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

International Labour Office

The MasterCard Foundation

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Introduction

Around the world, transition paths of young people to the world of work have become longer and more complex than in the past. The sovereign debt crisis and the ensuing loss of confidence has meant that a range of labour market indicators, including short and long term-unemployment have worsened (ILO, 2013). Youth are often the primary victims of fluctuations in the economy, and European youth in particular have had to pay a heavy price in recent years.

Globally, the labour market prospects of youth have rarely been as meek as today. Of primary interest to policy-makers and stakeholders are the pathways to success in the labour market, both in terms of the policies that work and the career choices of those directly concerned. As such, economists have studied the influences between various elements in the transition paths of young persons to identify the strategies that lead to stable and satisfactory employment. The ILO School-to-work transition surveys (SWTS) provide an opportunity to study this transition in 28 countries. The objective of the present technical brief is to reflect on the role played by the work-study combination in the transition to stable and satisfactory employment, and to simultaneously provide a discussion on the adequacy of the survey design and implementation to address this question. Can working while studying act as a stepping stone to good labour market opportunities or is it rather a necessity-driven constraint of more vulnerable youth, taking focus away from studying?

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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. A brief review of the literature

When weighing the costs or benefits of combining school and work, certain literature examines the question in regards to *human capital accumulation*. On the one hand, if one accepts the idea that the investment in human capital increases productivity and thus employability and wages, dedicating less time to school by working implies that future labour market prospects are worsened for those who combine their schooling with work. On the other hand, this might not necessarily be the case if time spent working is rather subtracted from leisure time and if job-specific, marketable skills are learnt while working, conferring a return to individuals that outweighs the time or mental acuity taken away from ones studies. There can also be gains in terms of resumé-building as more and more prospective employers look at past work experience as a hiring criteria for job candidates. The latter line of thought thus views the work-school combination from the perspective of *building social networks*. Regardless, the literature regarding the costs or benefits of combining work with school remains mixed.

Considering the impact of youth employment on academic performance, a substantial body of literature can be found to support either side. Singh (1998) finds a small negative effect of part-time working during secondary school on achievement in four subjects using data from the United States. Callender (2008) shows a similar result at the university level in the United Kingdom. A more recent study from the United Kingdom (Holford, 2015) also finds negative effects on GCSE scores for young females aged 14-15 who worked during the school period.

Warren, Lepore and Mare (2000), however, does not find any negative academic effect of the work-secondary school combination in the United States, and Body, Bonnal and Giret (2014) argues that the negative effect did not prevail for students working less than eight hours in France. Likewise, Turner (1994) and Hood, Craig and Ferguson (1992) find a positive impact of working on school achievement at the secondary and tertiary levels when working a moderate amount of hours.

Looking at longevity in education, McNeal Jr. (1997) notes that the likelihood of dropping out of school is correlated with the work-study combination at the secondary level, but that the effect was highly contingent on the type of job held. Behr and Theune (2014) look at the time to graduation and find that working while studying tends to prolong the time necessary to graduate.

Regarding the "social network" line of thought and whether the combination brings advantages in terms of familiarizing individuals with the job search and matching process while making connections for employment upon completion of school, again, the literature draws varying conclusions regarding labour market outcomes (typically measured in terms of wages).[1] Ehrenberg and Sherman (1987) find that working while in college (tertiary level) leads to a lower probability of remaining in college and thus to (in average) lower wages in the labour market. Light (2001) finds that excluding in-school work experience in wage regressions leads to an upward bias on the coefficient of schooling. Hotz et al. (2002) argue that many of these results are specific to methodology, and suggest that there are no

[1] Literature specific to the cause and effects of the work-school combination are rarely limited to discussions of youth aged 15-24 years. Rather, the bulk of the available literature looks at the impact of child labour (aged 5-17) on human capital accumulation and labour market outcomes. The exclusion of literature related to child labour from the discussion in this Brief, brings the unfortunate side effect of limiting the discussion to primarily high-income countries. The bulk of the studies on labour market outcomes related to the work-study combination, for instance, have been carried out on data from high-income countries, and especially the United States.

statistically significant returns to working in secondary or tertiary schools when applying dynamic selection methods. The absence of wage premia is confirmed in a study by Häkkinen (2006) on Finnish university students. More recently, Geel and Backes-Gellner (2012) distinguished the effects from the relation of the work to the field of study, finding that only part-time work related to the field of study brought significant positive labour market returns in terms of employability and wages.

As previously stated evidence from developing countries on the work-study combination after the age of 15 years is scarce. Emerson and Souza (2011), however, study adult outcomes of former child and teenage workers in Brazil, and discuss the negative effects on wages according to the age at which the person started working. Presumably, working at a very young age implies negative adult outcomes, but starting work as an adolescent might not. Their empirical results suggest this is the case in Brazil, and that the turning point occurs sometime around the ages of 12-14. This essentially concurs with the findings of Ilahi et al. (2000) for Brazil.

2. Characterizing the work-study combination in the ILO school-to-work transition survey

2.1 Technical challenges

The scarcity of evidence from developing countries regarding the impact of working while in school makes the SWTS data a valuable asset to investigate these mechanisms. Run in 28 countries in 2012 or 2013, the surveys paint a picture of the labour market transitions of youth in developing countries on all continents.[2] Section C of the survey contains questions related to individuals' formal education and training, as well as to their activity history and aspirations. We thus know whether individuals are still in schooling or not, if and why they dropped out, and at what stage they did so. This section contains the three following questions related to the work/study nexus:

- Did you ever work while you studied (not including apprenticeship)?
- What was your primary motivation in working while studying?
- Did you have one or more internships/apprenticeships with an employer as part of your education?

Challenges arising from the survey design include the fact that the nature of the work/study combination is generally only known for those individuals who were not students at the time of the survey. This might not be overly problematic if we consider completion of school as a prerequisite to judgment of the labour market outcome of youth. It would, however, be a cause for concern if we wanted to look at the impact of the work-study nexus for those still in schooling. Furthermore, since we lack precise data on school attendance and attainment (grades in particular), the mechanisms explaining how and why working while studying might or might not lead to a smoother transition are difficult to map.

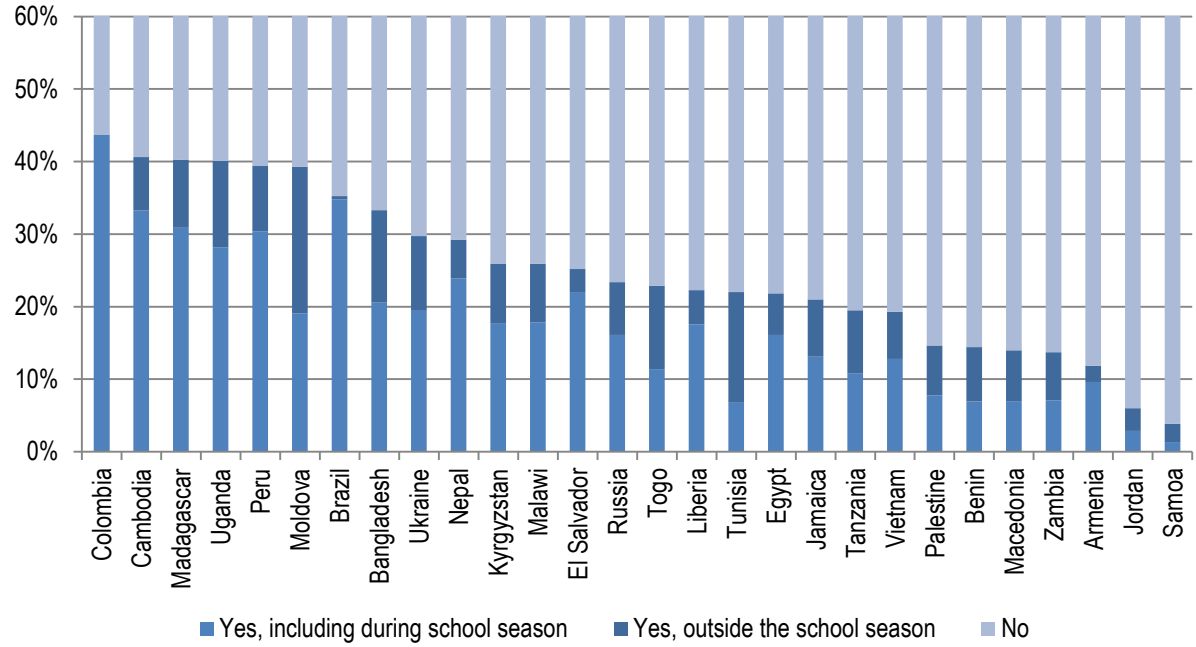
The questions related to the work/study combination are available for all countries. The question on working while studying was asked to all individuals who were at some

[2] A second wave of surveys is currently being undertaken, including most of the countries already present, but with new countries being added.

time in school. In total, in the 28 countries of the first round of SWTS, 96 886 young persons were attending or had attended school. A majority of those – 90 095 or 93 per cent – answered the question on working while studying.[3] Most missing values occur in Bangladesh and Russian Federation. Removing these countries, the response rate stands at 99.5 per cent.

Turning to the next question, that of the motivations for working while studying, it is asked to all those who said that they worked while studying. Out of the 21 922 individuals who declared working while studying, 21 127 gave at least one reason for doing so (96.4 per cent). The last question on the work-study combination regarding internships or apprenticeships during studying has also a good response rate. Excluding Bangladesh where the question was not included in the survey, the response rate stands at 91.7 per cent. Most missing observations are concentrated in Colombia (urban areas), Malawi, Russian Federation and Samoa. Excluding these countries, the response rate increases to 99.5 per cent.

Figure 1. Youth who worked while studying (out of those who ever attended school)



Source: Author's calculations using ILO 2012-2012 SWTS data (90 095 observations from 28 countries). The nature of the school/work combination is unknown for Colombia, and the vertical bar thus only reflects the total number of youth who worked while studying in one form or another.

Figure 1 shows that there is considerable heterogeneity in the share of youth who combine work with schooling. In Samoa, less than 4 per cent of youth worked while studying, while in Colombia this proportion reached almost 44 per cent.

As previously mentioned, the nature of the work experience for those who declare combining work and studying is mostly unknown. In the first round of surveys, only Brazil and Colombia provide information on the labour market experiences of youth still in school. This design flaw has since been corrected for in the second round of surveys so that it will be possible to study the labour market trajectories of those still in school. This is likely to be especially important concerning higher education, for which the proportion of in-sample individuals still in school is likely to be the highest.

[3] Figures here are unweighted.

2.2 How can the SWTS be used to examine the work-study combination?

Containing detailed data on the transition patterns of youth and knowing whether or not individuals worked during their schooling and why, the SWTS is an excellent source to fill the void in the literature on the role played by the work-study combination. Variables from the survey to measure the labour market outcomes of youth, against their work-study experience are numerous. Possible choices include labour force participation, employment and unemployment rates, and indicators related to the quality of employment. Certain elements of labour market status are also reflected in the ILO's concept of *stages of transition* based on the SWTS. According to Elder (2009), a transited individual is one who has successfully obtained a stable and/or satisfactory job.[4] Naturally, the quality of the job (in the sense of access to benefits, employment status, wages, hours of work, contractual arrangements, etc.) can be used as indicators on their own. Another interesting dimension to possibly explore relates to the type of work carried out.

Moreover, apart from post-schooling outcomes, the surveys can be used to look at the influence of working on schooling trajectories. Does having to work due to financial constraints result in many students abandoning schooling before graduation (early school-leaving)? Does early school-leaving also happen when working is motivated by a desire to enlarge one's social network?

Regarding identification of the impacts of the work-study combination, some caution is needed. In the context of developing countries, schooling as well as work decisions are likely to be made at the household level, at least when youth still living with their parents are considered. A correlation found between quality of job and having worked while schooling might reflect a birth effect, the eldest child being the one benefiting from most education and at the same time being the one designated for more stable employment.[5] In certain cultures as well, a male child might be permitted to stay in school while a female child is expected to help in the household.

On a related note, unobserved individual heterogeneity is also a cause for concern. It might well be that those individuals who are the most *able* in terms of education are also the ones who are the most likely to benefit from the work-study combination, while at the same time being the most productive workers (and thus preferred by the head of household). Any attempts to address causality should aim for a source of exogenous variation between individuals in the amount of hours worked while studying. This might include national legal frameworks such as compulsory schooling laws, environmental shocks or any other historical event randomly shifting part of students in or out of the labour market. Using instrumental variables in this way, data use is limited to variation that is unrelated to the outcomes measured; thus laying the grounds for a causal interpretation.

In the following, we do not make any claim to address the question of endogeneity. Our results first and foremost aim to show how the SWTS can be used to address a specific question related to the school-to-work transition, that of the relation between work and study combination and the transition to the labour market.

[4] Transited individuals thus include the following four groups : those in stable and satisfactory jobs ; those in stable but non-satisfactory jobs ; those in satisfactory and temporary job ; and those in satisfactory self-employment.

[5] Numerous SWTS reports highlight the strong link between educational attainment and improved employment outcomes. See, for example, Sparreboom and Staneva (2014). The impact of birth order on education and labour market outcomes is explored in Nilsson (forthcoming).

3. The impact of the work-study combination on the transition path

This section briefly examines the impact of working while studying on the transition path of youth in developing countries making use of the SWTS data sets. Since we lack precise information on academic achievement, and have little information on the labour market experiences of those who are still in school, the impact of schooling on academic outcomes as well as the labour market effects of those still in school cannot be properly treated. At best, we can make use of the *worked during schooling* question (including the *reason* for working during schooling) to look at how the length and type of schooling correlate with the work-study combination. The labour market experience questions in the datasets enable us to examine the length and nature of the previous job experience both for individuals who worked while studying and for individuals who did not. The SWTSs further enable us to look at the final outcome youth reach in the labour market, and to thus determine if working while studying carries a penalty or rather a premium in terms of how young people enter the labour market (in which status and at which length of transitions).

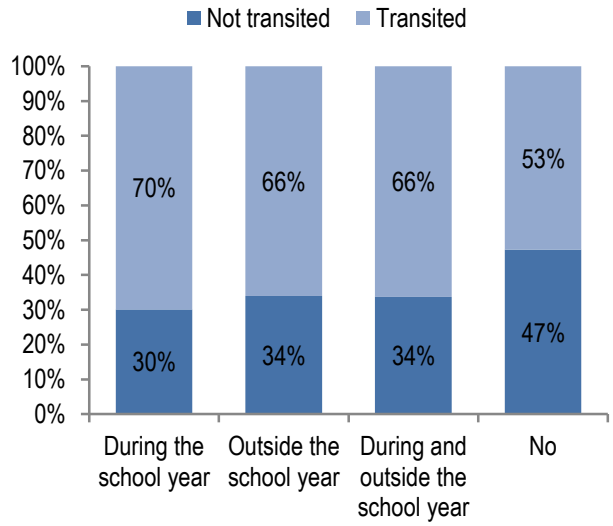
3.1 Does past work experience of graduates affect their school-to-work transitions?

Starting from a global perspective, pooling all countries together[6], it can be seen from Figure 2 that having worked during school does indeed imply a higher probability of having achieved one's transition into either stable employment or satisfactory temporary or self-employment. This result could plausibly be driven by a larger post-schooling labour market participation rate for those who worked during schooling. To see if this is the case, the same figure is reproduced excluding those individuals who have not yet started their transition, i.e. those who are inactive and not in school, with no intention of looking for work at a later stage (figure 3). The figure shows again that the likeliness of having transited is higher for those who worked both during and outside the school season than for those who only worked outside the school season.

These aggregate numbers might hide differences at the country level. When we cross-tabulate the same variables by country, only in five countries (Benin, Madagascar, Malawi, Nepal and Viet Nam) do those who did not work during schooling have a higher probability of being transited. Furthermore, in Benin, Madagascar, Nepal and Tanzania, only those who worked both during and outside the school year are penalized. Other individuals who combined work with study have significantly higher rates of transition in these countries. Aggregating all three subcategories for those who declare having worked while studying; we see from Figure 4 that only three countries, Benin, Madagascar and Viet Nam seem to provide a higher rate of transition for those individuals who did not work while studying.

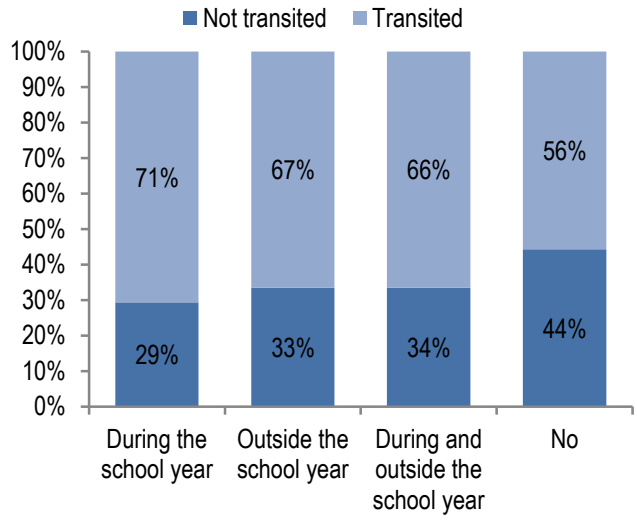
[6] Excluding Bangladesh, Colombia and Russia where we do not have complete information both on transitions and on the school-work combination.

Figure 2. Transition status and the work/study combination (all non-student youth)



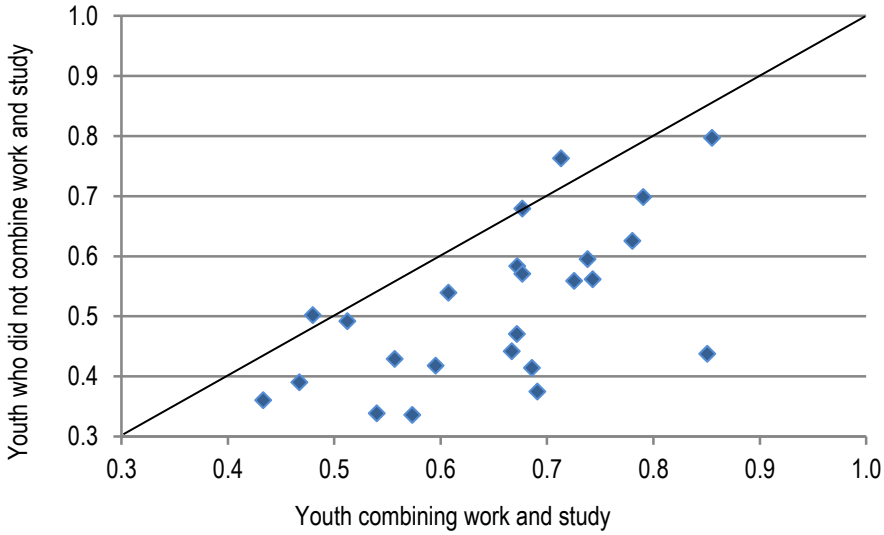
Source: Author's calculation using ILO 2012-2013 SWTS data (44 169 observations from 25 countries, excluding Bangladesh, Colombia and Russian Federation). The not transited include youth out of school who are either in transition, or inactive with no intention of looking for work.

Figure 3. Work/study combination and transition status (excluding all those who did not yet start their transition)



Source: Author's calculation using ILO 2012-2013 SWTS data (40 974 observations from 25 countries, excluding Bangladesh, Colombia and Russian Federation). The not transited include youth out of school who are in transition.

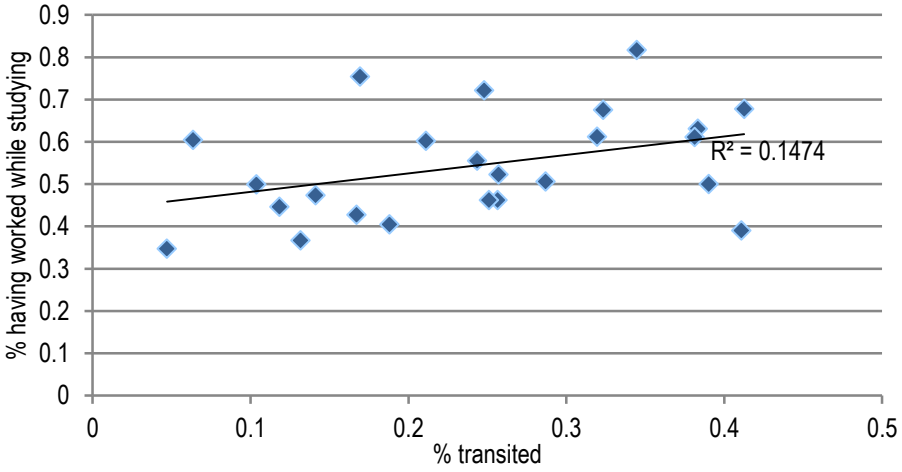
Figure 4. Transition rates of non-student youth by work/study combination, by country



Source: Author's calculation using ILO 2012-2013 SWTS data (40 974 observations from 25 countries). Country data are in Annex table A.1.

A related question of a more macro-economic nature is that of the link between transition rates and working while studying rates by country. From the previous graph (figure 4), it seems that working while studying does indeed imply higher rates of transitions. Are those countries where youth more often combine work and study also the countries that have the highest rates of transited youth? Figure 5 indicates that this does seem to be the case; plotting the average shares of transited youth by country against the percentage of youth having combined studying with work, we note a positive (although weak) correlation.

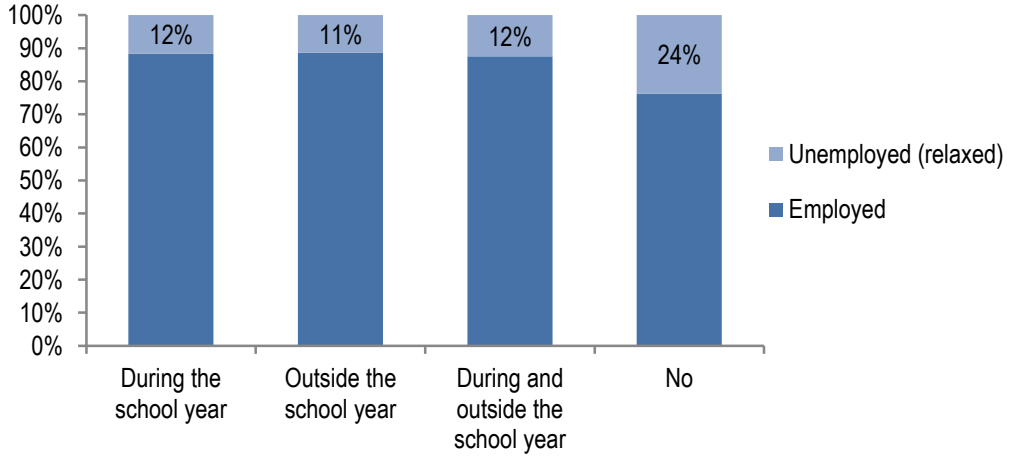
Figure 5. Percentage of transited versus percentage of work/study combinations, non-student youth by country



Source: Author's calculation using ILO 2012-2013 SWTS data (40 974 observations from 25 countries). Country data are in Annex table A.1.

Looking at a more traditional indicator of labour market failure (and inversely, success), Figure 6 looks at the youth unemployment rate by type of work/study combination. Again, those who worked during their studies are significantly better off in terms of lower unemployment rates. Looking at the country level evidence (not shown), the results are even more homogeneous than regarding transitions. Despite small subsamples in some countries, in all countries except Moldova and Tanzania, the unemployment rate of those who never worked while studying is higher than the one of those who combined studying with work both outside and during the school season. Results should be interpreted with care here as it is occasionally the youth from wealthier families who have less financial need to combine school and work and can afford to spend longer periods in unemployment (see ILO, 2015). Regarding the subsamples of individuals who worked either during the school season or outside the school season, but not both, results are similar. In two countries only – Benin[7] and Peru – those who only worked during the school season have a higher rate of unemployment than those who did not work at all.

Figure 6. Labour force status by work/study combination, non-student youth



Source: Author's calculation using ILO 2012-2013 using SWTS data (35 138 observations from 25 countries).

[7] We should note the negligible response rate in Benin, with only 10 respondents in this subcategory.

Table 1. Characteristics of the employment situation and the work/study combination, non-student youth (%)

	Worked during schooling			Did not work during schooling
	During the school year	Outside the school year	During and outside the school year	
Employment status				
Paid employment	68	56	56	63
Employer	3	3	4	3
Own account worker	20	22	22	21
Unpaid family worker	8	18	17	12
Member of producer's cooperative	0	0	0	0
Other	1	1	1	1
Total	100	100	100	100
Number of job benefits[a]	4.1	1.7	2.5	2.7
Contract type[a]				
Written contract	69	45	56	60
Oral agreement	31	55	44	40
Total	100	100	100	100
Duration[a]				
Unlimited	74	53	57	65
Limited	14	27	34	24
No contract	12	20	10	12
Total	100	100	100	100
Satisfaction at work[b]				
Mostly satisfied	44	19	30	29
Somewhat satisfied	37	57	47	49
Somewhat unsatisfied	13	16	17	16
Mostly unsatisfied	7	8	6	6
Total	100	100	100	100
Likelihood to keep job[b]				
Very likely	65	63	59	63
Likely, but not certain	18	23	26	21
Not likely	11	8	11	10
Do not know	6	6	4	6
Total	100	100	100	100

a. Question asked to paid employees only. Possible job benefits include: transport or transport allowance, meals or meal allowance, annual paid leave, paid sick leave, pension, severance, overtime pay, medical insurance coverage, bonuses, social security contribution, educational or training courses, occupational safety/protective clothing or equipment, childcare facilities or maternity/paternity leave.
b. Question asked to working out of school youth.
Source: Author's calculations using ILO 2012-2013 SWTS data from 25 countries.

Table 1 gives information on the contractual arrangement surrounding the job held by individuals (paid employees only[8]), the satisfaction associated with the job (all young workers) and the perceived likeliness to being able to keep it for the next 12 months (all young workers). It seems that on average, those who combined work with study do not have better jobs, as measured by the access to entitlements (paid leave, for example), the type of contract and the duration of contract. Looking at satisfaction, again, no clear pattern emerges, but young workers who had worked during the school season show a

[8] A criterion that unfortunately excludes two-thirds of young workers in the low-income countries of the SWTS datasets.

slightly higher likelihood of job satisfaction (especially for the category "mostly satisfied; 44 per cent) compared to seasonal school workers or non-school workers. Finally, having worked while in school does not seem to significantly alter individuals' perception of the likelihood that they keep their job for the coming 12 months. All in all, it thus seems that while working while in school does seem to be associated with increased transition probabilities and lower unemployment, among the SWTS countries, it does make much different in terms of the quality of job attained upon graduation. There does seem to be a significant difference between those who work only during school season and those who work outside the school season, although the causality here is not evident.

These hasty conclusions should be relativized since a number of coexisting mechanisms might be behind the results. Most prominently, we should recognize that working while in school can be either a choice or a constraint, with youth originating from very different family backgrounds and facing different sets of opportunities. Exploring the reasons given for working while studying as well as the type of work carried out can help shed light on the question.

The survey question on motivations for working while studying authorizes multiple answers. We therefore create a dummy variable equal to one if one of the two following answers were given: i) to gain work experience/ build up a CV; ii) to make connections that could lead to future employment, irrespective of whether the two other possible reasons: iii) making money (economic reasons); or iv) helping the family were given. Having answered i) or ii) could be seen as a testimony that while perhaps not the sole reason, the decision to work while in school considered the career-building component. Table 2 shows some summary statistics of young workers who combined work and schooling, dividing them into two categories regarding the reason for working: family-oriented or career-oriented. It seems that those who had a career-building component among their objectives do not fare better off than those who did not. They are not more often transited, nor more satisfied with their job. If anything, they seem to be a tiny bit more likely to face unemployment (potentially as they wait for a job better suited to their experience) and to wish to change their current job.

Table 2. Reasons for working while studying and selected labour market variables, non-student youth (%)

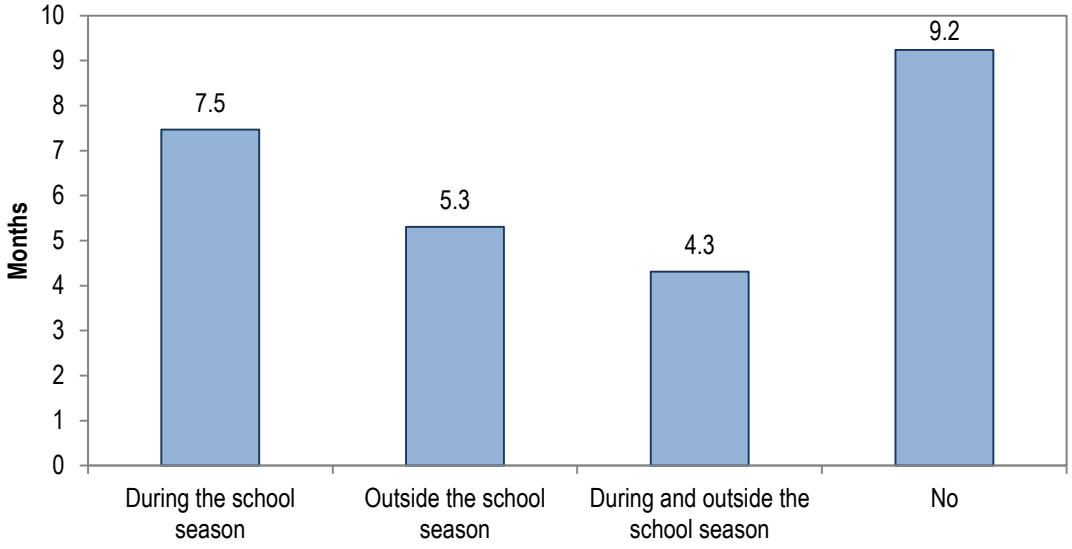
	Family/economic-oriented reason	Career-oriented reason	Total
Transited	69	69	69
Not transited	31	31	31
Share in youth non-student population			
Unemployed (relaxed)	12	13	12
Employed	88	87	88
Share in youth, non-student labour force	100	100	100
Very satisfied	35	33	35
Somewhat satisfied	43	44	44
Somewhat unsatisfied	14	16	15
Very unsatisfied	7	7	7
Share in youth, non-student employment	100	100	100
Would like to change employment situation:			
Yes	50	52	51
No	50	48	49
Share in youth, non-student employment	100	100	100

Source: Author's calculations using ILO 2012-2013 SWTS data from 25 countries.

To conclude this section, it thus seems that having worked while studying does indeed lead to higher transition rates and lower unemployment shares among those in the labour market. It does not, however, bring any obvious benefit for young person to gain a "better" job following from the experience of working while studying, even when done with the intention of opening the door to a career.

Lastly, it could be that while not conferring employment of higher quality, the work/study combination could improve the speed at which employment is found upon graduation. At the start of the present section, two theoretical linkages between working while studying and employment prospects were laid out. If indeed, working while studying is a way of improving one's social network, then this should be reflected in a smoother matching process ensuring shorter transition times for individuals. Figure 7 shows this does seem to be the case. Individuals working during the school year, regardless of modalities (during school year, outside the school season or both), had a shorter average transition period to the first job (upon departure from school) compared to youth who did not combine work and study. The average length of transition to the first job was shortest for those who worked both during and outside the school season (4.3 months). In contrast, the transition took an average of 9.2 months for those who studied only.[9]

Figure 7. Time to first job (outside of school) by work/study combination, non-student youth (months)



Source: Author's calculations using ILO 2012-2013 SWTS data (21 526 observations from 21 countries). Including direct transitions (length = 0).

3.2 Does the work-study combination modify schooling trajectories?

The work-study combination questions can be used to gauge the influence of working while in school on subsequent schooling choices. Taking into consideration all individuals who left schooling irrespectively of their age will however lead to a bias, since for lower ages those individuals who are observed are also those who did not attain high levels of education. Including those still in schooling is also problematic since we do not know the final level of education they will attain. Table 3 shows the educational attainments of

[9] Many young people do not end their labour market experience with the first job. In fact, ILO (2015) demonstrates – using SWTS data – that while the length of transition to first job are oftentimes short and direct, the transition to stable and/or satisfactory job tends to take much longer and has numerous spells along the way.

individuals in the upper age band of 25-29 according to their work/study combination. The upper age band was chosen to ensure that all educational cycles could have been completed by the individual while still keeping a reasonable number of observations in the dataset.

Table 3. Educational attainment by work/study combination, non-student youth aged 25–29 (%)

Educational attainment	During the school year	Outside the school year	During and outside the school year	No	Total
None/Less than primary	3	4	8	6	5
Primary	17	19	17	29	26
Vocational (secondary)	8	15	6	8	9
Secondary	45	31	27	37	37
Post-secondary vocational	5	10	15	5	6
University and postgraduate studies	21	21	26	15	17
Total	100	100	100	100	100

Source: Author's calculations using ILO 2012-2013 SWTS data (20 944 observations in 25 countries).

Only slight differences can be observed in the columns of the table. Notably, comparing the column *No* (no work/study combination) with the *Total* column gives an idea of any systematic differences between having worked while in school or not. It looks as if those who did combine the two activities have both a slightly better educational attainment (they more often went to university or post-secondary education). Overall, those who worked while in school more often end up with a university degree. Differences are rather small, however, and differences of the same magnitude are observed when decomposing those who did work while in school.

Table 4 shows the actual educational attainment of youth out of school who combined work and school by their reason for working while in school, using the distinction described above. It shows that those who professed a career-building aspiration for the work/study combination are those who ended up with a higher educational attainment. The correlation could suggest (as might be expected) that the motivation to develop networks and gain work experience is one that is taken in the higher cycles of the educational system as future career choices become more imminent. In contrast, a large share of youth who stated a need to combine school and work for economic or family reasons ended their education at the primary level or less (20 per cent). One can guess then that economic need, ie. the urgency of contributing to household income, remains a strong factor behind low educational attainment in poorer countries.

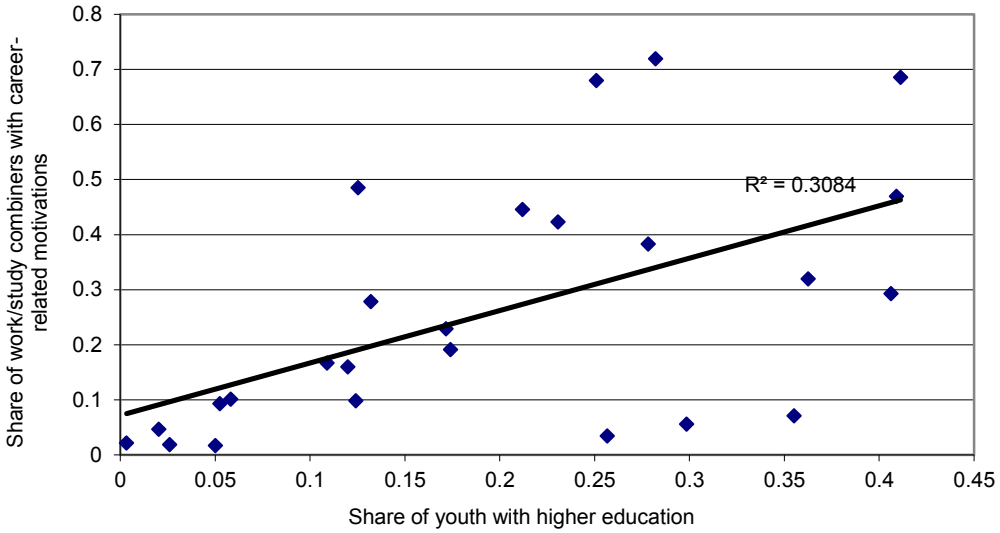
Table 4. Educational attainment by work-study motivation, non-student youth 25–29 (%)

Educational attainment	Family/economic-oriented reasons	Career-oriented reason	Total
None/Less than primary	6	2	5
Primary	20	8	18
Vocational (secondary)	9	8	9
Secondary	42	24	39
Post-secondary vocational	5	12	6
University and postgraduate studies	18	47	23
Total	100	100	100

Source: Author's calculations using ILO 2012-2013 SWTS data (3,960 observations in 25 countries).

As can be seen from Figure 8, when plotting the share of youth aged 25-29 who worked while in school for career-related motivations against the share who have a higher education attainment, a pattern seems to emerge. The phenomenon previously observed is thus at least partly explained by country-related factors. The countries in which a lot of youth attain tertiary education are also those where the decision to work while in schooling is often taken for career-related reasons.

Figure 8. Share of career-related motivation and shares of tertiary graduates, non-student youth 25–29, by country



Source: Author's calculations using ILO 2012-2013 SWTS data (3,960 observations from 25 countries). Country data are in Annex table A.2.

4. Concluding remarks

The previous sections have aimed at providing a brief picture of the relationship between the work-study combination and subsequent outcomes in schooling and in the labour market. The first sections discussed previous findings in the literature and laid out the utility of the SWTS data surveys to address the impact of the work-study combination on transitions. The next section looked at how having worked while studying influenced labour market outcomes of youth no longer in school. *While only simple correlations are presented, results indicate that having worked while in school leads to higher rates of transition and lower shares of unemployment*. There is however no apparent impact on the nature or quality of jobs obtained. Furthermore, the transition period of youth to their first job (outside of education) among those who combined work and schooling are shorter than those of youth who did not.

Concerning schooling outcomes, there seems to be a slight positive correlation between working while in school and subsequent educational outcomes. When distinguishing between motives for working while in school, it appears as if those who evoke career-oriented motives as reasons for working while studying are also those who end up with higher educational attainment, plausibly since developing social networks and marketable skills is more of a concern for individuals at the higher educational cycles. The correlation is however in part driven by country effects, since the countries in which a larger fraction of youth working while in school do so for career-related reasons are also the countries in which the share of tertiary graduates is relatively high. Countries with comparatively lower educational attainment also tend to be lower income countries where youth tend to leave school at young ages to take up work for economic reasons.

References

Behr, A.; Theune, K. 2014. "The causal effect of off-campus work on time to degree", in *Education Economics*, (ahead-of-print), p. 1-21.

Body, K.M.D.; Bonnal, L.; Giret, J.F. 2014. "Does student employment really impact academic achievement? The case of France", in *Applied Economics,* Vol. 46(25), p. 3061-3073.

Callender, C. 2008. "The impact of term-time employment on higher education students' academic attainment and achievement", in *Journal of Education Policy,* Vol. 23(4), p. 359-377.

Ehrenberg, R.G.; Sherman, D.R. 1987. "Employment while in college, academic achievement, and post-college outcomes: A Summary of results", in *Journal of Human Resources,* Vol. 22(1), p. 1-23.

Elder, S. 2009. *ILO school-to-work transition survey: A methodological guide* (Geneva, ILO).

Emerson, P.M.; Souza, A.P. 2008. "Birth order, child labour, and school attendance in Brazil", in *World Development*, Vol. 36(9), p. 1647-1664.

Geel, R.; Backes-Gellner, U. 2012. "Earning while learning: When and how student employment is beneficial", in *Labour,* Vol. 26(3), p. 313-340.

Häkkinen, I. 2006. "Working while enrolled in a university: does it pay?", in *Labour Economics*, 13 (2), p. 167-189.

Holford, A. 2015. *Youth employment and academic performance: Production functions and policy effects*, ISER Working Paper Series No. 2015-06 (Essex, Institute for Social and Economic Research).

Hood, A.B.; Craig, A.F.; Ferguson, B.W. 1992. "The impact of athletics, part-time employment, and other activities on academic achievement", in *Journal of College Student Development*.

Hotz, V.J.; Xu, L.C.; Tienda, M.; Ahituv, A. 2002. "Are there returns to the wages of young men from working while in school?", in *Review of Economics and Statistics*, Vol. 84(2), p. 221-236.

Ilahi, N.; Orazem, P.; Sedlacek, G. 2000. "The implications of child labour for adult wages, income and poverty: Retrospective evidence from Brazil", The World Bank.

International Labour Organization (ILO). 2013. *Global Employment Trends for Youth 2013: A generation at risk* (Geneva).

—. 2015. *Global Employment Trends for Youth 2015: Scaling up investments in decent jobs for youth* (Geneva).

Light, A. 2001. "In-school work experience and the returns to schooling", in *Journal of Labour Economics*, Vol. 19(1), p. 65-93.

McNeal Jr., R.B. 1997. "Are students being pulled out of high school? The effect of adolescent employment on dropping out", in *Sociology of Education*, p. 206-220.

Singh, K. 1998. "Part-time employment in high school and its effect on academic achievement", in *The Journal of Educational Research*, Vol. 91(3), p. 131-139.

Sparreboom, T.; Staneva, A. 2014. *Is education the solution for decent work for youth in developing countries*, Work4Youth Publication Series No. 23 (Geneva, ILO).

Turner, M.D. 1994. "The effects of part-time work on high school students' academic achievement", paper presented at the Southern Economic Association Conference, Orlando, Florida.

Warren, J.R.; LePore, P.C.; Mare, R.D. 2000. "Employment during high school: Consequences for students' grades in academic courses", in *American Educational Research Journal*, Vol. 37(4), p. 943-969.

Annex tables

Table A.1 Work/study combination and transition shares, by country (%)

	Having worked while stuyding	Share of transited by work/study combination		
		Overall	Combined work/study	Did not combine work/study
Armenia	11.8	44.6	68.6	41.4
Benin	10.4	49.9	48.0	50.1
Brazil	32.0	61.2	72.6	55.8
Cambodia	34.5	81.7	85.5	79.7
Egypt	25.7	52.2	67.2	47.0
El Salvador	28.7	50.6	66.7	44.1
Jamaica	14.1	47.3	85.1	43.7
Jordan	6.4	60.4	73.8	59.5
Kyrgyzstan	24.8	72.1	79.1	69.8
Liberia	25.6	46.2	55.7	42.9
Macedonia, FYR	13.2	36.7	57.3	33.5
Madagascar	41.3	67.8	67.7	67.9
Malawi	24.4	55.5	60.7	53.9
Moldova, Rep. of	39.0	50.0	51.2	49.2
Nepal	41.1	39.0	43.3	36.0
Occupied Palestinian Territory	16.7	42.7	69.1	37.4
Peru (urban areas)	38.3	63.1	74.3	56.1
Samoa	4.7	34.7	54.0	33.8
Tanzania, United Rep.	18.8	40.4	46.7	39.0
Togo	21.1	60.2	67.2	58.3
Tunisia	25.1	46.2	59.5	41.8
Uganda	38.1	61.1	67.7	57.0
Ukraine	32.3	67.5	78.0	62.5
Viet Nam	16.9	75.4	71.3	76.2
Zambia	13.7	40.2	59.9	37.1

Source: Author's calculations using ILO 2012-2013 SWTS data (40 974 observations from 25 countries).

Table A.2 Reason for working while studying and the share of higher education, by country (%)

	Share of career-oriented reasons	Share of higher education
Armenia	41.1	68.5
Benin	5.8	10.1
Brazil	17.4	19.1
Cambodia	2.0	4.6
Egypt	12.0	15.9
El Salvador	25.7	3.4
Jamaica	40.6	29.3
Jordan	27.8	38.3
Kyrgyzstan	21.2	44.6
Liberia	29.9	5.6
Macedonia, FYR	12.5	48.5
Madagascar	5.0	1.7
Malawi	2.6	1.9
Moldova, Rep. of	23.1	42.3
Nepal	36.3	31.9
Occupied Palestinian Territory	40.9	46.9
Peru (urban areas)	17.2	22.9
Samoa	25.1	67.9
Tanzania, United Rep.	0.3	2.1
Togo	5.2	9.3
Tunisia	13.2	27.8
Uganda	12.4	9.8
Ukraine	28.2	71.9
Viet Nam	10.9	16.7
Zambia	35.5	7.1

Source: Author's calculations using ILO 2012-2013 SWTS data (3 960 observations from 25 countries). Population: individuals out of school who were once in school and who combined work with studying.