Does the work-study combination among youth improve the transition path? An updated review

International Labour Office

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Introduction

A technical brief on the issue of the work-study combination and its consequences on the school-to-work transition for youth was issued in November 2015 (Nilsson, 2015), based on the round of the ILO SWTS datasets implemented in 28 countries between 2012 and 2013. Although the SWTS at that time captured the history of economic activities of young respondents, it was designed in such a way that only activities after completion of school were included. The historical pathways information of the SWTS 2012/13 round thus did not allow for examination of the work-study combination, with the exception of the surveys in Brazil and Colombia where the design had been adapted. The exploration of the work-study combination in Nilsson (2015) was therefore based on the direct question to young respondents – between the ages of 15 and 29 – on whether or not they had worked during their schooling. Between 2014 and 2016, the ILO implemented additional surveys in 25 countries, this time using a revised questionnaire to allow for the identification of all economic activities regardless of the date of school graduation. In this round it is now possible to identify the work-study combination in the individuals' labour market history.

The resulting data open up interesting possibilities for comparisons over time, as well as the opportunity to be more precise in the study of the nature of the relationship between working while studying and labour market outcomes. In particular, it is now possible to calculate the time spent in various activities preceding school departure. There is also reason to believe that an indirect measure of the school-work combination might be more precise, since individuals might not consider certain activities as "work" (unpaid family work or other forms of self-employment, for example).

Bearing in mind that the analysis carried out in Nilsson (2015) did not go beyond subjective responses to having worked while in school, it did show that those who worked while in school had faster transitions to stable or satisfactory employment, and lower unemployment rates. However, no correlation was found between the quality or the nature of the jobs obtained and the work-study combination. The brief also showed that those who combined work and schooling ended up with slightly higher educational attainments. The link seemed particularly strong when career-related motives were given for having worked while in school, although a strong country effect was noted.

The purpose of this technical brief is twofold: firstly, it aims to analyse the work-study combination in relationship to the labour market outcomes of youth using the pathways grid of the SWTS and see if the results support those reported in the previous analysis of the 2012/13 surveys. Secondly, it aims to utilize the new datasets to explore the possible heterogeneity of benefits across a number of sub-populations, distinguishing alternate types of combinations.

Youth Employment Programme

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The ILO School-to-work transitions surveys (SWTS) are implemented as an outcome of the **Work4Youth (W4Y)** project, a partnership between the ILO and The MasterCard Foundation. The project has a budget of US$14.6 million and will run for five years to mid-2016. Its aim is to "promote decent work opportunities for young men and women through knowledge and action". The immediate objective of the partnership is to produce more and better labour market information specific to youth in developing countries, focusing in particular on transition paths to the labour market.

See the website www.ilo.org/w4y for more information.

1. Explaining the work-study combination[1]

The literature on the work-study combination has not settled on a definitive answer of whether working while studying improves the transition to the labour market or not, arguing justly that this depends on a number of factors such as the nature and amount of the work carried out, the motivations for it and at what level of education it takes place. As argued in Baert et al. (2015), several strands of standard economic theory can be mobilized. Firstly, human capital theory, by which working can procure human capital benefits through learning on the job; in that sense, it is an activity which is complementary to studying (all the more so when the work undertaken is in the same field of study as those pursued by the young student). However, working also means less time is available for studying, both inside and outside the classroom, such that the quality of schooling and thus the human capital benefit from it might decrease. The standard Beckerian assumptions at the heart of family economics – that optimizing behaviour governs individual choices both in their allocation of time and resources, and that this is done over the life cycle according to expected returns to present investments – do not give us a clear prediction for the effect of working and studying.

Signaling theory (Spence, 1973) is also frequently mobilized regarding labour market outcomes. Unable to measure beforehand the abilities and motivations of a young person looking for a job upon graduation, employers exploit all the information they have: generally, an oral or written account of the candidate's previous experiences. However, the interpretations of employers are subjective. It might be that working while in school signals a high degree of motivation, but it might also signal poverty or financial constraints, especially if the job is a menial one. Aside from sectoral and employer specificities, the type of signal emitted and its interpretation are likely to vary by cultural context.

Working while in school is also a way of extending one's social network. The literature has shown that having a large social network increases the chances of finding a job in virtually all labour markets that have been studied (Calvo Armengol and Jackson, 2004). Through working while studying youth establish contacts with successful actors in the labour market. Such contacts may then be mobilized in their future job search through referrals or by provision of information on job opportunities. This has been suggested as a plausible cause for decreasing hazard in unemployment: the longer an individual is unemployed, the lower the share of employed persons in his or her social network, implying (aside from discouragement) less readily-available information about job prospects. Apart from extending the social network, working while studying implies contact with employers. If work is done in the sector that the individual intends to work in after leaving school, part-time work experience for an employer might be a stepping stone to a full-time position with that very same employer upon school completion. In this regards, the engagement with employers provides screening potential for future more permanent employment.

Whether the real-life school-to-work transition incorporates one or several elements of the previously mentioned theories is difficult to establish; doing so would require capturing variations of working while in school that only affect one channel at a time. However, in order to conclude that working while studying has a positive or negative impact on future labour market prospects, we do not need to sort out the mechanisms at play. Showing that an exogenous variation in time spent working (or in the probability of working) while

[1] The author is a graduate student at DIAL-LEDa, Université Paris-Dauphine. He is grateful for the valuable comments and support from Sara Elder and Marco Principi, Chief Technical Advisor and Technical Officer of the ILO Work4Youth Programme.

studying is associated with increased or decreased future income, longer or shorter transitions in the labour market, is enough to conclude on an effect.

There are obvious reasons to doubt the exogeneity of simple variations in time spent working, however. Working while in school might be correlated with other factors (household income, ambition, academic achievements to mention a few) which are likely to influence the transition in itself. Finding an exogenous variation would imply using instrumental variables and goes beyond the scope of this brief. Therefore, the results presented below should be seen as indicative rather than firm evidence on the causal effect of working while studying.

2. Measuring the work-study combination in the SWTS

The dataset used for the present analysis is derived from 20 school-to-work transition surveys carried out through the ILO Work4Youth project in as many countries, between 2014 and 2015.[2] Using the labour market history grid of the survey, and knowing the date of final departure from school for those who finished their education, an indicator of work-study combination can be created. In total, out of the 26,264 individuals still in school, 6,228 (23.7 per cent) were also working or had worked at some point. Adding the population weights, this corresponds to 6.4 million out of 27.5 million individuals aged 15–29. Out of the 34,389 young persons who already left school, 6,660 (19 per cent) had at some point in time combined their schooling with work. With weights this corresponds to 8.5 million out of 44 million individuals.

The school/work combination here is defined as engagement in either i) salaried work, ii) self-employment (own-account work or employers), iii) apprenticeship/internship, or iv) unpaid family member/for family gain. A second definition excluding apprenticeship and internship will also be used; according to which, the shares combining work-school were 23 per cent and 19 per cent of those in school and out of school, respectively).

Recalling the Introduction, the SWTS implemented between 2014 and 2016 allow for both direct and indirect measures of the work-study combination. All individuals who ever went to school answered the question, "Did you ever work while you studied (not including apprenticeship)". The direct (and subjective) measure of the combination is thus taken as youth who answered the question positively, whether it be working outside of the school season or during the school season. The indirect measure is that identified using the date of graduation crossed with dates of employment identified by the individual when recalling their labour market history. The two measures can thus be compared to obtain an idea of their equivalence. The corresponding correlation coefficient is equal to 0.6, which is far from the perfect correlation that one would hope to see between two measures of a similar outcome.

Table 1 shows a cross-tabulation of the two measures for youth, both current students and non-students. It shows that when asked directly, individuals more frequently declared having worked while in school in comparison to results when measured indirectly based on their recall of economic activities. This is not surprising in itself, given that the survey instructions asked the enumerators to capture past labour market spells of the young individual with a duration of three months or more. This means that work during a summer holiday of one-month duration would not be captured through the indirect measure. As can

[2] SWTS data in an additional five countries have since been added to the website.

be seen from table 1, only 61.5 per cent of those who declared combining work and study were captured in the historical activity grid. Symmetrically, 21.8 per cent of those who were captured through the grid stated that they did not combine work and study. One could guess that the latter includes youth who were helping out in the family and who did not consider this work.[3]

Table 1. Breakdown of the shares of school combiners by type of measure (%)

		Indirect (subjective) measure		
		Did not combine	**Combined**	**Total**
Direct measure	**Did not combine**	94.0	6.0	100.0
		87.5	21.8	74.1
	Combined	38.5	61.5	100.0
		12.5	78.2	25.9
	Total	79.7	20.4	100.0
		100.0	100.0	100.0

Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

Comparing the two indicators permits us to sum up their respective weak points: the historical activity grid does not capture experiences lasting less than three months; it can be prone to entry error on the enumerator side (since based on a large number of variables and dates) and there can be recall errors on the part of the individual. Asking individuals directly if they worked while studying, however, makes use of their personal (and subjective) opinion on what constitutes work. While it is unlikely that input errors or having worked more or less than three months are correlated with individual characteristics, the opinion on what constitutes work might very well be related to cultural or gender-specific attributes. For this reason, and since the indirect measure enables a deeper analysis, it is taken as the basis for the remainder of the article, except for comparisons with the previous brief.

3. Who are the young people working while studying?

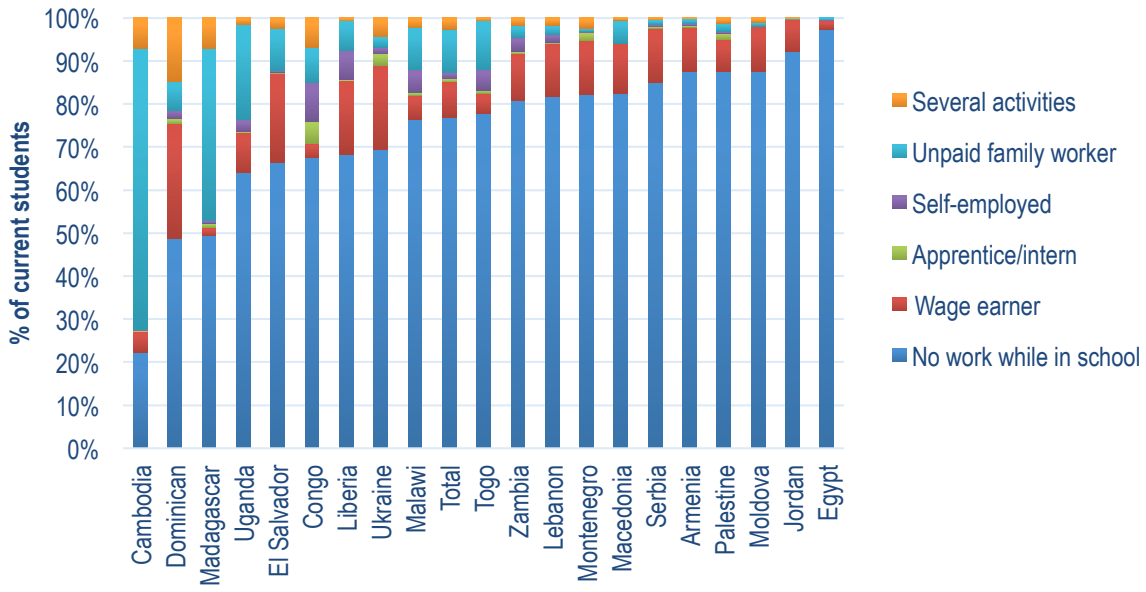
This subsection aims to describe the main characteristics of youth who combined work during their studies according to the indirect measure detailed above. If working while studying first and foremost relates to a necessity to provide the household with income, then one should see higher rates of work-study combination in relatively poor households. On the other hand, when working and studying represents a career strategy, relatively rich households might be those where youth work the most. This should also be reflected in the type of work youth do while in schooling; salaried work on the one hand versus helping out in the family business on the other are likely to reflect two very different situations in terms of future opportunities in the labour market. Most importantly, however, the type of work carried out depends heavily on the stage of development of the economy considered, as well as the urban/rural setting of the household.

Figure 1 shows that countries are relatively heterogeneous when it comes to youth working while studying. There are regional tendencies, with countries in the Middle East and North Africa (MENA) (Egypt, Jordan; Lebanon and the Occupied Palestinian

[3] One-half (54 per cent) of those still enrolled who declared not having combined work and study but were captured through the direct measure are indeed unpaid family workers.

Territories) and Eastern Europe (Armenia, FYR Macedonia, Montenegro, Republic of Moldova and Ukraine) seeing low rates of work-study combinations, while Cambodia, Dominican Republic, El Salvador and sub-Saharan African countries (Liberia, Madagascar, Malawi, Togo and Uganda) have youth more prone to work while in school.[4]

Figure 1. Share of work-study combination of youth still in education by type of activity, by country



Note: The shares of youth in the category "not classified" are negligible and are not shown here.

Source : Author's calculations based on ILO SWTS (2014/15) in 20 countries.

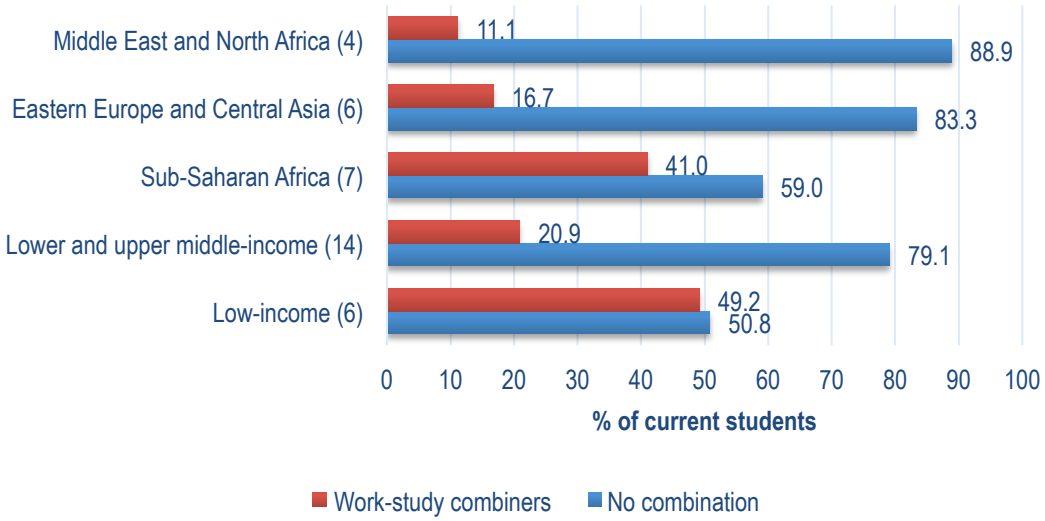
The type of work carried out in combination with school also differs a lot between countries; the few who do combine work with schooling in Eastern Europe and the MENA region are more often paid workers than those in Sub-Saharan Africa, Asia or Latin America (although there are exceptions; Dominican Republic features a high percentage of wage earners, for example). Self-employment as a complementary activity is more common in sub-Saharan Africa with unpaid family work taking an even larger share in most low-income countries. In the regions of Eastern Europe and MENA with their low rates of work-study combinations, the complementary activity of those who do combine with school is paid employment. Such results are in fact, indicative of regional trends of the youth working populations as a whole (see ILO, 2015).

Figure 2 shows the regional disparities more clearly regarding the tendency to work with schooling. The figure also draws attention to the influence of national income levels. Shares of work-study combinations are significantly higher among the six low-income countries surveyed at 49.2 per cent compared to 20.9 per cent for the lower and upper-middle income countries, which make up the rest of SWTS 2014/15 countries examined here. The heterogeneity of results point to the influence that socio-economic context plays. In sub-Saharan Africa, for example, conditions of poverty and poor infrastructure in much of the region means that only a handful of youth are able to stay in school through the tertiary level. The analysis of SWTS results in eight sub-Saharan African countries concluded that only 35 per cent of youth had completed their education beyond the primary

[4] Note that this is fairly coherent with the distribution of countries from Nilsson (2015) using the direct methodology.

level (Elder and Koné, 2014). The corresponding share among youth in six Eastern European and Central Asia countries was 9 per cent. Also in the sub-Saharan African report, it stated that 10 per cent of youth never attended school and another 30 per cent left before completion. The most commonly cited reason for leaving school early was economic reasons – the inability to cover school fees or the need to work to contribute to household income. With economic reasons pushing youth out of school early in the region, it is also a safe bet that economic reasons are also the primary driver of the work-study combination among youth in the region (see also discussion in section 3.3.3).

Figure 2. Share of work-study combination of youth still in education, by region and income grouping



Notes: The number in parentheses is the number of countries covered. Only regional averages based on more than three countries are shown (exclude Asia and Latin America and the Caribbean).

Source : Author's calculations from ILO SWTS (2014/15) in 20 countries.

Table 2 shows the distribution of age, sex, household financial status (based on perception of the respondent) and area of residence for work-study combiners and non-combiners. It can be seen that youth living in rural areas are more like to work during their studies than urban residents. The same holds true for male youth, who are more often carrying out work while in school than their female counterparts (home duties are not included in the definition of working while studying). Furthermore, the table shows that those who combine work and studying more often belong to households that they consider as poor or fairly poor, as compared to those who do not combine work and study. The same holds, to a lesser extent, for those who finished schooling. It thus seems reasonable to conclude that poverty is at least one of the drivers of the work-study combination.

For non-student youth, table 2 also looks at the highest level of education attained for youth who combined or did not combine work with their studies. The results seem to support the higher tendency to combine among youth in the more traditional education tracks – 22.1 per cent among university graduates, 30.9 per cent among secondary general graduates and 19.9 per cent among youth with primary education only. Fewer youth following vocational education combined work with school, possibly because work-based learning was already embedded in the vocational programmes. Still, it is important to bear in mind the country effects on the averages; in the countries that are more prone to the work-study combination – Cambodia and Malawi, for example – very few youth enroll in vocational education, while in the countries with larger portions of youth in vocational training – Eastern European countries, for example – the tendency to combine work with school is less.

Table 2 . Share of work-study combination of youth by selected characteristics, 20 country average

	Current student (%)			Non-student (%)		
	No W/S	**W/S**	**Total**	**No W/S**	**W/S**	**Total**
Area of residence						
Urban	79.0	21.0	100.0	83.7	16.3	100.0
Rural	74.6	25.4	100.0	78.5	21.5	100.0
Sex						
Male	74.4	25.6	100.0	79.0	21.0	100.0
Female	79.7	20.3	100.0	82.1	17.9	100.0
Age group						
15-19	81.0	19.0	100.0	78.2	21.8	100.0
20-24	70.6	29.4	100.0	80.9	19.1	100.0
25-29	40.1	59.9	100.0	81.4	18.6	100.0
Household financial situation						
Well-off	83.4	16.6	100.0	87.3	12.7	100.0
Fairly well-off	85.9	14.1	100.0	85.8	14.2	100.0
Around the average	78.0	22.0	100.0	81.7	18.3	100.0
Fairly poor	71.2	28.8	100.0	78.9	21.1	100.0
Poor	65.5	34.5	100.0	75.5	24.5	100.0
Completed educational attainment						
None or less than primary				85.8	14.2	100.0
Primary				80.1	19.9	100.0
Vocational secondary				92.1	7.9	100.0
Secondary				69.1	30.9	100.0
Vocational (post-secondary)				84.0	16.0	100.0
University				77.9	22.1	100.0
Postgraduate studies				100.0	0.0	100.0
Total (20 country average)	**76.9**	**23.1**	**100.0**	**80.6**	**19.4**	**100.0**

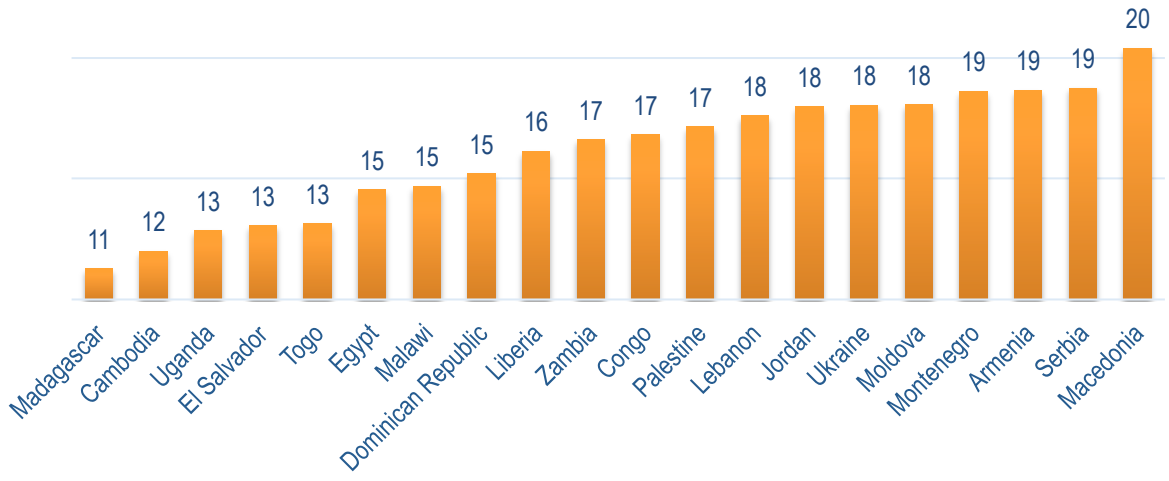
Notes: W/S = work-study combiners; No W/S = non work-study combiners.

Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

We can go further in our investigation of the age at which youth are engaging in the work-study combination. The historical activity grid of the SWTS enables us to know when the first work experience occurred, and whether or not the individual had finished school at this date or not. We thus construct a variable containing the age at which work started.[5] Figure 3 shows the average age at which individuals started to work among individuals who are out of school.

[5] We consider as work the first five items in question D.4 in the grid: working for wage/salary with an employer (full or part-time); work for wage/salary through a temporary employment agency; engaged in internship/apprenticeship; self-employed, and work as an unpaid family member.

Figure 3. Average age at first work experience, by country (non-student W/S combiners)

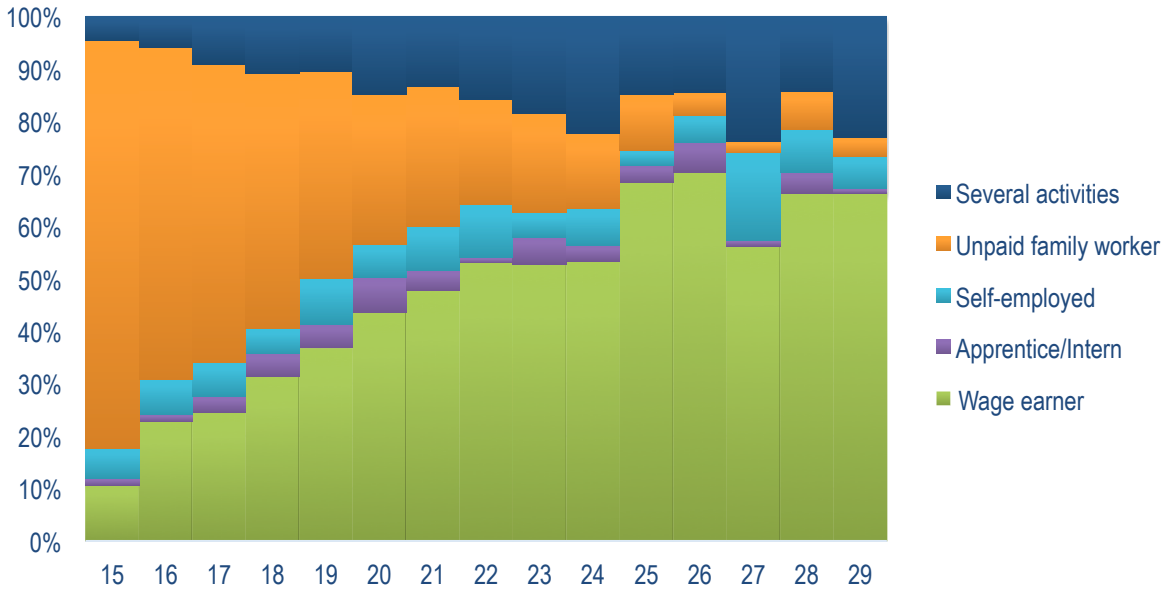


Note: W/S = work-study combiners.

Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

From the figure it can be seen that the average time at which individuals start working while in school varies significantly across countries, with a 9-year span between the youngest W/S combiners (11 years in Madagascar) and the oldest W/S combiners (20 years in FYR Macedonia). While in Cambodia, El Salvador, Madagascar, Togo and Uganda, youth start working very early – below the age of 15, thus at secondary or even primary school – in Eastern Europe and the MENA region, they rather start at a higher age and thus at a higher level of education. Furthermore, the positions of countries in the figure is to a large extent similar to their positions in figure 1. Generally, the countries in which working while in school is frequent are also the ones where the ages at which young people start working are the lowest.

Figure 4. Type of activity by age of youth still in education, 20 country average



Source: Author's calculation from ILO SWTS (2014/15) in 20 countries.

Figure 4 shows the type of activity carried out by youth working while in school, as a function of their age. It should be noted that the "several activities" category contains individuals who have carried out several activities during their schooling, but not necessarily at the same time. The figure shows that age matters for the type of activity carried out: unpaid family work is far more common with young individuals, while the opposite is true for stable employment. Individuals are also more prone to have carried out several activities as they grow older. This is however not surprising, since staying in school longer implies an increased possibility of having carried out several different activities.

4. Does working while studying improve transition results?

Results in Nilsson (2015) showed that having worked while studying was associated with higher shares of youth having completed the labour market transition to stable and/or satisfactory employment and lower shares in unemployment. The question on the work-study combination used however was subjective and did not go into detail regarding the characteristics of the combination. As previously mentioned, the surveys run between 2014 and 2016 allow for a more in-depth examination of the work-study combination. It might thus be of interest in the present context to revisit some of the results from the first round of surveys using the indirect measure of work experience. For comparison, results using the direct measure are also presented.

4.1 Higher transition rates to stable/satisfactory work

The outcomes of interest pertaining to the work-study combination focus on two dimensions regarding the school-to-work transition: the *smoothness* of the transition and the quality of the *state* attained. O'Higgins (2008) refers to this duality using the terms *ease* and *success* of transition. The ILO's assessment of the recent SWTS dataset takes a similar approach (c.f. ILO, 2015, section 4.1). In this brief, we look at the stage of transition, i.e. whether or not the young person has completed the transition or not, while looking as well at some variables of job quality.

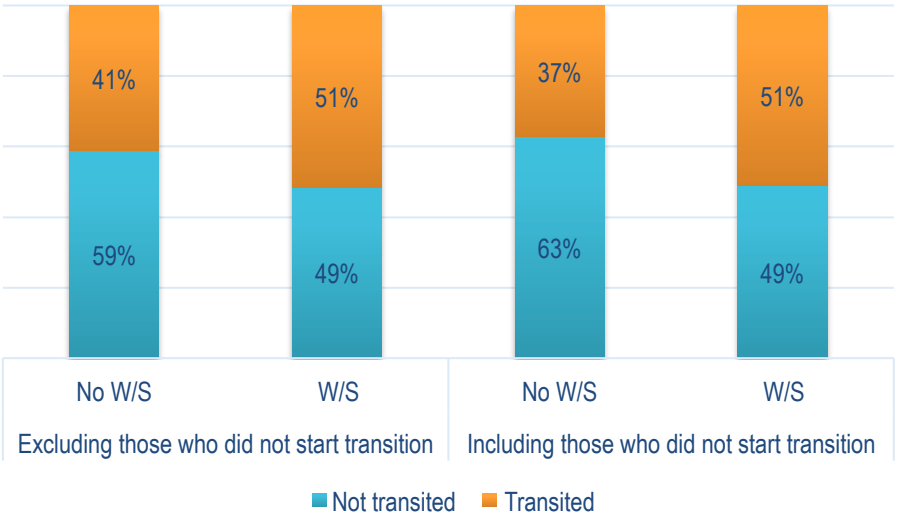
In defining the transition length, the start of the transition is taken either as an individual's first labour market experience if the young person never attended school or the date of leaving school for the rest of the population. The end date is attainment of a first stable and/or satisfactory job. Individuals are considered as transited if they are in stable or satisfactory employment (including self-employment).[6] For youth who attained their first stable or satisfactory job during schooling, the transition length is considered immediate (length = 0). For other youth, the transition period may have never started, as in the case of graduates who remain inactive with no intention of ever looking for work. Finally, the transition period of some young workers can be ongoing according to the ILO definition; this pertains to youth who are working in a temporary, non-satisfactory job or in non-satisfactory self-employment. Youth with on-going transitions are considered in the category of "in transition" and are thus excluded from the calculation of transition lengths discussed in section 4.2.

Figure 5 shows the share of transited youth by work-study combination, using the historical activity grid (indirect measure) to identify combiners. Similar to the results from the 2012/13 surveys, it seems that having worked while studying does indeed imply a

[6] See ILO definitions of the stages of labour market transition for youth in Box 13 of ILO (2015).

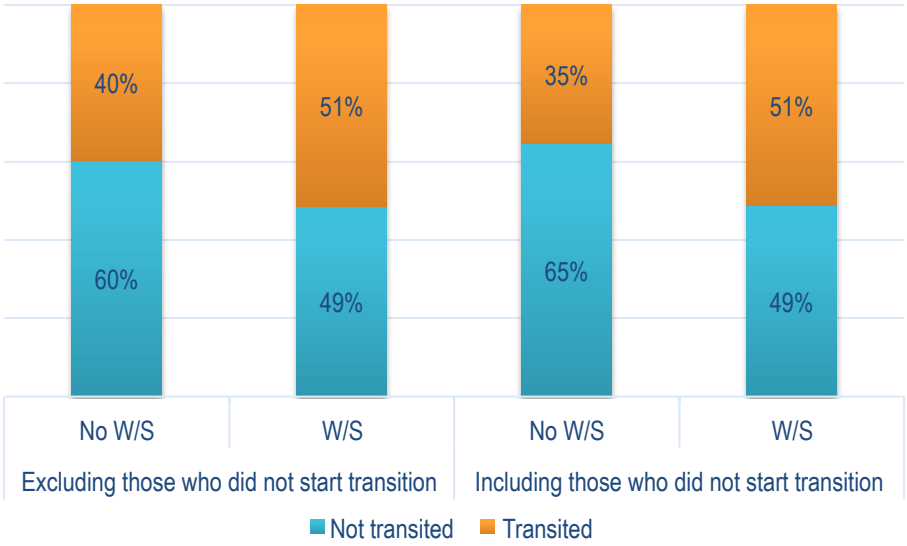
higher probability of having achieved one's transition. It should be noted that this aggregate result holds whether we exclude those who did not start their transition or not and whether observations are weighted or not. It is also robust to the exclusion of a random country. Applying the direct measure to the new datasets, figure 6 shows results which are virtually identical to those of the indirect measure, despite the imperfect correlation between the two measures.

Figure 5. Share of transited youth by work-study combination (indirect measure), non-student youth, 20 country average



Notes: W/S = work-study combiners, including apprenticeships; No W/S = non work-study combiners.
Source: Author's calculations from ILO SWTS (2014/15) in 20 countries.

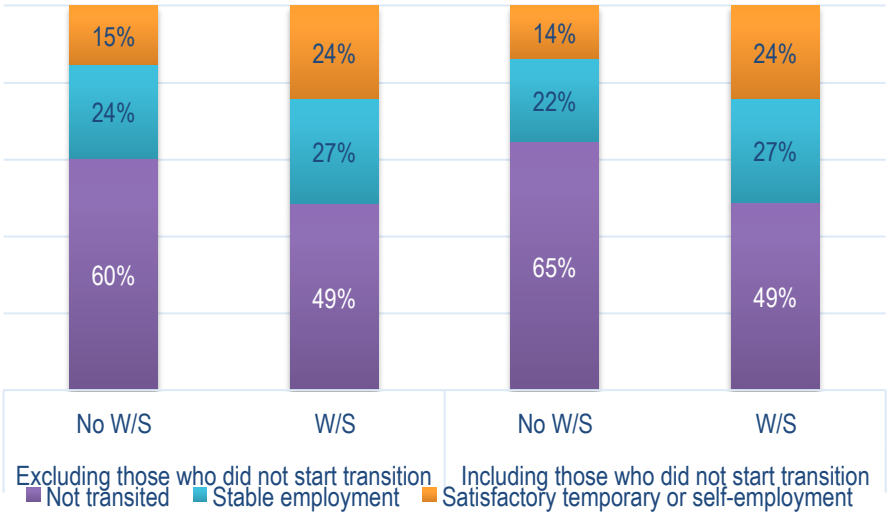
Figure 6. Share of transited youth by work-study combination (direct measure), non-student youth, 20 country average



Notes: W/S = work-study combiners, including apprenticeships; No W/S = non work-study combiners.
Source: Author's calculations from ILO SWTS (2014/15) in 20 countries.

One thing to bear in mind regarding these results is the large shares of youth who complete their labour market transition to satisfactory self-employment in low-income countries. According to the analysis of the SWTS datasets in ILO (2015), the share of young adults (25-29) having completed the transition to satisfactory self-employment, including unpaid family work, was approximately one-third of the youth population. Given that the likelihood of the work-study combination is higher among many of the low-income countries (see figure 2), the more successful transition rates among the work-study combiners are linked to the higher tendency towards self-employment; youth in low-income countries are more likely to combine work with schooling and also more likely to complete their transition to self-employment. This is shown in figure 7, as the likelihood of transition to satisfactory temporary employment or self-employment is higher for work-study combiners; nevertheless, they are also associated with a higher probability of transition into stable employment, such that the work-study – self-employment nexus found in low-income countries is not entirely driving this result.

Figure 7. Share of transited youth by work-study combination (direct measure) and type of transition, non-student youth, 20 country average



Notes: W/S = work-study combiners, including apprenticeships; No W/S = non work-study combiners.
Source: Author's calculations from ILO SWTS (2014/15) in 20 countries.

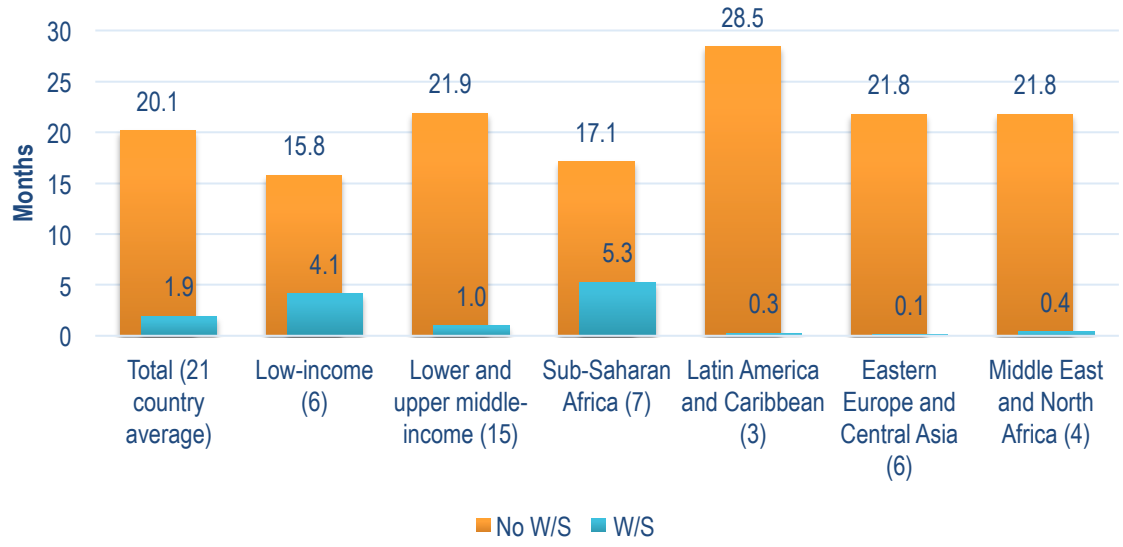
4.2 Shorter lengths of transition

The length of time taken for young people to complete the transition to a first stable and/or satisfactory job is vastly different when comparing youth who combined work with school and youth who did not. Results for 21 SWTS countries shown in figure 8 show the average transition duration of 1.9 months for young work-study combiners compared to 20.1 months for non-combiners. In the six low-income countries among the datasets – primarily in sub-Saharan Africa – the transition period among those who had worked at some point during their schooling was less direct compared to the lower and upper middle-income countries (15 in total) at 4 and 1 months, respectively. The fact that youth in low-income countries leave school at an earlier age than youth in lower and upper middle-income countries can explain in part the longer transition period in the former.

What is more important, perhaps is the smaller gap in lengths between youth who combined work-study and those who did not in the low-income group compared to the middle-income group (12 and 21 percentage points, respectively). In conditions of wide-

spread poverty and in the absence of social safety nets, long periods of unemployment are not an option for most youth; where economic reasons will have driven many young students in low-income countries to combine work and school, economic reasons will also push youth to take up whatever work they can find – typically of their own making in self-employment – upon completion of school. Transition lengths in low-income countries are thus shorter than in higher income countries where large shares remain in unemployment.

Figure 8. Average length of transition from school to first "transited" job by work-study combination (months)



Notes: W/S = work-study combiners, excluding apprenticeships; No W/S = non work-study combiners. The number in parentheses is the number of countries covered.

Source: Author's calculations based on ILO SWTS (2014/15) in 21 countries.

Recalling the literature review in section 1 and the varying views regarding the main mechanisms through which working while in school might be beneficial or detrimental to future labour market outcomes. As was suggested, no clear prediction emerges from theory; rather, the outcomes are likely to depend on a variety of circumstances surrounding the work-study combination, among which are the income factors pointed to above and the age at which youth start to work. Emerson and Souza (2011) study the effects of child labour on future earnings in Brazil. Concentrating on the age at which children started to work, they find an initial negative effect for children who start at a young age, and a positive effect when work starts at a later age. The turning point occurs between 12 and 14 years of age.

Figure 3 above had confirmed that some youth combining work and study were doing so below the age of 15 years. So how do early work experiences relate to future outcomes? Table 3 shows the results from a regression run on a binary variable reflecting satisfaction at the current workplace. It lends support to the Emerson and Souza hypothesis that satisfaction at work is a concave function of the age at which the individual started to work. The table also shows that working while studying is beneficial for satisfaction, however not when country dummies are included, suggesting that in countries where working while studying is common, individuals are generally more satisfied at work. In the spirit of Emerson and Souza, we can calculate turning points for age started to work, i.e. ages before which starting to work confers a penalty in terms of dissatisfaction.

When maximizing the quadratic function of age starting to work we find optimal ages of approximately 15 years for the two first specifications, and 16 years for the third one. Should one choose to trust these estimates, this implies that there is a benefit, in terms of future job satisfaction, of delaying entry into the workforce until the age of 15–16. This is an aggregate result, however, likely to reflect a number of heterogeneous situations within countries (even though the country average satisfaction is accounted for by country dummies), and results should not be taken at face value.

Table 3. Coefficients from a linear probability model on satisfaction at work, non-student youth

	(1)		(2)		(3)	
Age	-0.0231***	(0.00872)	-0.0232***	(0.00890)	-0.0148*	(0.00877)
Age²	0.000566***	(0.000190)	0.000568***	(0.000194)	0.000366*	(0.000191)
Age started to work	0.0200***	(0.00144)	0.0201***	(0.00146)	0.0107***	(0.00155)
Age started to work squared	-0.000684***	(5.84e-05)	-0.000688***	(5.96e-05)	-0.000330***	(6.25e-05)
Worked while studying	0.0388***	(0.00718)	0.0406***	(0.00738)	0.000191	(0.00764)
Sex	0.0122**	(0.00566)	0.0137**	(0.00580)	0.0112*	(0.00589)
Rural			0.00968	(0.00610)	0.00586	(0.00612)
Household financial situation:						
Fairly well off	-0.0371**	(0.0150)	-0.0418**	(0.0166)	-0.0228	(0.0165)
Around national average	-0.0750***	(0.0130)	-0.0724***	(0.0143)	-0.0825***	(0.0145)
Fairly poor	-0.177***	(0.0136)	-0.176***	(0.0149)	-0.174***	(0.0153)
Poor	-0.248***	(0.0143)	-0.247***	(0.0156)	-0.239***	(0.0160)
Country dummies	No		No		Yes	
Education dummies	Yes		Yes		Yes	
Constant	1.004***	(0.0987)	0.999***	(0.101)	0.980***	(0.101)
Observations	21,364		20,535		20,535	

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

We carry out similar regressions for transited youth based on the ILO definition in table 4. The results also give support to a quadratic relation between age first started to work and transition status. When computing the ages at first work for which transition probabilities are maximized, we find ages of 17.6 years for the first two specifications and 20 years when country dummies are taken into account. This suggests that while working while studying might be beneficial for the probability of being transited once out of school (the work/study coefficient in itself is not significant in the two first specifications, and negative in the third one), it is better to delay the entry until the late stages of secondary school or at university.

Focusing on the transition to stable employment only in table 5, the coefficients found imply that probabilities of transition to stable employment are maximized when work entry occurs at an even higher age, around 22.5 years (in specifications 1 and 2; 25.6 years in specification 1). The dummy for working while studying is negative in all three specifications, suggesting that while the combination might be beneficial for some future labour market outcomes such as satisfaction, its impact is less clear when transition patterns are considered, and even appears detrimental to the transition to stable employment.

Table 4. Coefficients from a linear probability model on being transited, non-student youth who have started their transition

	(1)		(2)		(3)	
Age	-0.0585***	(0.00788)	-0.0598***	(0.00800)	-0.0334***	(0.00791)
Age²	0.00139***	(0.000172)	0.00141***	(0.000175)	0.000848***	(0.000173)
Age started to work	0.0514***	(0.00118)	0.0501***	(0.00120)	0.0411***	(0.00124)
Age started to work squared	-0.00146***	(5.32e-05)	-0.00142***	(5.42e-05)	-0.00101***	(5.60e-05)
Worked while studying	-0.00617	(0.00704)	-0.00561	(0.00719)	-0.0255***	(0.00744)
Sex	-0.0711***	(0.00502)	-0.0683***	(0.00511)	-0.0741***	(0.00510)
Rural			0.0158***	(0.00527)	-0.00155	(0.00533)
Household financial situation:						
Fairly well off	-0.0409***	(0.0133)	-0.0331**	(0.0143)	-0.0172	(0.0142)
Around national average	-0.0832***	(0.0114)	-0.0608***	(0.0122)	-0.0584***	(0.0123)
Fairly poor	-0.154***	(0.0119)	-0.131***	(0.0127)	-0.140***	(0.0130)
Poor	-0.152***	(0.0125)	-0.128***	(0.0133)	-0.155***	(0.0136)
Country dummies	No		No		Yes	
Education dummies	Yes		Yes		Yes	
Constant	0.421	(0.452)	0.418	(0.453)	0.289	(0.444)
Observations	32,405		31,388		31,388	

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

Table 5. Coefficients from a linear probability model on being transited to a stable job, non-student youth who have started their transition

	(1)		(2)		(3)	
Age	-0.0188***	(0.00690)	-0.0237***	(0.00691)	-0.0252***	(0.00679)
Age²	0.000456***	(0.000151)	0.000566***	(0.000151)	0.000583***	(0.000148)
Age started to work	0.0300***	(0.00103)	0.0294***	(0.00103)	0.0258***	(0.00106)
Age started to work squared	-0.000661***	(4.66e-05)	-0.000656***	(4.68e-05)	-0.000503***	(4.80e-05)
Worked while studying	-0.0346***	(0.00617)	-0.0283***	(0.00621)	-0.0158**	(0.00639)
Sex	-0.0838***	(0.00440)	-0.0810***	(0.00441)	-0.0677***	(0.00438)
Rural			-0.0482***	(0.00455)	-0.0388***	(0.00457)
Household financial situation:						
Fairly well off	-0.0660***	(0.0116)	-0.0587***	(0.0123)	-0.0180	(0.0122)
Around national average	-0.0764***	(0.00996)	-0.0558***	(0.0106)	-0.0284***	(0.0106)
Fairly poor	-0.111***	(0.0105)	-0.0867***	(0.0110)	-0.0669***	(0.0112)
Poor	-0.131***	(0.0110)	-0.103***	(0.0115)	-0.0714***	(0.0117)
Country dummies	No		No		Yes	
Education dummies	Yes		Yes		Yes	
Constant	0.108	(0.395)	0.140	(0.391)	0.268	(0.381)
Observations	32,405		31,388		31,388	

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

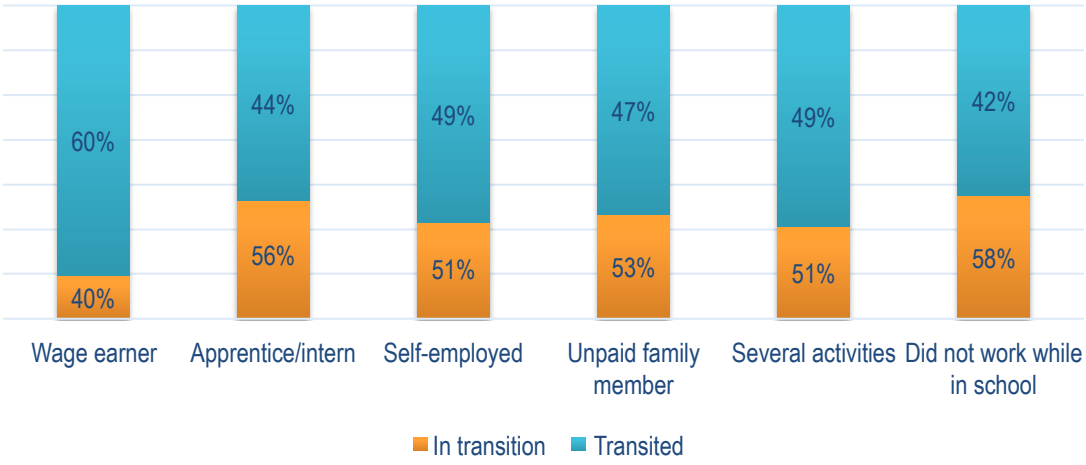
Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

4.3 Is all work experience helpful?

If the age at which the work-study combination starts seems to matter for future outcomes, it is also likely that the nature of the combination can be linked to the probability of a successful transition. The benefits of working while in school are lower when the element of choice is absent from the equation and working, primarily in self-employment, is a requirement to help provide resources for the household. As such, working while in school might send out a negative signal in a context of poverty, but a positive one when it is taken at a higher age and outside a context of deprivation. Similarly, while being a wage earner implies that individuals carry out an activity that is valued by the labour market, own-account work and unpaid family work might not carry the same weight with employers and does not confer the same social network benefits.

Figure 9 shows a breakdown of youth by whether transited or remaining in transition by the type of activity carried out during schooling. It indicates that unpaid family work and self-employment are less potent as stepping stones to stable or satisfactory employment than is engagement in wage employment while studying. Apprenticeships or internships hardly seem to help in post-school labour market transition, although former apprentices/interns are more likely to complete the transition than youth who had no combination at all.

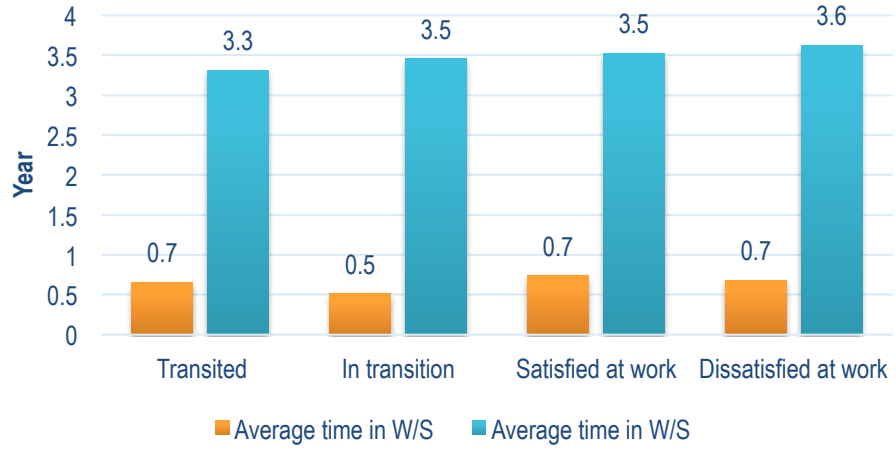
Figure 9. Share of transited or transitioning youth by type of activity during schooling, non-student youth, 20 country average



Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

What about the time spent working during school? Figure 10 shows the average time spent working for youth by their transition status and their level of satisfaction in employment. When we include those who did not combine work with studies, there seems to be a slight positive association between the total time spent working while studying and satisfaction at work and transition status. However, when we restrict the analysis to only those who did combine work and study, the slightly positive association turns into a slightly negative one. The positive association found in the full sample is thus driven by the fact that having combined work and study in itself has a positive impact on the transition status. The fact that time spent combining is negatively associated with transition probability might also stem from an association between the quality of the work experience and its length. Youth with long histories of the work-study combination might also be those who work as unpaid family members for long periods of time – something likely to be of little value in the search for more stable employment – while shorter and training-related experiences such as internships or apprenticeships may be more valued by employers.

Figure 10. Average time spent working while in school, non-student youth, 20 country average (years)



Source: Author's calculations based on ILO SWTS (2014/15) in 20 countries.

5. Concluding remarks

The present brief, following the one issued in November 2015 (Nilsson, 2015), has attempted to revisit some of the results on the work-study combination of youth, using the new data from the SWTS carried out in 2014/15. The main result found in the previous brief, namely that working while studied increased the probability of a successful transition, is confirmed using the new round of data. The result holds whether a direct measure (asking workers whether they combined work and schooling) or an indirect measure (finding out from the historical activity grid) is used. It furthermore paints a brief picture of the population of work and study combiners, showing that it is to a slight extent women more than men, rural more than urban and poor more than rich who work during their schooling. We also find that the type of economic activity carried out while in school varies with age. Unpaid family work is most common for younger individuals, but leaves space for wage employment and multiple activities as individuals grow older and move to higher levels of education.

The second part of the brief addressed the heterogeneous effects of working while studying. Relying on the methodology of Emerson and Souza (2011), we specify satisfaction and transition status as quadratic functions of the age at which the individual started working, controlling for area of residence and the household's financial situation. The results lend support to a concave relationship, suggesting that maximum benefits in terms of job satisfaction are achieved when individuals start working at 15-16 years old, and in terms of completing the labour market transition at 20 years (22.5 years for the transition to stable employment). We also investigate different types of work, finding that wage employment in the work-study combination is the type of work most associated with a successful transition, while youth who engaged in apprenticeships/internships, unpaid family work or self-employment fare only slightly better than those who did not work at all during their education. Finally, on average, time spent working during school does not seem to matter for transition status or job satisfaction.

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