

Volume 38, Issue 1

Key drivers of NEET phenomenon among youth people in Senegal

François Joseph Cabral LINC/University Cheikh Anta Diop and CRES

Abstract

The purpose of this paper is to assess the phenomen of young people who are not in education, employment, or training (NEET), by identifying the key factors that drive the probability to belong to this category and explore targeting measures. In fact, due to the low rates of youth unemployment and the precariousness of their status in the labor market over the past years, an increasing interest for the analysis of this category of young people is growing in Senegal. A binomial model, based on the Poverty Monitoring Survey in Senegal (ESPS 2) is used to identify the key determinants of NEET status. The results show that the about 4 out of 10 young people belong to NEET group. The key factors which significantly affect the probability of a young person to belong to this group are: existence of a physical and mental disability, age and gender of the young person, gender and education status of the head of household, occupational and matrimonial status of the head of household, and household income. Howerver depending on the area of residence and gender sataus, determinants of the phenomenon can be different. As a result, it is important to introduce targeting mechanisms and some policies so as to reduce the ratio of NEET among the youth population.

We acknowledge Yaya Ky and Alhassane Camara for their assistance.

Citation: François Joseph Cabral, (2018) "Key drivers of NEET phenomenon among youth people in Senegal", *Economics Bulletin*, Volume 38. Issue 1, pages 248-261

Contact: François Joseph Cabral - joecabral 7@gmail.com. **Submitted:** August 04, 2017. **Published:** February 09, 2018.

Introduction

In 2013, about 73.4 million youths worldwide were unemployed, representing an unemployment rate of 12.6%. According to forecasts, this trend in the number of unemployed will continually rise until 2018, at which the rate will remain stagnant at 12.8% (ILO, 2013). Africa has an employed population mainly consisting of young people and about 17% of the youth population in developing countries live in the continent.. Also, about 43.3% of unemployed people in Sub-Saharan Africa are between 15 and 24 years old (ILO, 2012).

Unemployment affects educated young people as much as uneducated youth. A growing proportion of young African graduates from higher education can no longer be absorbed by the labor market. Between 2000 and 2009, the number of graduates from higher education has trebled to 4.9 million in low income countries—and this is estimated to reach 10 million in 2020 (BAD, 2013).

According to the World Bank Development Indicators, the African continent has recorded 4.9% annual economic growth between 2000 and 2011—and during the same period, ILO statistics revealed that the proportion of young people with employment has risen from 46.2% to 42.6% (ILO, 2012). The youth labor market in Africa is characterised by an inadequacy of the skills offered by the educational system in relation to the labor demand from the economic sector. An significant proportion of youth with higher education are exposed to "invisible underemployment". Moreover, young people are more and more under the constraint of accepting unskilled workers and employees or office employees' jobs (ILO, 2013).

Employment quality is equally a problem in the developing regions just as unemployment is. "Arab spring" that started in Tunisia reveals that young people's vulnerability can be a source of political instability. Lack of skills, education or vocational training forces a high proportion of Sub-Saharan Africa youth to take on low or non-paying jobs, which is mostly in the informal sector. From the ILO data (2012), the proportion of workers in the overall labor force that are in poverty is 39.1%. This is therefore a real challenge for African economies that are in quest of an inclusive growth, in order to be able to provide decent jobs for the population and set in place an educational system that is able to respond to the skills need of the economy.

In Senegal, the population has had an annual growth pace of 2.79% from 2005 and 2011. Over the same period, the youth population has grown at a rate of 8% (Republic of Senegal, SES, 2011). This growth in youth population can be an asset for the economy, because it is likely to encourage an increase in labor supply, innovation and creativity. Moreover, for the economy to leverage on the potential offered by the growing population, there is need for young people to occupy jobs in the productive sector. On the other hand, this increase in youth population can be a hindrance to development when strong pressure is on the labor market, in particular, in an economy where little opportunities of paid employment and job insecurity still persists. Also, the increase in youth population could be a source of inequality in access to employment, as well as, a determinant of political instability, as seen in the "Arab Spring". In other words, young people deprived of education, training or employment (that is, NEET) could be an issue of concern for policy-makers.

All things being equal, the labor market's usual indicators which are unemployment, the employment rate and the participation rate, is not sufficient to measure the vulnerability level of young people in the labor market. Hence, it is important to resort to other indicators which take into account the complexity of the situation of young people in the labor market. In ILO's 2011 report, it contended that the NEET rate measures the unemployed youth, and thus represents the potential youth labor force supply (ILO, 2011). The OECD had already established that NEET is another performance measurement of the youth labor market, to the extent that it represents the number of young people at the threshold of marginalization or social exclusion (Quintini & Martin, 2006). In 2014, it was noted that there was an increase of NEET in 30 of the 40 countries for which data was available over the 2007-2013 period. In France and USA, the NEET rate was respectively 15% and 20% (ILO, 2014).

The increase in youth unemployment over the past years has attracted more interest in the analysis of this category of young people, that are neither in education, employment, or training—also known by the acronym: NEET.

According to Furlong (2007) ¹, the notion of NEET has replaced the "Status Zer0" used in Great Britain at the end of the 1980's, to identify the 16 and 17 years old youth without social status; had no access to unemployment benefit and were out of training or education. However, the term "Status Zer0" has been abandoned and replaced by "Status A", which designates youth aged 16-18, not connected to any status of the labor market (Istance and colleagues, 1994) ². It was in 1999 that the term NEET had officially substituted "Status A" in a social policy document of the British Government called "Bridging the Gap", which aimed at improving the system of social protection directed at young people. The phrase NEET was thereafter understood as less pejorative and capable of capturing the heterogeneities within the youth population.

The origin of the concept justifies the fact that the first work in this field was conducted in Great Britain. Bynner and Parsons (2002) have shown that in Great Britain, the NEET category is principally determined by school failure. The methodology used by the authors was the assessment of a binomial model (Logit) from the data of a survey on the labor market. The results obtained established that among young boys, area of residence was a determining factor required to be grouped in the NEET category; whereas lack of care from parents towards children's education was a strong determining factor among girls. It has also been revealed that the impact of the NEET status among young boys is reflected in adverse experiences on the labor market, such as the deterioration of human capital and decrease of employability. On the other hand, among girls, the majority of whom are young mothers, the impact is reflected through psychological problems (depression, stress, et cetera.). To conclude, Bynner and Parsons (2002) proposed that training programs put in place by the British Government be tailored based on the groups presenting high risks of vulnerability.

¹ Quoted byr Valentina Cuzzocrea (2013)

² Quoted by 'European foundation (2012)

The decade which started in 2000 has seen the use of the concept be popularizing beyond the borders of Great Britain. This has revived the debate and enabled the development of multiple definitions of NEET (based on the countries), despite the efforts of the ILO to give the concept a universal definition (Social Research of the Scotish Executive Power, 2005; Inui, 2005; Chen, 2009; Eurofound, 2012; Cahuc and al., 2013).

The aim of this research is to assess the extent of the phenomenon of NEET by measuring its rate and identify the key factors of the status of NEET. Firstly, the situation of the Senegalese youth labor market is analyzed (section 1). The methodology is described in the section 2 and finally, we give the results in section 3.

1. Diagnostic of the youth labor market

The Senegalese economic growth does not sufficiently absorb the youth labor force. During the 2000-2010 periods, the economy has grown at an average annual pace of 3.1% (Republic of Senegal, SNDES, 2013) while the youth employment rate has remained significantly regular between 2005-2011 (ILO, 2013). Depending on the level of education and the place of residence, youth unemployment rate shows considerable disparities. Young people with no level of education have an employment rate of 46.2%, which is clearly higher than that of young people in other categories. The rural area has high youth employment (45.2%) (ESPSII, 2013). The youth employment market remains dominated by the non-educated, which are relatively more employed by the economy and exposed to a high poverty threshold.

Table 1: Youth employment rate, place of residence and level of education

	15 - 19	20 - 24	25 - 29	30 - 34	15 - 34	35 - 64	Senegal	
W. 6 11								
Place of residence								
Urban Dakar	15,2	28,5	37,3	48,0	31,0	51,0	38,5	
Other urban centers	14,7	25,6	36,1	46,5	27,8	49,1	35,3	
rural	38,2	44,0	50,9	54,7	45,2	57,8	50,2	
Level of eduction								
No education	44,1	44,0	47,8	49,6	46,2	54,5	50,0	
Primary school	30,9	42,9	44,6	50,4	40,7	51,2	43,8	
Junior secondary	12,8	25,1	38,8	54,5	21,6	51,1	27,6	
Secondary education	-	8,8	31,1	59,9	17,5	62,3	29,5	
Higher Education	-	8,4	22,1	53,6	26,5	68,6	43,1	
Total	27,7	35,3	43,8	50,8	37,5	54,2	43,8	

Source: ILO, Diagnostic Study on youth employment in Senegal, 2013

Senegalese youth remain essentially employed in the primary sector, most often in rural areas, and without education or training. About 49% of the youth labor force is employed in the

agricultural sector, while in the industry and services sectors, they represent 30% and 21%, respectively. The majority of the youth employees in these two sectors is higher education graduates that are in urban areas (ILO, 2013).

Table 2: Distribution of youth based on the sectors of activity

	Primary sector		Secondary	sector	Tertiary sector		Total		
	Number	%	Number	%	Number	%	Number		
Place of residence									
Urban	46055	4,9	408590	70,8	268149	65,0	722794		
Rural	898808	95,1	168670	29,2	144450	35,0	1211928		
Level of education	Level of education								
No education	674114	72,5	248141	44,1	178375	44,1	1100630		
Primary school	158790	17,1	211316	37,5	124626	30,8	494733		
Lower secondary	80987	8,7	71390	12,7	51927	12,9	204303		
Secondary	14972	1,6	20137	3,6	26937	6,7	62045		
Higher education	1463	0,2	11789	2,1	22217	5,5	35469		
Total	944862	100,0	576870	100,0	412564	100,0	1934296		

Source: ILO, Diagnostic Study on youth employment in Senegal, 2013

Youth are the most affected by unemployment. In 2011, the unemployed youth were about 12.2%, while the national average was only 10.2% (Republic of Senegal, 2011). Nearly 15% of young people aged 25-29 were jobless in 2011, with a heterogeneity between men (13%) and women (18%). People in the 20-24 years old youth group had an employment rate of 13%, of whom 18% were women and 9% were men (ILO, 2013).

Table 3: Evolution of the unemployment rate based on the age group and sex

Age	15 - 19	20 - 24	25 - 29	30 - 34	15 - 34	35 - 64	15 - 65
Male	5,6	9,3	12,7	8,8	9,1	7,1	8,2
Female	14,4	18,2	18,2	14,9	16,5	8,4	12,7
Senegal	8,9	12,7	15,1	11,7	12,2	7,8	10,2

Source: ILO, Diagnostic Study on youth employment in Senegal, 2013

2. Méthodology

The methodological approach is articulated into three steps. We first give the measurement of the NEET rate. Then, a model is specified in order to analyze the determinants of the NEET status. Finally a targeting approach of social protection is proposed which separates the threshold of the poverty depth.

Measurement of the NEET ratio

The approach followed to determine the NEET rate goes beyond the approach of the ILO. According to ILO, the unemployment rate measures the number of people without employment; have been in active search for employment in the preceding month and are available for work in the following two weeks. It records the percentage of people that do not find a job within the labor force. As a result, the definition of the NEET from the perspective of the ILO encompasses all the youth not involved either in the labour market, or in the educational system" (Eurofound 2012).

From the ILO approach, the NEET rate (θ) is measured as follows:

$$heta = rac{(unemployed\ and\ non\ working\ people\ outside\ the\ educational\ or\ training\ system)}{youth\ population\ of\ working\ age}$$

Determinants of the NEET status

The model used estimate the probability for a young person to fall into NEET status is a binomial one. This choice is justified by the binary status of NEET people. That is:

The choice of this model over the others is justified by the fact that the youth people is part of the whole population sample, and consequently giving a higher significance to extreme values versus the significance of the normal law described by the Probit Model (Hosmer and Lemshow, 2000). The process consists in explaining the dichotomous variable y from a set of p variables (x1, x2... xp). The dichotomous variable y represents NEET status and has a value of 1 if the young person is a NEET and 0 in all other cases.

The sample is thus subdivided into two groups: young people under NEET status (y=1) and those not under NEET status (y=0). Theoretically, we suppose that the probability for a person to be part of the first group (y=1) depends on some socio-economic factors.

An estimation of the probability that a young person belongs to class 1, if he's characterized by the vector X = (x1, x2... xp), is given by the following logistic function:

$$Pi = P(y_i = 1) = P(y_i * \phi \ 0) = P(\beta_0 + \beta_1 x_i + \varepsilon_i \ \phi \ 0) = P(\varepsilon_i \ \phi - (\beta_0 + \beta_1 x_i)) = \Phi(\beta_0 + \beta_1 x_i)$$
(1)

With Φ (.) the function of repartition of the logistic rule.

$$Pi = P(y_i = 1) = \Phi(\beta_0 + \beta_1 x_i) = \frac{\exp(\beta_0 + \beta_1 x_i)}{1 + \exp(\beta_0 + \beta_1 x_i)} = \frac{1}{1 + \exp(-(\beta_0 + \beta_1 x_i))}$$
(2)

By generalizing we can set this operation

$$Pi = P(y_i = 1) = \frac{1}{1 + \exp(-\eta_{ij})}$$
 (3)

The log-odds ratio is a transformation of the equation (3):

$$\eta_{ij} = \log\left(\frac{P_{ij}}{1 - P_{ij}}\right) \tag{4}$$

While, Pij cannot take any value other than 0 and 1; nij can take any value. The probability of being under NEET status, predicted by the equation (3), is therefore a result of log-odds ratio (nij) transformation. The logit model is, then, a model in which the log-odds ratio, nij is obtained through a linear combination of explanatory variables:

$$\eta_{ij} = \beta_{0j} + \beta_{1j} X_{1ij} + \beta_{2j} X_{2ij} + \dots + \beta_{Qi} X_{Qij}$$
 (5)

Where X_{qij} represent the explanatory variables and β_{qj} the parameters to be estimated.

The X_{qij} variables are components of the vector X and β_{qj} the unknown coefficients of the model with j varying from 1 to q.

The p explanatory variables for this model are the following:

The description of the variables, individual characteristics, is given in table 4.

Table 4: Description of the variables of the model

Components of vector X_i	Nature of the component
Mental and physical status	Dichotomic variable equals 1 if the individual has a physical or mental disability, if not 0.
Place of residence	Dichotomic variable equals 1 if the individual lives in an urban center, if not 0
Age	Continuous variable indicating the age of the individual
Sex	Dichotomic variable equals 1 if the individual is male
Education	Multinomial variable equals 0 if the young man has no education, 1 if
	primary education level, 2 if lower secondary school, 3 if secondary
	school and 4 if higher education.
Sex of the head of	Dichotomic variable equals 1 if the individual is male, if not 0
household	
Education of the head	Multinomial variable equals 0 if the head of the household has no
of household	education, 1 if primary education level, 2 if lower secondary school, 3
	if secondary school and 4 if higher education.
Socio-professional	Multinomial variable equal 0 if the head of household is unemployed
category of the head	or has no occupation, 1 if apprenticeship, 2 if he support the family, 3
of household	if independent worker, 4 if employer, 5 if laborer, 6 if skilled worker,
	7 if middle manager, 8 if senior manager.
Parental situation	Dichotomic variable equals 1 if the individual is orphan of father or mother, if not 0

Before analyzing the key NEET status factors among Senegalese young people, a discussion on explanatory variables is made and the expected outputs presented in the following subsection before the results' analyses.

Due to lack of explicit public policies devoted to this category, the mental and physical status is supposed to increase the probability of being a NEET.

NEET status is also dependent on the young person's area of residence. From one area to another, gaps in terms window of opportunities can be huge. Great opportunities of higher revenues can exist in some urban areas, whereas it is scarce in rural area.

The age of the young person has an incidence on the NEET status, but its effect on the probability of being a NEET is supposed to be ambiguous.

Gender of the young person can have an influence on his or her probability to be a NEET or not. This effect is supposed to be ambiguous.

The education level is supposed to reduce the probability of a young person to be a NEET as it increases his or her stock of human capital and chances to reach high segments of the labor market.

The head of household's gender and matrimonial status is supposed to have an influence on the probability of a young person belonging to that household to be a NEET. It can therefore have an influence on the economic choices. Its effect is supposed to be undetermined.

The head of household's education level is supposed to reduce the probability of a young person to be a NEET. It can have an influence on the factor return flows of the household and, hence the human capital endowments of the young persons of that household.

Also, the head of household's activity is supposed to have an impact on the probability of a young person to be a NEET. Depending on the fact that he or she is occupied, unemployed or inactive, this will affect to the position of young people with regards to NEET status.

Data

The data used are is the household survey conducted in 2011 for Poverty Monitoring purpose in Senegal (ESPSII-2011). The young people chosen are between 15 and 34 years old. It is considered that any youth who did not go to school at the moment of the survey, or did not attend vocational training, or had never been registered in a school is outside the educational system.

3. Results

- NEET rate

Table 5 gives the measurement of the NEET rate calculated, based on the ILO approach. In this case, it appears that 35.9% of the youth population in Senegal is under NEET status. The 25-29 years old are more affected as 37.9% of this age group belongs to the NEET category, followed by the age group 20-24 and 30-34. However, when this NEET status is extended to underemployment, then it appears that the rate of young person suffering from this

phenomenon is higher (44.4%).. The age group 25-29 is, one more time, more affected than the others.

Table 5: NEET rates based on the ILO approach

Age	NEET rate under ILO approach	NEET rate extended to underemployment
15-19 old	34,5	40,5
20-24 old	36,6	44,0
25-29 old	37,9	47,8
30-34 old	34,9	47,6
15-34 old	35,9	44,4

Sources: calculations.

- Determinants of the NEET status

The results of the binomial model shows that the existence of a physical or mental disability increases the probability of the young person to belong to the NEET group (table 6). It increases the risk to be a NEET by 116.9% at the national level, as highlighted by the oddsratio³. However, the probability to be a NEET due to a disability is higher in rural area than in urban one and is higher for boys than girls. The coefficient associated to area of residence is significant with regard to sex. For boys, the risk of exposure to NEET phenomenon increases more than for girls, as the odds-ratio showed it.

Education of the head of the household affects significantly the status of the young person with regards to the phenomenon of NEET. The probability of belonging to the NEET category increases by 17% for those who belong to a household whose is not educated as highlighted by the odds-ratio. This factor is a key one for girls as it increases the risk of being a NEET by 46.8% for this group when then belong to a household whose is not educated and only by 1.4% for boys. The risk of being a NEET for a young person is also greater when he belongs to a household with an unemployed or inactive head. The risk is more high for boys than for girls and is highest in rural than in urban area as observed with odds-ratio.

However, for those who belongs to a household headed by a female, the probability of being a NEET is lesser than for those living in a household headed by a man. The coefficient associated with this status is significant at national, urban and rural areas. It's also significant for girls and not for boys. Household income is also a key factor as the coefficient associated to this one is very significant at national, urban and rural areas and for both girls and boys. As highlighted by odds-ratio, this factor tends to decrease the probability of belonging to NEET group in urban more than in rural area. It also reduces the risk of being a NEET more for girls than for boys.

³ see table A1 in the annex.

With regards to matrimonial status of the head of household, the coefficient associated with the status "divorced" is significant at national and rural levels and for boys. As highlighted by odds-ratio, it appears that for those three cases young person belonging to household whose head is divorced are more exposed to risk of being NEET than those whose head of household is not divorced. By contrast, for young person living with a head of household not married, the probability of being a NEET is reduced by 35% at the national level. It decreases by 40% and 27% respectively in urban and rural areas. For boys, the probability of being a NEET if the head of household is not married tends to decrease by 50% whereas the coefficient associated with this status is not significant for girls.

The coefficient associated with age of the young person is significant at the national and rural levels and for both boys and girls. As highlighted by odds-ratio, probability to be a NEET tends to decrease with age by 1.2% and 3% respectively at national and rural levels. It decreases also by 5.4% for boys whereas is increases slightly by 0.6% for girls, due to gaps in opportunities of jobs which are different for the two groups.

Table 6: Determinants of NEET: results of the regression

Variables	Senegal	Boys	Girls	Urban	Rural
	Coef	Coef	Coef	Coef	Coef
Disability	0.774***	1.105***	0.505***	0.792***	0.798***
Area of residence of the young=urban	0.108	0.413***	0.157***		
Education level of the head of household =none	0.157***	0.0142	0.384***	0.305***	0.166***
Age of the young	-0.0122***	0.0551***	0.00575*	0.00513	0.0302***
Sex of the young=female	1.444***			1.235***	1.709***
Occupation of the head of household=Unemployed	0.505***	0.680***	0.377***	0.335***	0.944***
Occupation of the head of household=Inactive	0.194***	0.258***	0.181***	0.0928*	0.310***
Matrimonial status of the head of household=polygamous	0.0311	0.115*	-0.0224	0.134**	-0.0398
Matrimonial status of the head of household=single	-0.421***	-0.682***	-0.167	0.515***	-0.314**
Matrimonial status of the head of household=Widower	0.0843	0.148	0.0287	0.0977	0.109
Matrimonial status of the head of household=Divorced	0.238*	0.817***	-0.0996	0.155	0.933***
Matrimonial status of the head of household=Concubinage	-1.220	0	-1.130	- 4.007***	0.658
Sex of the head of household=Female	-0.170***	0.0554	-0.255***	-0.132**	-0.242***
Logarithm of the household income	-0.165***	-0.175***	-0.156***	- 0.124***	-0.224***
_cons	0.855***	1.789***	1.657***	0.0859	1.899***
N	53494	24171	29318	28143	25351

^{*} p<0.1, ** p<0.05, *** p<0.01

Sources: calculations.

Conclusions

The aim of this research is to assess the phenomenon of young person "not in employement, nor in education, nor in training" (NEET) in Senegal. We firstly measure the NEET rate in Senegal, based on the standard ILO method and an extend approach which encompasses the underemployed youth and secondly identify the key factors that drive it. Two indicators and a multinomial model have been used to that purpose.

Based on the results, a ratio of 34.5% of the youth are hit by the NEET phenomenon, based on the ILO standard approach (and 44.4% based on the extended approach). At the national level, the key factors that drive the phenomenon of NEET group are the existence of a physical and mental disability, age and gender of the young person, gender and education status of the head of household, occupational and matrimonial status of the head of household, and household income. However depending on the area of residence and gender status, determinants of the phenomenon can be different.

Household income tends to have significant effects and reduce the probability of belonging to the NEET group more in urban area than in rural area and more for girls. Disability tends to increase for a young man the risk of belonging to the NEET group in rural area and for for boys. With regards to gender status, being a boy in rural area tends to increase the probability of belonging to the group of NEET. Head of household education and employment status also play a key role. Whereas not educated status of the head of household increases the risk of being a NEET for a girls, not employed status of the head of household increases the one for boys. Matrimonial status of the head of household is also a key determinant. For girls, the risk of being a NEET tends to decrease when they belong to a household whose head is a female whereas this factor is not significant for boys. Howerver, for a young man, belonging to a household whose head is divorced tends to increase the risk of being a NEET. With regards to the area, belonging to a household whose head is divorced also increases the probability of being a NEET in rural districts.

Therefore, it is important to put in place a targeting approach in order to reduce the NEET population by explore several channels through which it is feasible. It suits to set in place high labor intensity programs so as to increase household income and take into account the fact that a household headed by a non educated or an unemployed predisposes the young to be a NEET. Targeting of the NEET youth population and development of a high labor intensity program would mean, for the Government (central government, local government, agencies, etc.), to allocate to the program an amount of its public job opportunity. This policy which would enable the Government to intervene directly on the labor market in order to stimulate job creation could significantly reduce poverty, as well as serve as an important social protection policy oriented toward youth. Government and public agencies managing direct and indirect programs could have as particular task in their mission to reduce the burden of the NEET in the youth labor market by providing training and labour access to those who have never received any training or education. Only the acquisition of these qualifications could allow the youth to be absorbed in the labor market.

Also the importance of determinants such as disability and divorced status of the head of household for girls and in rural area needs some to implement some policies so as to fight against NEET the phenomenon. Hence, some policies are also suitable to mitigate the factors that drive the NEET phenemenon.

Bibliography

Bureau International du Travail. (2013). Tendances Mondiales de l'emploi des jeunes. Génève.

Banque Africaine de Développement. (2013). Annuaire Statistique pour l'Afrique.

Banque Mondiale. (2013). *Indicateurs de Développement*.

Bureau International du Travail. (2011). Tendances Mondiales de l'emploi des jeunes. Génève.

Bureau International du Travail. (2012). Tendances Mondiales de l'emploi des jeunes. Génève.

Bureau International du Travail. (2013). Etude Diagnostique sur l'emploi des jeunes au Sénégal.

Bureau International du Travail. (2014). Tendances Mondiales de l'emploi des jeunes. Génève.

- Bynner, J., & Parsons, S. (2002). Social Exclusion and the Transition from School to Work: The Case of Young People Not in Education, Employment, or Training. *Journal of Vocational Behavior*, pp. 289–309.
- Chen, Y.-W. (2009). Once 'NEET', Always 'NEET'? Experiences of Employment and Unemployment of Youth Participating in a Job Training Program in Taiwan . *The 2009 Singapore Conference:*Asian Social Protection in Comparative Perspective . Singapore.
- Conseil d'Analyse Economique. (2013). L'emploi des jeunes peu qualifiés .
- Cuzzocrea, V. (2013). La catégorie des NEET : quel avenir? Italy: Council of Europe youth project.
- European Foundation. (2012). Young people not in employment, education or training: characteristics, costs and policy responses in Europe. Luxembourg.
- Furlong, A. (2007). The zone of precarity and discourses of vulnerability: NEET in the UK. *The Journal of Social Sciences and Humanities*, pp. 101-121.
- Inui, A. (2005). Why Freeter and NEET are Misunderstood: Recognizing the New Precarious Conditions of Japanese Youth. *Social Work and Society International online journal*.
- Quintini, G. & Martin, J. P. (2006), "Starting well and loosing their way? The position of youth in the labour market in OECD countries", IZA Discussion paper, no. 2582.
- Organisation pour la Coopération et le Développement Economique. (2006). *Starting well or losing their way? The position of youth in OECD countries*. Paris.
- République du Sénégal. (2011). Situation Economique et Sociale.
- République du Sénégal (2013). Stratégie Nationale de Dévéloppement Economique et Sociale.
- Scottish Executive. (2005). *Literature review of the NEET group*. Edinburgh: Scottish Executive Social Research .
- Williamson, H. (1997). Status ZerO, youth and the 'underclass s': Some considerations". *MacDonald R.* (ed.), Youth, the "underclass" and social exclusion. Routledge, London.

- Williamson, H. (2001, Winter 2000/Spring2001, pp. 6-8.). "From Tommy Butler' to Tony Blair" A story of marginalised youth and public policy. *ESRC Youth, Citizenship and Social Change Newsletter*.
- Williamson, H. (2005). "Young people and social inclusion. An overview of policy and practice". *Barry M. (ed.), Youth policy and social inclusion. Critical debates with young people.*
- Yates, S., & Payne, M. (2006). "Not so NEET? A critique of the use of 'NEET' in setting targets for interventions with young people. *Journal of Youth Studies*, pp. 329-344.D.

Annex: Marginal effects

Modalité de la variable	Senegal	Boys	Girls	Urban	Rural
	Odd	Odd	Odd		Odd
	ratio	ratio	ratio	Odd ratio	ratio
	2.169**	3.019**	1.656**		2.221**
Disability	*	*	*	2.207***	*
		1.511**	1.170**		
Area of residence of the young=urban	1.114	*	*		
	1.170**		1.468**		1.180**
Education level of the young=none	*	1.014	*	1.357***	*
Education level X Area of residence of the young	1.177**				
	0.988**	0.946**			0.970**
Age of the young	*	*	1.006*	1.005	*
	4.236**				5.523**
Sex of the young=female	*			3.438***	*
	1.658**	1.975**	1.457**		2.570**
Occupation of the head of household=Unemployed	*	*	*	1.399***	*
	1.214**	1.294**	1.199**		1.363**
Occupation of the head of household=Inactive	*	*	*	1.097*	*
Matrimonial status of the head of					
household=polygamous	1.032	1.122*	0.978	1.143**	0.961
	0.657**	0.506**			
Matrimonial status of the head of household=single	*	*	0.846	0.597***	0.730**
Matrimonial status of the head of household=Widower	1.088	1.159	1.029	1.103	1.115
		2.264**			2.542**
Matrimonial status of the head of household=Divorced	1.269*	*	0.905	1.168	*
Matrimonial status of the head of				0.0182**	
household=Concubinage	0.295	1	0.323	*	1.930
-	0.844**		0.775**		0.785**
Sex of the head of household=Female	*	1.057	*	0.876**	*
	0.848**	0.839**	0.855**		0.799**
Logarithm of the household income	*	*	*	0.883***	*
N	53494	24171	29318	28143	25351

^{*} p<0.1, ** p<0.05, *** p<0.01

Source: calculation of the author.