074	0.023	0.225	-0.005
							(0.224)	(0.256)	(0.399)	(0.217)	(0.253)	(0.401)	(0.224)	(0.265)	(0.422)
Wealth index: middle tertile age 15							0.571*	0.116	0.468	0.594*	0.139	0.501	0.575*	0.137	0.476
							(0.329)	(0.375)	(0.440)	(0.331)	(0.389)	(0.460)	(0.341)	(0.418)	(0.445)
Wealth index: top tertile age 15							-0.051	-0.217	0.303	-0.067	-0.235	0.281	-0.093	-0.239	0.191
							(0.436)	(0.465)	(0.488)	(0.423)	(0.453)	(0.483)	(0.424)	(0.456)	(0.464)
Household size at age 15										0.070	0.073	0.092	0.060	0.058	0.072
										(0.085)	(0.072)	(0.118)	(0.085)	(0.069)	(0.118)
AWSA index z-score at age 22													0.348	0.906***	-0.038
													(0.218)	(0.342)	(0.561)
Grit z-score at age 22													-0.125	-0.000	-0.394
													(0.253)	(0.209)	(0.344)
Big 5: neuroticism z-score at age 22													-0.247	-0.687***	0.213
													(0.241)	(0.258)	(0.414)
Big 5: conscientiousness z-score at age 22													0.200	0.114	0.421
													(0.293)	(0.295)	(0.400)
Teamwork z-score at age 22													0.149	0.133	-0.130
													(0.156)	(0.173)	(0.221)
Leadership z-score at age 22													-0.139	0.036	-0.022
													(0.157)	(0.196)	(0.224)
Constant	1.758***	1.563***	-1.035	1.908***	1.129**	-0.552	2.416***	1.575**	-0.516	2.153***	1.303*	-0.853	2.341***	1.677**	-0.885
	(0.468)	(0.399)	(0.770)	(0.552)	(0.524)	(0.780)	(0.604)	(0.658)	(0.851)	(0.702)	(0.778)	(1.125)	(0.727)	(0.844)	(1.034)
Observations	**542**	**542**	**542**	**533**	**533**	**533**	**509**	**509**	**509**	**509**	**509**	**509**	**509**	**509**	**509**

Notes: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Part IV: *Vietnam*

	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET	Working only	Studying and working	NEET
Sets of controls	**Basic age 8**			**Aspiration age 12**			**SES age 15**			**Household size age 15**			**Technical skills age 22**		
Female	0.209	0.337	1.114***	0.222	0.312	1.082***	0.352*	0.409	1.134***	0.355*	0.416	1.136***	0.384*	0.458*	1.285***
	(0.182)	(0.240)	(0.248)	(0.181)	(0.241)	(0.233)	(0.190)	(0.263)	(0.259)	(0.192)	(0.262)	(0.259)	(0.215)	(0.262)	(0.316)
Urban age 8	-0.283	-0.156	-0.338	-0.289	-0.146	-0.353	0.022	0.012	-0.267	0.022	0.014	-0.267	-0.093	-0.081	-0.520
	(0.281)	(0.300)	(0.344)	(0.276)	(0.299)	(0.336)	(0.282)	(0.322)	(0.457)	(0.285)	(0.324)	(0.458)	(0.309)	(0.359)	(0.539)
Mother's education: completed primary education and above	-0.585**	-0.373	-0.517	-0.570**	-0.449	-0.598*	-0.255	-0.319	-0.339	-0.253	-0.316	-0.338	-0.102	-0.192	-0.252
	(0.261)	(0.307)	(0.331)	(0.260)	(0.289)	(0.340)	(0.269)	(0.293)	(0.350)	(0.268)	(0.292)	(0.350)	(0.277)	(0.307)	(0.345)
Wealth index: middle tertile age 8	-0.840***	-0.383	-0.886*	-0.803***	-0.448	-0.862*	-0.699**	-0.467	-1.031**	-0.701**	-0.467	-1.034**	-0.687**	-0.495	-0.988**
	(0.293)	(0.329)	(0.517)	(0.298)	(0.341)	(0.490)	(0.292)	(0.342)	(0.435)	(0.293)	(0.345)	(0.432)	(0.292)	(0.320)	(0.457)
Wealth index: top tertile age 8	-1.239***	-0.340	-1.126**	-1.187***	-0.449	-1.121**	-0.523	-0.106	-1.317***	-0.523	-0.100	-1.318***	-0.404	0.002	-1.175**
	(0.325)	(0.315)	(0.491)	(0.335)	(0.336)	(0.487)	(0.394)	(0.359)	(0.466)	(0.392)	(0.360)	(0.453)	(0.389)	(0.337)	(0.530)
Height for age z-score age 8	-0.026	0.046	-0.069	-0.019	0.016	-0.031	0.153	0.058	0.057	0.152	0.057	0.057	0.208**	0.112	0.193
	(0.092)	(0.093)	(0.159)	(0.085)	(0.093)	(0.154)	(0.107)	(0.105)	(0.154)	(0.109)	(0.106)	(0.149)	(0.101)	(0.096)	(0.158)
Household size age 8	0.085	-0.121	-0.095	0.090	-0.129	-0.083	0.068	-0.167	-0.102	0.076	-0.150	-0.095	0.063	-0.190	0.001
	(0.086)	(0.103)	(0.199)	(0.087)	(0.104)	(0.210)	(0.116)	(0.117)	(0.235)	(0.123)	(0.114)	(0.237)	(0.138)	(0.119)	(0.207)
Whether older sibling at age 8	0.212	0.179	0.513*	0.222	0.156	0.451	0.177	0.140	0.472*	0.184	0.151	0.479*	0.185	0.168	0.463
	(0.235)	(0.252)	(0.292)	(0.238)	(0.250)	(0.280)	(0.272)	(0.285)	(0.283)	(0.288)	(0.296)	(0.288)	(0.291)	(0.298)	(0.303)
Number of siblings at age 8	0.330**	0.360**	0.490*	0.312*	0.387**	0.529*	0.304*	0.410**	0.512*	0.308**	0.416**	0.515*	0.340**	0.465***	0.508*
	(0.161)	(0.156)	(0.273)	(0.161)	(0.160)	(0.294)	(0.160)	(0.176)	(0.305)	(0.155)	(0.171)	(0.307)	(0.162)	(0.169)	(0.282)
Child's educ aspiration: complete university age 12				-0.069	0.495	0.121	0.401	0.533	0.370	0.402	0.532	0.372	0.465	0.573	0.542
				(0.291)	(0.350)	(0.399)	(0.321)	(0.395)	(0.435)	(0.320)	(0.394)	(0.437)	(0.354)	(0.413)	(0.477)
Maths: percentage of correct answers at age 15							-0.031***	-0.012	-0.022**	-0.031***	-0.012	-0.022**	-0.038***	-0.021**	-0.027**
							(0.010)	(0.009)	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.009)	(0.013)
Standardised PPVT score age 15							-0.024	0.223	-0.146	-0.021	0.228	-0.143	0.014	0.241	-0.017
							(0.183)	(0.220)	(0.204)	(0.188)	(0.228)	(0.206)	(0.196)	(0.231)	(0.203)
Pride index age 15							-0.138	-0.134	-0.154	-0.140	-0.136	-0.156	-0.140	-0.138	-0.136
							(0.221)	(0.271)	(0.236)	(0.219)	(0.270)	(0.235)	(0.226)	(0.267)	(0.258)
Agency index age 15							-0.097	0.152	-0.024	-0.093	0.155	-0.020	-0.111	0.147	0.076
							(0.254)	(0.223)	(0.389)	(0.249)	(0.216)	(0.382)	(0.274)	(0.236)	(0.406)
Wealth index: middle tertile age 15							-0.297	-0.057	0.152	-0.298	-0.059	0.152	-0.389	-0.123	-0.074
							(0.583)	(0.617)	(0.555)	(0.585)	(0.618)	(0.559)	(0.590)	(0.641)	(0.609)
Wealth index: top tertile age 15							-1.117*	-0.753	-0.016	-1.113*	-0.748	-0.012	-1.127*	-0.808	-0.044
							(0.601)	(0.714)	(0.502)	(0.596)	(0.709)	(0.493)	(0.583)	(0.697)	(0.516)
Household size at age 15										-0.019	-0.037	-0.017	-0.030	-0.046	-0.085
										(0.098)	(0.100)	(0.161)	(0.097)	(0.101)	(0.161)
AWSA index z-score at age 22													-0.512	-0.226	-0.688
													(0.392)	(0.374)	(0.582)
Grit z-score at age 22													0.440**	0.076	0.287
													(0.225)	(0.254)	(0.273)
Big 5: neuroticism z-score at age 22													0.038	-0.269	0.280
													(0.318)	(0.225)	(0.410)
Big 5: conscientiousness z-score at age 22													-0.133	-0.275	-0.428
													(0.335)	(0.326)	(0.443)
Teamwork z-score at age 22													-0.034	0.098	-0.287
													(0.176)	(0.184)	(0.210)
Leadership z-score at age 22													-0.240*	-0.022	-0.485**
													(0.144)	(0.188)	(0.226)
Constant	2.476***	1.409**	0.009	2.471***	1.112	-0.048	4.594***	2.238**	1.385	4.628***	2.300*	1.416	5.221***	3.071**	1.644
	(0.590)	(0.603)	(0.976)	(0.594)	(0.678)	(1.027)	(1.160)	(1.125)	(1.342)	(1.216)	(1.206)	(1.477)	(1.214)	(1.229)	(1.570)
Observations	**815**	**815**	**815**	**787**	**787**	**787**	**753**	**753**	**753**	**753**	**753**	**753**	**748**	**748**	**748**

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The tables report the estimated coefficients of the multinomial probit model, where the category `studying only' is the base outcome variable. Wealth index is a composite index of living standards. Height-for-age is standardised according with age and gender-specific child growth standards provided by WHO. PPVT: Peabody Picture and Vocabulary Test; AWSA: Attitude Toward Women Scale. Depression: number of depressive symptoms (z-score). See Table A1 for list of definitions of categorical variables.

Table A11. *Working and studying status at age 22: multinomial probit model, relative probabilities of main variables*

	(1) Ethiopia			(2) India			(3) Peru			(4) Vietnam		
	Working only	Working and studying	NEET	Working only	Working and studying	NEET	Working only	Working and studying	NEET	Working only	Working and studying	NEET
Basic estimation age 8												
Female	0.73	0.63	2.62	0.48	0.37	2.44			5.34	1.47	1.58	3.62
Urban			2.05						2.44			
Mother's education: completed primary and above	0.52											
Wealth index: Middle tertile	0.66	0.56	0.60			1.56		0.49	0.37	0.50		0.37
Wealth index : Top tertile	0.44	0.39	0.46			1.75						0.31
Height-for-age z-score	1.17			1.19		1.20				1.23		
Household size								0.86				
Whether older sibling									3.57			
Number of siblings									0.80	1.40	1.59	1.66
Aspiration age 12												
Child's educ. aspiration: complete university				0.69								
Socio-economic status and skills age 15												
Maths: percentage of correct answers at age 15	0.97		0.98	0.98		0.99	0.97		0.98	0.96	0.98	0.97
Pride z-score at age 15	1.32						0.68	0.66				
Wealth index age 15: Middle tertile	0.72						1.78					
Wealth index age 15: Top tertile				0.38	0.39					0.32		
Household size age 15												
Household size	1.12	1.19	1.15									
New skills (z-score) age 22												
AWSA index								2.48				
Grit index										1.55		
Big 5: neuroticism								0.50				
Big 5: conscientiousness		0.92			1.88							
Technical skills (z-score) age 22												
Team index	1.33	1.35	1.37	0.68	0.70	0.62						
Leadership index	0.72									0.79		0.62

Notes: Multinomial probability models estimated separately for each country sample (columns 1 to 4). The table reports the relative probabilities of significant variables only for the four dependent variables of working and studying status, with `studying only' as the base outcome variable. Full list of estimations are reported in Table A10 parts I-IV. Wealth index is a composite index of living standards. Height-for-age is standardised according with age and gender-specific child growth standards provided by WHO. PPVT: Peabody Picture and Vocabulary Test; AWSA: Attitude Toward Women Scale. Depression: number of depressive symptoms (z-score). See Table A1 for list of definitions of categorical variables.

Young Lives is an international study of childhood poverty following the lives of 12,000 children in Ethiopia, India (in the states of Andhra Pradesh and Telangana), Peru and Vietnam over 15 years.

Its aim is to shed light on the drivers and impacts of child poverty, and generate evidence to help policymakers design programmes that make a real difference to poor children and their families.

Young Lives

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