Working While Studying: Employment Premium or Penalty for Youth in Benin?

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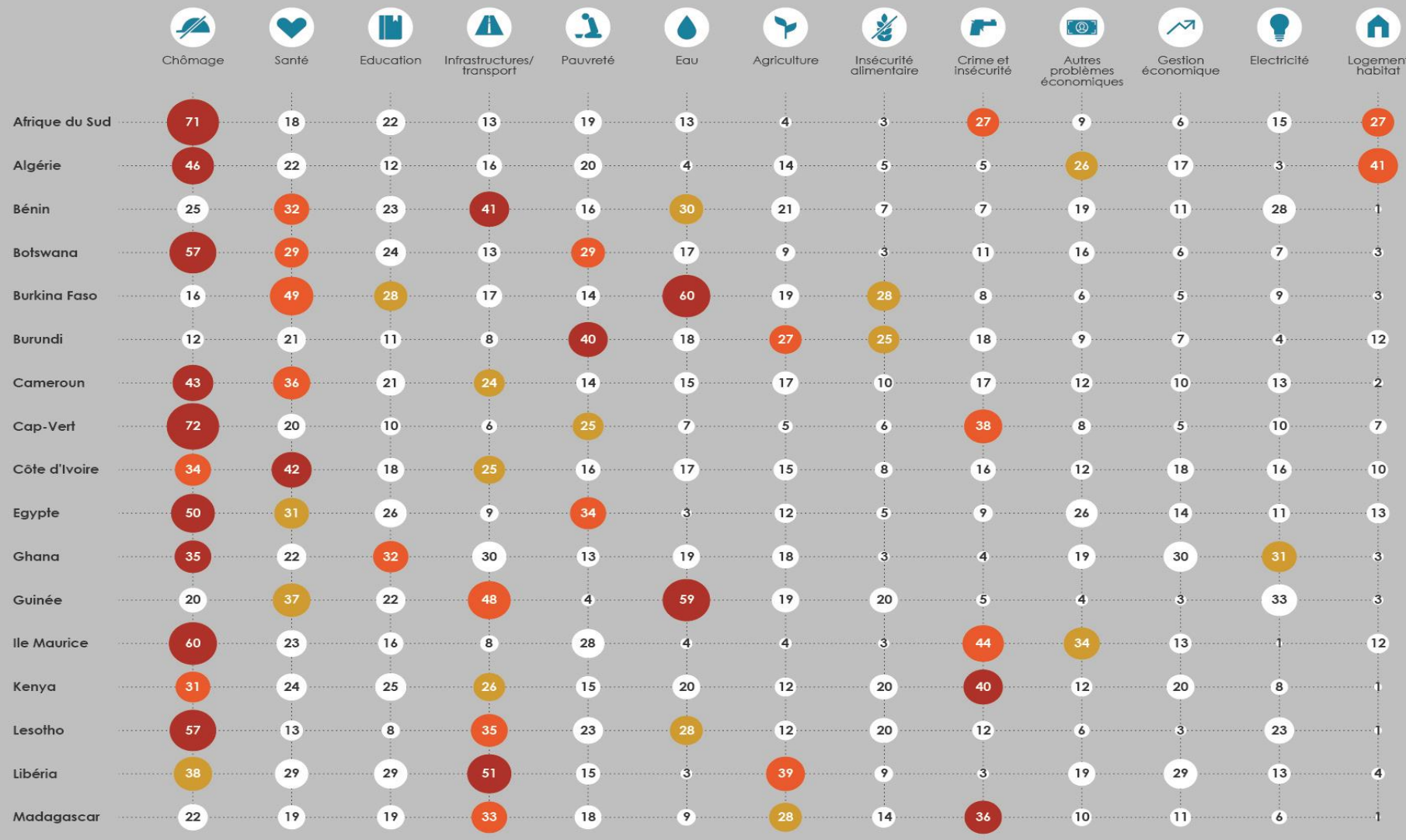
Context

Unemployment issue in Africa

Figure 5: Problèmes prioritaires, par pays | 32 pays | 2014/2015



- Considered as the most important governments should address (Afrobarometer, 2015)

Context

Unemployment issue in Africa

Figure 1: Problèmes prioritaires | 32 pays | 2014/2015

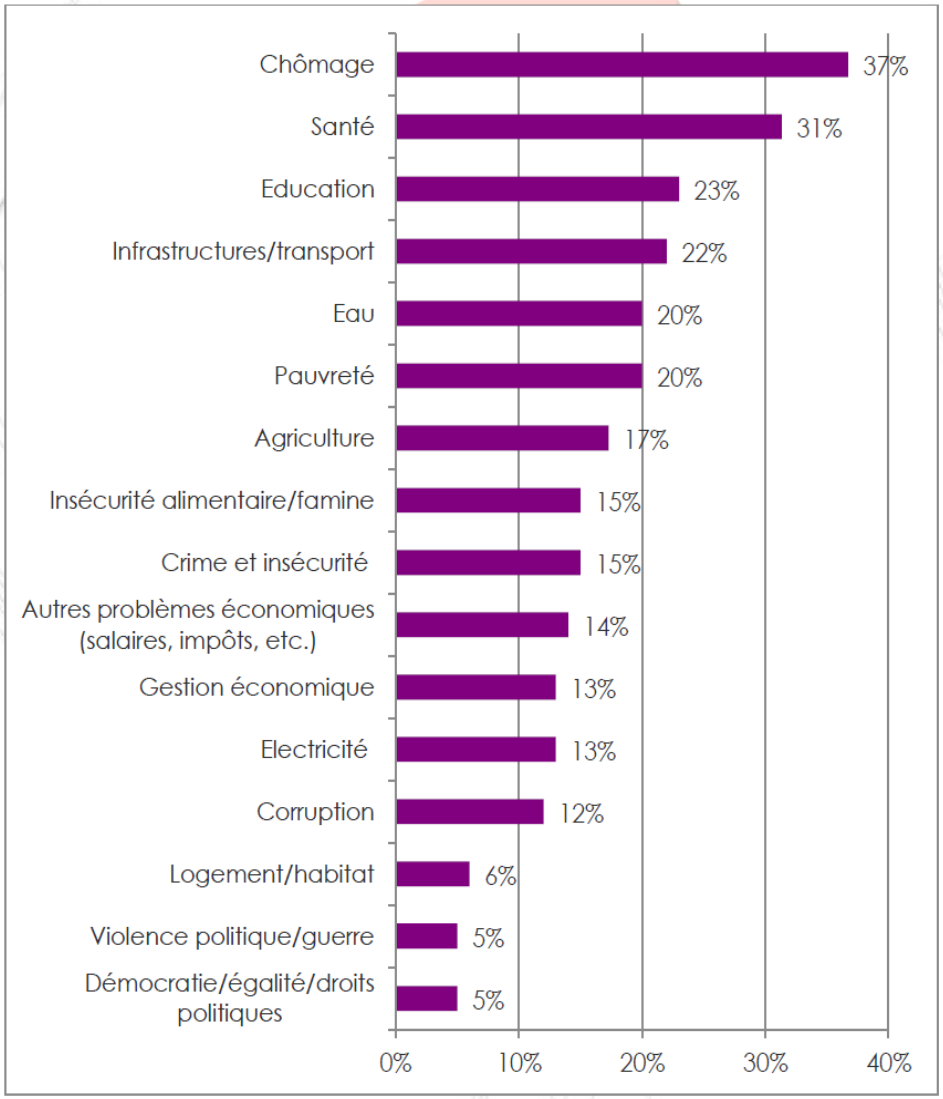
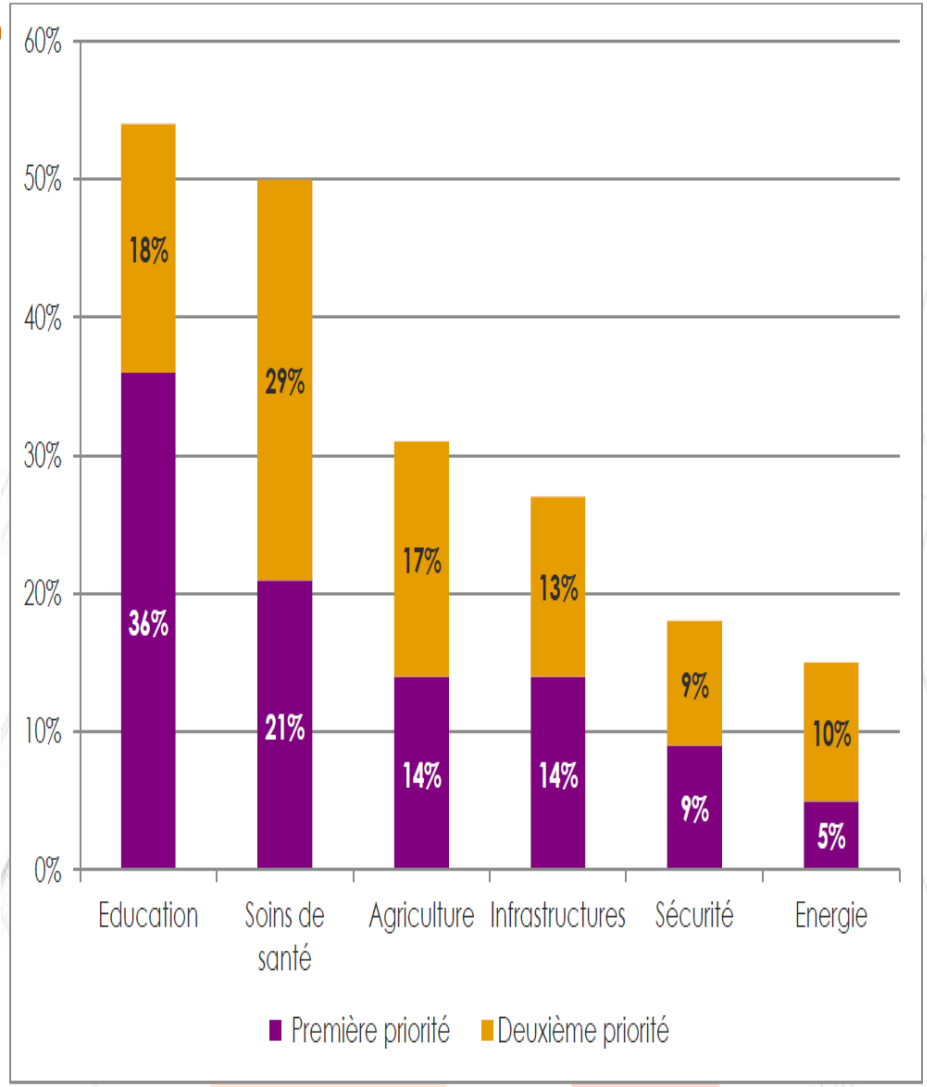


Figure 2: Première et deuxième priorités d'investissement | 32 pays | 2014/2015



- Unemployment is the most imperative problem for Africans (Figure 1)
- Education is the number one priority for government spending (Figure 2)

Context

Unemployment issue in Africa

- **Young people**: almost 3 times more likely to be unemployed than adults (ILO, 2012).

- Particular concern for **students** : first entry into the labour market after leaving school

- Youth experience relatively long periods of transition from school to the first job, between less than 1 – 7 years (Garcia & Fares, 2008; ILO, 2015)

➢ Students in Africa leave school with a general academic background, limiting their chances to enter early the labour market

Context

Youth unemployment issue in Benin

- Duration reported to be long: 42.7% of unemployed spent over a year unemployed with 50% for women and 38.1% for men (SWTS, 2012).
- Statistics from SWTS: only 11.2% of youth completed the school transition (INSAE, 2016).
- Impediment for youth employment, as revealed by SWTS: lack of vocational and technical education, low professional experience, lack of job search assistance (INSAE-BIT, 2013)
- Since 2007: emergence of structures and programs (ANPE, FNPEEJ, BPC,...) to increase employment opportunities for youth

➢ Yet, the majority of such (limited) interventions (whose effects are not yet clearly known) are post-schooling.

Our Research

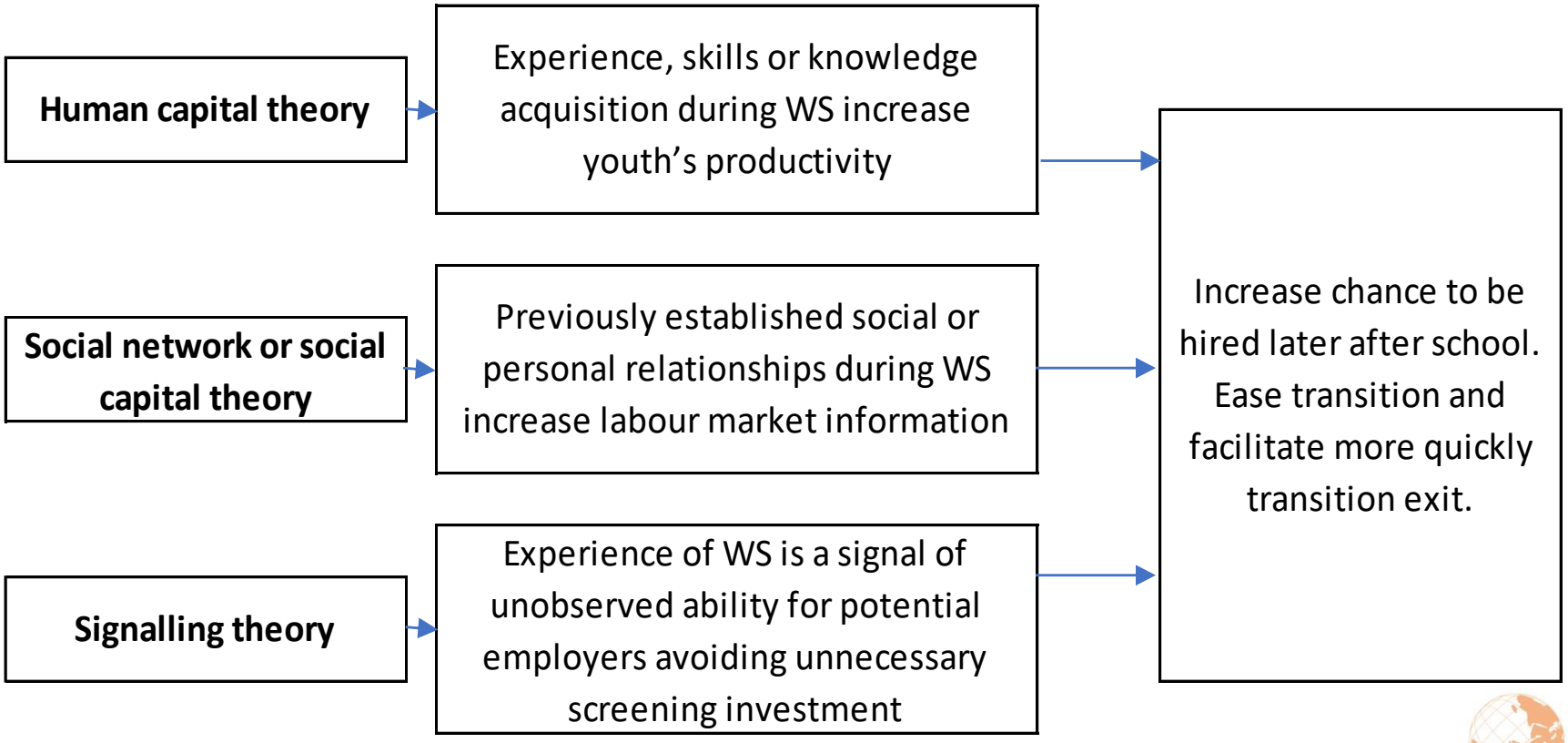
- We seek to answer whether a work experience before leaving school can help youth having an easier transition from school to work in Benin
  - Effort and large investments are spent to deal with important barriers of youth employment
  - Yet there are post schooling interventions and may have limited scope in reducing the transition from school to a first job

➢ If an experience of work while studying proves to be effective, there may be the need for policy interventions to reorient and/or to expand investments in that direction.

Conceptual framework

Channels

- Transition may be facilitated if youth familiarize with/acquire habits, attitudes, and labour market related information before leaving the school



Data

- Sources: data from the School to Work Transition Surveys (SWTS) implemented in 2014-2015 in Benin by the National Institute of Statistics, under the Work4Youth project. The 2014-2015 SWTS is nationally representative of 4306 individuals 15-29 years old.

- Unit of analysis: subsample of 1162 individuals aged 15-29 who were no longer at school in the time of the survey (not still at school). 1771 youth were still at school in the time of the survey.

- The outcome variable :
  - The duration of transition from school to the first job (in months)

- The treatment variable: binary variable indicating whether the youth has already worked while studying

Data

Distribution (%) of Youth Who Ever Worked While Studying					
	Sample of youth that already left school				Sample of youth Still in school at the time of survey
	Total (1,162)	Those still in transition (695)	Those not in transition (467)		Total (1771)
a) Worked during the school year	3.44	3.31	3.64		2.15
b) Worked outside the school year (summer break, holiday)	6.97	6.04	8.35		9.15
c) Worked during & outside the school year	6.97	5.61	8.99		6.38
d) : (a+b+c)	**17.38**	**14,96**	**20,99**		**17,68**
Source: Calculations based on 2014 SWTS data.					

Data

Transition from School to First Job: A Summary		
Sample of youth that already left school (1,162)		
	Those who exited from the transition	Those still in the transition
% of youth	40.19	59.81
Median transition-to-work period (Y/M)	1.75/21	4.42/53
Median Age of entering in the transition (Y)	22.08	15.25
Median Age of exiting from the transition (Y)	25	-
% that exited into self-employment	23.84	-
% that exited into salaried work	16.35	-
Source: Calculations based on 2014 SWTS data.		

Methodology

- Modelling the effect of Work-Study : 2 issues

- Work-Study likely to be endogenous (unobserved heterogeneities).
  - Because of greater ability or initial skills: More able/motivated youth may be pushed to start working earlier during study and may as well have an easier transition to a first job after leaving school

- Non-random selection of leaving school (sample selection).
  - The duration of the transition is observed only for youth who left the school.

Methodology

- Multiequation model: modelling the duration of the transition (T) accounting for unobserved heterogeneity and Sample Selection

(1) $$Ti = \alpha 1 WSi + Xi\beta + u_{1i} > 0$$ Outcome equation

(2) $$WS_i = \begin{cases} 1, & \text{if } Z1i\gamma + u_{2i} > 0 \\ 0, & \text{otherwise} \end{cases}$$ endogenous treatment equation

(3) $$\text{LEAVE SCHOOL} = 1(\alpha 2 WSi + Z2i\varphi + u_{3i} > 0)$$ sample selection equation

unobserved errors terms are normal with mean zero and have the following correlation structure:

$$\text{corr}\,(u_1, u_2) = \rho_{12},\ \text{corr}\,(u_1, u_3) = \rho_{13},\ \text{corr}\,(u_2, u_3) = \rho_{23}$$

Results

Table 3 : Estimation Results of the Duration of the School-to-First-Job Transition Period				
Outcome: Duration of transition	Interval regression: Eq1	Interval regression with sample selection: Eq1	Interval regression with endogenous treatment and sample selection (with external IV): Eq1	Interval regression with endogenous treatment, sample selection (with external and constructed IV): Eq1
Work/study	**-12.008****	**-13.028*****	**-40.982*****	**-40.699*****
corr(e.Eq2, e.Eq1)		-0.488***	-0.541***	-0.541***
corr(e.Eq3, e.Eq1)			0.384***	0.383**
corr(e.Eq2, e.Eq3)			-0.477**	-0.448**
Observation	1,162	2,910	2,910	2,910
Uncensored	1,056	1,056	1,056	1,056
Left-censored	106	106	106	106
Right-censored	0	0	0	0
Selected		1,162	1,162	1,162
Nonselected		1,748	1,748	1,748
Source: Calculations based on 2014 SWTS data.				

Results

Table 4 : Estimation Results of the Duration of the School to First Job Transition Period by Different Sample Definitions

	Interval regression with correction of sample selection and endogenous treatment (external IV): Duration of transition: Eq1						
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Work/study	-29.715**	-32.387***	-44.546***	-25.142	-62.707***	-43.758***	-28.448***
corr(e.Eq2, e.Eq1)	-0.540***	-0.815***	-0.386***	-0.584***	-0.515***	-0.382***	-0.816***
corr(e.Eq3, e.Eq1)	0.333**	0.417***	0.357**	0.211	0.651***	0.339**	0.668***
corr(e.Eq2, e.Eq3)	-0.396	-0.465*	-0.277	-0.804***	-0.480**	-0.044	-0.288
Observation	2,804	2,456	2,638	2,669	2,471	2,608	2,421
Uncensored		622	959	987	912	948	567
Left-censored		86	82	94	81	77	106
Right-censored		0	0	0	0	0	0
Selected	1,056	708	1,041	1,081	993	1,025	673
Nonselected	1,748	1,748	1,597	1,588	1,478	1,583	1,748

Note: Regression A—regression with sample of non-zero transition-to-work period. Regression B—regression excluding subsample of individuals who left school by 14 or earlier. Regression C—regression excluding subsample of individuals who worked during the school year and individuals who worked during and outside the school year. Regression D—regression excluding subsample of individuals who worked outside the school year (summer break, holiday) only. Regression E—regression excluding subsample of individuals who worked while studying but had no experience in internships or apprenticeships during study. Regression F—regression C without subsample of individuals who worked while studying and had experience in internships or apprenticeships during study. Regression G—regression excluding those whose duration is above the median of those still in transition (53 months).
Source: Calculations based on 2014 SWTS data.

Results

Table 5 : Estimation Results of the Duration of the School-to-First-Job Transition Period: Heterogeneous Impacts					
Interval regression with endogenous treatment and sample selection: Duration of transition: Eq1	By Sex			By Level of education	
	Men	Women		At least secondary	Elementary
Work/study	-51.330***	-33.209		-38.774***	4.564
corr(e.Eq2, e.Eq1)	0.591***	0.311		0.548***	-0.276
corr(e.Eq3, e.Eq1)	-0.854***	-0.293		-0.641***	-0.177
corr(e.Eq2, e.Eq3)	-0.566***	-0.595		-0.346	-0.896
Observation	1,623	1,287		2,205	705
Uncensored	509	547		489	567
Left-censored	67	39		65	41
Right-censored	0	0		0	0
Selected	576	586		554	608
Nonselected	1,047	701		1,651	97
Source: Calculations based on 2014 SWTS data.					

Results (summary)

- Working while studying significantly reduces the transition spell:
  - For youth who left school with at least a secondary education.
  - For men. It was not found to make a difference in the duration of women's transition periods.
  - If the work is undertaken only during the summer break or holidays (not evenings and weekends during the school year).
- The transition spell is further reduced when working-while-studying experiences are combined with apprenticeships.

Conclusion

- The results draw the attention on the importance of acquiring a work experience during studies for favouring job opportunities later after school.

- Job policy interventions need to be reoriented or extended towards strategies that promote or encourage youth people to be engaged in well designed in-school work experience activities.

- Policy-makers may initiate and invest more on mentorship specific school-work programs in various fields and in relation with private enterprises.

- Policy-makers may promote temporary (summer) employment opportunities for students

- Job policy interventions programs may take the form of entrepreneurship education that may integrate business skills training into secondary education.

Thank you !

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