Migration and participation of young people in labor market and in education in Brazil[1]

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Cenários diversos e desiguais frente ao trabalho

ABSTRACT

The aim of this paper is to study the young people profile (15-24 years old) in Brazil according to their education and labor conditions along the years 2000. It specially focuses on the group of NEETs (Neither in Employment nor in Education or Training) since it represents the most vulnerable situation among the others (Just Employed, Just in Education, Simultaneously Employed and in Education). According to Bertola and Ocampo (2010) Latin America has improved its educational indicators substantially during the 20th century, maintaining levels still under developed countries' levels. Economic environment was also favorable with sustained economic growth allowing higher demand in the labor market and consequently more income to the households as increasing international demand for primary products, exported mainly by emerging economies. However part of the young population was still kept out of education and labor market. Macroeconomic and demographic aspects are vital to explain some trends. Specifically, most NEETs are women, belonging to low income families and low to moderate educational level. Migration is also a demographic aspect to be investigated. Our main hypothesis is rooted in the belief that migrant families are in worse socioeconomic situation, one of the reasons to search for better conditions in other region. Therefore their children may be exposed to a more delicate condition having more chances to be a NEET. Thus, this research analyses young people profile considering individual socio-demographic characteristics including the factor of being a migrant (or from a migrant family). Data are from National Household Survey (2001 and 2014), and we estimate a logit model for the probability of being in such condition considering the specific applicable sociodemographic variables. Further, the study applies the Blinder-Oaxaca decomposition in order to decompose the difference in the probability of being NEET between 2014 and 2001 into (a) differences in observable sociodemographic characteristics, such as age, gender, schooling, place of residence and household per capita income; and (b) differences into the return to these observable features — called "unexplained gap". One of the main findings of the paper is that unexplained gap contributed to decrease the proportion of NEETs among migrant families.

1. Introduction

The need for policy makers to reflect, design so the government can implement public policies is a challenge task that is under consideration in this research. Therefore, socio demographic characteristics were investigated and included in this work. An often used methodology to study this phenomenon is to estimate the probability of being in NEET condition considering several applicable sociodemographic variables and then investigate if these probabilities for each factor have raised or have dropped along the studied period. Besides age, sex, race, education (and so on) and household characteristics such as region and area, we compared migrants and not migrants within NEETs. Moreover, we investigated if there were any children in the family, as the NEET could be at home to take care of the child, a lack of social support of public policy in order to enroll this child in pre-school educational system.

Interpreting the results presents an important step, however, because regions differ widely in terms of social and economic conditions across the country it is necessary to disaggregate information in smaller geographic spaces. In a dynamic perspective it is important to obtain information on the evolution of migrant and not migrant NEETs. To accomplish this task we have introduced another methodological tool which plays a fundamental part in achieving the objective of conducting better evaluations. Blinder Oaxaca decomposition (Blinder 1973; Oaxaca 1973) were applied to compare differential between two NEET groups (migrants and not migrants) in 2001 and in 2014.

This proceeding allowed the comparison into a part that is "explained" by group differences in sociodemographic characteristics such as age, sex, race, education (and so on) and a residual part that cannot be accounted for by such differences in NEETs determinants. This unexplained part subsumes the effects along the period in unobserved predictors.

In the next section we review some of theoretical debate and methodological problems that we have confronted with and the ways in which we try to deal with them. Stating this, it should be made clear that we intend to present in this article part of our current research about young population (migrants and not migrants) and their conditions in a developing country.

2. Literature

Literature on internal migration is extensive; SAHOTA (1968) on a paper about interstate migration in Brazil has briefly mentioned three hypotheses to explain the phenomenon.

The first hypothesis is neoclassical and it has come mainly from Chicago School. It is put in terms of costs and investments that will bring a return to migrants along the time. The evaluation is based on costs of migrating, i.e. travel, residence versus social and economic benefits. Since the payoff period is shorter for older migrant workers they tend to be less disposed to move than the young ones. The second hypothesis is based on the approach that there is a tied link between economic development and internal migration in terms of the selectivity of people. Kuznets's seminal work (1957) is the cornerstone and the explanation supporting that migrants are more dynamic people, ready to take new risks. Internal migration thus results in the redistribution of the countries' population promoting economic growth and development and stimulating further migration of select people. The third approach to internal migration comes from English economists, mainly Ravestein ((1885) and Redford (1964). According to these authors the motivation for migration is due to a pull/push factor rather than motivated by economic factors such as cost-and-return. Therefore, migrants may accept jobs like those of shoe shine, porter, or even casual jobs instead of employment in modern sectors pushed from rural areas and pulled to the bright lights of towns. In fact, most internal migration theories are based on rural-urban movement of people.

Sociological and economic approach is largely influenced by economic development theory. However, sociologist rather call it under the name of modernization theory, both are based on the shift of population from rural to urban areas as an important factor resulted of the economic development or modernization dynamics.

According to sociological approach rural surplus-labor moves to urban areas where there is better standard of living, even with higher social, psychological, economic costs in living (i.e. housing, transport, etc.). The cost-benefit relationship always favors migration. Economic approach emphasizes the low agricultural productivity with almost unlimited labor force in rural areas, densely populated. This rural surplus-labor moves to industrial sector and its improving labor productivity due to constant technical progress.

Brazil has historically considered the reallocation of the labor force from agricultural sector, in rural areas to the industrial sector. According to BRITO (2009) most of the internal migration theories for developing countries reflect a historical period, especially the 60s and 70s or even before when it happened. Carvalho (1994) estimated that 43 million people migrated from rural to urban areas, mainly to metropolitan agglomerations, between the 60s and the 80s in Brazil. Brito *et al.* (2002) emphasized that urbanization rate increased from 31% (1930/40) to 55% (during the 60s). Nowadays, Brazilian urban people represent over 80% of the country's population. PASTORE & SILVA (1979) highlighted that migration flows towards cities meant a process of upward social mobility. New urban jobs for migrants or their children in low tertiary improved considerably their access to basic services, namely education, health and income. Despite this point of view, JANNUZZI (2002) calls attention for the fact that only part of this population showed improvements in the living conditions since many migrants did not reach the amount of income necessary for subsistence in the cities and many of them were to live in poor condition in the outskirts of the cities. Therefore, social mobility did not decrease social inequality in the country.

Migration patterns began to change in the 70s and BRITO (2009) advised that it was necessary to give a step forward towards new theories that could explain this new migration stage. In this sense, Baeninger (1998) discusses based on a historical and structuralist perspective the transformation process in the productive economical redistribution and its reflections on the migration from 1980s on. The author admits a close link between a new economic configuration in the country and the population flux, showing relevant data on diminishing migratory balances towards metropolitan agglomerations. Indeed, PACHECO (1996) highlighted that the trade openness and regional productive restructuring intensified enterprises' adjustments from 1980 on in Brazil. Dynamic urban centers experienced difficulties and new challenges in this international scenario, decreasing its attractiveness. According to Brito (2009) demographic circumstances such as less fertility associated to economic and social conditions made population flux towards metropolitan agglomerations less probable. Labor market requiring people more educated and prices of housing and food had become unviable the previous volume of migration balances. The competitiveness of metropolitan areas started discouraging the sense of better lifestyle and social mobility. Medium-size towns started to play an important role of attractiveness reducing opportunity costs for enterprises and for workers, as well. Migration patterns changed substantially from the 80s decreasing new entries, in parallel to an increasing return migration.

Although the literature is large and related theory extensive this research includes a new perspective that has been curiously less explored. Migration works have provided few discussions over young people **Neither in Education nor in Employment or Training**. These young people, known as NEET, have been progressively considered a major social problem for multilateral institutions.

OECD (2014) data shows that NEET rate has increased in most of the countries members since the 2008 economic crisis. The average rate was about 13% in 2012 and the rate for emerging economies were generally higher. These people ought to be a target of a public policy avoiding higher costs in the future. "Countries should ensure access to quality services for children and prevent labor market exclusion of school leavers." (OECD, 2014).

The Economic Commission for Latin American and the Caribbean - ECLAC (2015) estimates that approximately 30 million Latin American youngsters (22% of the young population) are out of two main areas of social inclusion: education system and labor market. This is not just a present risky situation but for the future, as well. Researchers (VAN DIJK et al., 1990; JUSTUS, 2009) have found a close relation between delinquent behavior and abuse of alcohol and drugs among young people with lack of education.

ECLAC evaluated the profile of this population in order to understand the phenomenon. The study demonstrated that they were mainly women (73.5%), they lived in urban areas (63.5%) and they were distributed in the bottom 40% poorest households in 2014.

Camarano & Kanso (2012) have searched the profile of the Brazilian youngsters simultaneously out of the school system and labor Market. The authors found out that Brazil followed almost the same Latin America profile. Using data from 2000 and 2010 Demographic Census they confirmed that young women were more exposed to becoming NEETs (2/3 married), households were mainly in urban areas and that NEETs came mostly from low income families. Education attainment of the household reference person played also a positive effect in lowering NEET rates along the studied period (2000-2010).

Other research (Corseuil, Santos, e Foguel, 2000; Leme e Wajnman, 2000; Dauster 1992; Fonseca, 1994) on young Brazilians showed that family background such as parents' education, household per capita income and individual characteristic are determinant on their choice between studying and working. Therefore, these issues of main importance must be considered in this research.

3. Material and Methods

3.1. Concepts and definitions

Young people are defined chronologically according to age range. The United Nations consider, for statistical purposes, people between the ages of 15 and 24 years. (UN, 2007)

According to the United Nations recommendations, migrants consist of four categories: (a) long-term immigrants (or emigrants), (b) short-term immigrants (or emigrants), (c) residents returning after (or leaving for) a period working abroad, i.e. short-term emigrants returning (or leaving); and (d) nomads. However "migrant" is a designation employed in this paper for a person who is not born in the municipality of residence since it concerns internal Brazilian migration.

NEET stands for young people aged 15-24 Not in Education, Employment or Training.

Analyses are based on data from Brazilian National Household Survey (PNAD 2001 and 2014) of the Brazilian Institute of Geography and Statistics (IBGE). PNAD is representative of the entire territory but the 2001 survey did not investigate the North rural region of the country.

Therefore, to make possible the comparison, youngsters from North rural region are taken out of the 2014's base. The survey also investigates three types of households: (a) permanents, (b) improvised and (c) collective and for this paper we have considered only permanent households which represented over 99% of the households.

Employing data from 2001 and 2014 Brazilian Household Survey we used two Linear regressions to estimate if the person is NEET or if the person is not among young migrants and non-migrants in order to verify the differences between these two groups and along the period.

3.2. Statistical Models

OLS estimation

Treatment in a specifically cross-section context and the estimation can be found in Wooldridge (2002). Linear regression model based on the following expression:

$$Y_i = \sum_{i=1}^{k} \beta_i X_i + e \tag{1}$$

Where Y_i is the dependent variable. The dependent variable is a function of k independent variables: $X_1, X_2, X_3, \dots, X_k$. The random error component is represented by e. The value of the coefficient β_i determines the contribution of the independent variable X_i, and β_0 is the $y-$ intercept. Therefore, Y_i is composed of two components – one fixed and one random.

Particularly, as mentioned previously, this paper has as dependent variable the young person status (15-24 years old), living in Brazil considering his/her condition in/out labor market and in/out education simultaneously. In other words the variable states if the person is NEET or not in NEET condition. Despite estimations with binary dependent variable use probit or logit models usually, we worked with linear estimation to simplify the decomposition process. The greatest difference between these approaches happens in the extremes of the distribution. However our main concern is with the regressors mean values behavior which would bring few practical implications to the specification form.

Several variables can influence a person to become NEET, those related to the person and those related to the household. Mostly, they are binary variables which have value 1 when the person belongs to a group or zero if not. They are:

Young Person

- Nine binary variables to represent ten ages (15 to 24) of the young person, being 15 the reference age.
- One binary variable for gender: *Male* (reference); *Female*;
- Three binary variables to represent four categories of color/race: (i) *Black*, (ii) *Yellow*, (iii) *Brown* and (iv) *White* (reference). Indians were aggregated with brown category and they represented 0.1 of the considered population.
- Three binary variables to represent four categories of education: (i) *under primary school level or less than 8 years of school* (reference); (ii) *primary school level or 8 years of school*; (iii) *secondary level complete or incomplete or 9 to 11 years of school*; (iv) *complete secondary level and tertiary education or 12 school years or more*.

Household

- Six binary variables to represent seven residence location region; (i) *North*; (ii) *Northeast* (reference); (iii) *Southeast*; (iv) *South*; (v) *Midwest without Federal District*; (vi) *Federal District*.
- Logarithm of household income per capita;
- One binary variable to represent two categories: (i) *household without children under 7 years old* (reference); (ii) *household with children under 7 years old*.

Therefore, the estimation had 24 explanatory variables. Some observations were taken out of the data base because of ignored or not declared answers. The new base had 74.764 observations for the 2001 Survey and 57.814 observations for the 2014 Survey. We employed the expansion factor supplied by IBGE, Brazilian Statistical and Geographic Institute.

The research applies also the Blinder-Oaxaca decomposition in order to verify the difference in the probability of being NEET both for migrants and non-migrants for the years of 2014 and 2001 into (a) differences in observable sociodemographic characteristics, such as age, gender, schooling, household condition, place of residence; and (b) differences into the return to these observable features.

Blinder Oaxaca Decomposition Method

The decomposition method (Oaxaca, 1973), has been widely used in studies of gender and racial differentials. It explains the gap in the means of an outcome variable between two groups (Ex: between the migrants and the non-migrants). The gap is decomposed into that part that is due to group differences in the magnitudes of the determinants of the outcome in question, on the one hand, and group differences in the effects of these determinants, on the other.

This approach requires that the regression models are estimated for each of the two groups, migrants and non-migrants separately (i.e. rather than pooling the two groups together). Social researches (CAMERON & TRIVEDI, 2005; MAIA & SAKAMOTO, 2015; MAIA & GARCIA, 2015) have used the technique lately. The main idea is to control observable and unobservable variables that can affect a young person to be or not NEET. Let r refer to each migrant/non-migrant group (i.e. $r = M$ for Migrants and $\bar{M}$ for Non-migrants) for a given country:

$$Y_{it}^r = \alpha^r + \sum_{j=1}^{k} \beta_j^r X_{jit}^r + \varepsilon_{it}^r \tag{1}$$

Because equation 1 is estimated separately for each group (migrant/non-migrant), the dichotomous variable for Migrant is removed from the vector of independent variables, X_j. As is well known, estimation by ordinary least squares (OLS) ensures that the difference between the means on the dependent variable for the two groups (i.e., $\left[\Delta \bar{Y} = \bar{Y}^M - \bar{Y}^{\bar{M}}\right]$ for Migrants versus Non-migrants is obtained from:

$$\bar{Y}^r = \alpha^r + \sum_{j=1}^{k} \beta_j^r \bar{X}_j^r \tag{2}$$

which may be re-arranged as:

$$\Delta \bar{Y} = \left\{\alpha^M - \alpha^{\bar{M}} + \sum_{j=1}^{k}\left(\beta_j^M - \beta_j^{\bar{M}}\right)\bar{X}_j^M\right\} + \left\{\sum_{j=1}^{k} \beta_j^{\bar{M}}\left(\bar{X}_j^M - \bar{X}_j^{\bar{M}}\right)\right\} \tag{3}$$

$$\qquad\qquad Rates \qquad\qquad\qquad\qquad Composition$$

The first part of the right-hand side of equation 3 is the rates component which, as noted previously, is often interpreted as deriving from labor market and educational conditions to the extent that the model specification is without omitted variable bias. This component derives from an entirely unexplained differential plus a portion that is due to the differential coefficients associated with the measured independent variables. The second part of the right-hand side of equation 3 is the composition component which derives from the migration condition differences between the means of the measured independent variables.

4. Main results

Descriptive statistics

A clear signal of changing young migration patterns is illustrated in Table 1. We may see that migration has decreased between 2001 and 2014. They represented about fifteen percent of the young population in 2001 and just about eight in 2014 and they declined by half from 4 to 2 million.

Throughout the period young women were more likely to migrate than men once the proportion of women was always more expressive among migrants than those of men. This might be a reflection of the labor market gender's changing conditions with more opportunities for them.

Age structure was an important characteristic as well, once results indicate that among young people those of 19 years old and older were more likely migrate. Their relative advantage in the 19 to 24 age range is clear comparing migrants to non-migrants.

Race / color seem to be of great relevance to determine migration for black youngsters along the period. They represented 4.2% in 2001 and 9.4% in 2014 a difference of 5.2 p.p.. Meanwhile, more white and yellow Brazilians remained in their birth cities as we may see at Table 1.

As for educational attainment, people highly educated were more motivated to migrate along the period. The 12-years or more of schooling was the only category that has increased in absolute number of people. Moreover, the concentration of migrants was more representative in the highest two educational categories (36.4% versus 63.1%) in 2014. It's important to highlight that there was a shift of the entire young population (i.e. migrants and non-migrants) towards higher levels of schooling.

Brazil is known for its significant regional differences which can be historically observed by a considerable number of migrants towards Southeast region mainly from the Northeast. However, our analyses focus on the migration among cities and Table 1 shows us that the proportions of migrants in Northeast, Southeast and South were higher than in the other regions. For example, in the Northeast young migrants represented 27.8% of the young people in the region meanwhile they represented only 14.8% in Brazil in 2001. Further, the same type of profile was observed for the year of 2014. These findings cannot be readily explained by a new migration pattern, but we interpret the results as suggesting that Northeast cities may have been offering better labor market and income opportunities than it has ever happened historically. Nonetheless Brazilian young population as a hole have remained more still over time, regional segmentation shows that North, South and Midwest regions have still been attracting relatively more youngsters in 2014. However, young population as well as population concentration still remains in Northeast and Southeast regions.

Previous researches (ECLAC, 2014; Camarano & Kanso, 2012) have pointed out that young women were more exposed to becoming NEET and we show in Table 1 that NEET population is relatively more representative among migrants than among non-migrants (24% versus 14.8%

in 2001 and 21% to 15% in 2014) a sign of the migrant vulnerable situation which data showed us that it has narrowed over time. As a matter of fact, additional descriptive statistics provided by Table 2 shows that income is higher for non NEETs' households. But a migrant NEET person had a little higher income than a non-migrant in 2001. This situation probably reflects the willingness of these individuals or families to take risks and to get out of difficult origin social situation. There is also a perception that the risk worths.

Table 1 – Distribution of young people migrant or non-migrant according to socioeconomic characteristics

Characteristics	2001				2014			
	Non-Migrant		Migrant		Non-Migrant		Migrant	
	Abs	(%)	Abs	(%)	Abs	(%)	Abs	(%)
Gender								
Male	14,402,290	50.5	1,916,646	45.4	14,601,132	50.6	1,042,713	44.7
Female	14,150,370	49.5	2,305,809	54.6	14,243,719	49.4	1,287,529	55.3
Age								
15	3,104,276	10.9	347,215	8.2	3,135,520	10.9	174,831	7.5
16	3,091,067	10.8	358,933	8.5	3,115,671	10.8	178,152	7.6
17	2,939,839	10.3	351,818	8.3	3,099,103	10.7	187,235	8.0
18	3,058,995	10.7	419,107	9.9	3,157,301	10.9	207,781	8.9
19	3,066,822	10.7	466,882	11.1	2,910,460	10.1	258,387	11.1
20	2,844,133	10.0	436,007	10.3	2,850,435	9.9	279,289	12.0
21	2,857,330	10.0	476,943	11.3	2,661,140	9.2	251,434	10.8
22	2,586,092	9.1	462,999	11.0	2,760,466	9.6	252,332	10.8
23	2,585,373	9.1	445,190	10.5	2,582,532	9.0	264,148	11.3
24	2,418,733	8.5	457,361	10.8	2,572,223	8.9	276,653	11.9
Race / Color								
White	14,344,460	50.2	2,128,833	50.4	12,172,715	42.2	968,912	41.6
Black	1,653,174	5.8	175,454	4.2	2,506,942	8.7	218,485	9.4
Yellow	112,411	0.4	13,166	0.3	98,873	0.3	8,114	0.3
Brown	12,411,343	43.5	1,899,036	45.0	13,968,028	48.4	1,122,123	48.2
Indian	31,272	0.1	5,966	0.1	98,293	0.3	12,608	0.5

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Table 1 – Distribution of young people migrant and non-migrant according to socioeconomic characteristics
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	2001				2014			
	Non-Migrant		Migrant		Non-Migrant		Migrant	
	Abs	(%)	Abs	(%)	Abs	(%)	Abs	(%)
Education								
Less 8 years	12,805,521	44.8	2,132,677	50.5	6,348,897	22.0	532,141	22.8
8 years	3,864,251	13.5	555,936	13.2	4,242,237	14.7	325,798	14.0
9 to 11 years	9,973,045	34.9	1,269,367	30.1	14,491,137	50.2	1,149,697	49.3
12 years or +	1,909,843	6.7	264,475	6.3	3,762,580	13.0	322,606	13.8
Region								
North	1,841,433	6.4	341,794	8.1	2,158,600	7.5	210,083	9.0
Northeast	8,814,517	30.9	1,174,850	27.8	8,848,763	30.7	673,758	28.9
Southeast	12,084,993	42.3	1,531,117	36.3	11,686,407	40.5	812,322	34.9
South	3,892,257	13.6	704,896	16.7	3,914,824	13.6	441,464	18.9
Midwest	1,553,951	5.4	401,481	9.5	1,777,916	6.2	192,310	8.3
Fed. District	365,509	1.3	68,317	1.6	458,341	1.6	305	0.0
NEET								
No	24,866,980	87.1	3,405,106	80.6	25,077,433	86.9	1,927,775	82.7
Yes	3,685,680	12.9	817,349	19.4	3,767,418	13.1	402,467	17.3
Total	**28,552,660**	**100**	**4,222,455**	**100**	**28,844,851**	**100**	**2,330,242**	**100**

Source: Household Survey, IBGE

Table 2 – Household per capita income of young people migrant and non-migrant NEET or not NEET: 2001/2014

| | 2001 | | | | 2014 | | | |
| | Non Migrant | | Migrant | | Non Migrant | | Migrant | |
	NEET	Not NEET	NEET	Not NEET	NEET	Not NEET	NEET	Not NEET
Mean	440.67	720.17	454.61	736.63	541.47	872.60	529.43	949.45
Median	276.31	414.46	287.82	422.13	377.33	616.50	375.00	696.50
St dev	12,708.33	22,894.74	12,640.13	21,745.92	15,982.56	24,525.74	13,573.20	29,946.09

Source: Household Survey, IBGE

OLS Estimation

The results for estimation where the dependent variable is whether or not the young person is a NEET is shown in Table 3. Both for migrants and non-migrants the probability to be a NEET increased as the young person grew older with slight differences between the groups. For non-migrants the chances raised from 5% (16-year-old) to 17.6% (24-year-old) from the reference age (15-year-old) in 2014. For migrants they raised from 7% (16-year-old) to 18 (24-year-old), keeping other variables unchanged always. This finding is consistent with previous research indicating that migrants in general come from vulnerable situation and they search for jobs as their age allows them to work, they are ultimately after better life conditions and social mobility (PASTORE & SILVA, 1979).

Gender plays an important role in determining if a person is NEET. Our estimation for non-migrants shows that the probability of young women becoming a NEET was 10% higher than one of the men in 2014 confirming ECLAC's (2015) prior results for Latin America. Estimation also demonstrates that this probability has been decreased over time. An additional issue is important to highlight: the probability of being a NEET when there was a child under 7 years old in the household fell down from 7.3% to 5.8%, between 2001 and 2014, suggesting that there are more pre-schools to keep these children, which might have released some women from childcare. Among migrants the situation of gender is more critical; the probability of being NEET for a woman was even higher (19% higher than for a man in 2014). Fortunately, that condition tended to lower along the period (25% in 2001).

The coefficients for race and color were mainly not statistically significant for the four models. In regard to the findings for education attainment a notable pattern is evident for migrants and non-migrants in both years (2001 and 2014). Education achievement is undoubtedly an important factor to reduce the possibility of being a NEET. Despite the condition of migration and the period (2001/2014) to be a secondary school graduated or to be at the University reduced the possibility of being NEET in at least 18%.

Regional differentials cannot be compared as most of them were not statistically significant. Our findings concerning to the income demonstrates it plays an important role to drop the possibility of being a NEET. For a migrant an income increase of 1% meant a decline of 5.4% in that possibility meanwhile for a non-migrant it meant a decline of 4% in 2014.

Taken as a whole, the results confirm that gender, education and income were key factors in determining the possibility of being NEET during the period. Furthermore, it is remarkable that migrant's social situation in general has always been more fragile.

Table 3 – OLS estimates for the coefficients using the dependent variable (NEET) for young people migrant and non-migrant, Brazil 2001 and 2014

| | 2001 | | | | 2014 | | | |
| | Non-migrants | | Migrants | | Non-migrants | | Migrants | |
	$\beta_{\bar{M}_{01}}$	p	$\beta_{M_{01}}$	p	$\beta_{\bar{M}_{14}}$	p	$\beta_{M_{14}}$	p
Intercept	0.0842	***	0.0936	***	0.2753	***	0.3609	***
Age16	0.0441	***	0.0602	0.0007	0.0514	***	0.073	0.0078
Age17	0.0752	***	0.0625	***	0.1071	***	0.1544	***
Age18	0.1086	***	0.0929	***	0.1762	***	0.1599	***
Age19	0.1334	***	0.1213	***	0.1718	***	0.1932	***
Age20	0.148	***	0.1209	***	0.179	***	0.1566	***
Age21	0.1531	***	0.1467	***	0.1798	***	0.1669	***
Age22	0.1433	***	0.1331	***	0.1765	***	0.1423	***
Age23	0.1531	***	0.1019	***	0.1813	***	0.1406	***
Age24	0.1512	***	0.1211	***	0.1765	***	0.1785	***
Female	0.1428	***	0.25	***	0.1047	***	0.1897	***
Black	-0.0255	***	-0.0096	0.6063	-0.03	***	-0.021	0.2827
Yellow	0.0375	0.0612	0.1935	0.0031	0.0278	0.2488	-0.1553	0.0857
Brown	-0.0091	0.0018	-0.032	***	-0.009	0.0045	-0.0106	0.3791
Primary	-0.0591	***	-0.0741	***	-0.077	***	-0.0838	***
Secondary	-0.1064	***	-0.1173	***	-0.1065	***	-0.123	***
Tertiary	-0.1803	***	-0.2242	***	-0.1972	***	-0.2109	***
North	0.0287	***	0.008	0.579	0.0081	0.1584	-0.0036	0.8589
Southwest	0.0163	***	-0.0199	0.0375	-0.0017	0.6314	-0.0114	0.4099
South	0.002	0.6459	-0.0248	0.0398	-0.0101	0.0395	-0.0307	0.0649
Midwest	0.0203	***	0.0005	0.9681	0.0082	0.1919	0.0149	0.4819
Federal District	0.0008	0.9433	-0.013	0.6574	0.0051	0.6529	0.1428	0.7578
LnIncome	-0.018	***	-0.0166	***	-0.0395	***	-0.0547	***
Child<7	0.073	***	0.1028	***	0.0584	***	0.0932	***

Source: PNADs

Blinder Oaxaca decomposition

Total difference between the mean of each characteristic and OLS estimation of migrants and non-migrants was 4.2% in 2014, a reduction of differences compared with the year of 2001 (6.5%). Effects of coefficients (unobservable factors) explain half and the effects of characteristics the other half of the differences between migrants and non-migrants. Unobservable factors would be, for example, more difficulties to be hired or dropouts in education of the migrant group.

The main factor explaining the Effect of Characteristics was age followed by gender confirming the descriptive part of this work. The presence of a child and education was also important as well.

Between 2014 and 2001 the total difference reduced 0.01. This reduction was mainly due to the effect of

Table 4 – Decomposition of the differences (migrants/non-migrants) according to person and household characteristics

Source of difference / Characteristics	2001	2014	14 to 01
Age	8%	12%	4
Gender	7%	6%	(1)
Race/color	0.2%	0%	(0.2)
Education	6%	0%	(6)
Region	0.4%	0%	(0.4)
Income	0.4%	0.2%	(0.2)
Children	7%	4%	(3)

Source: PNADs

FINAL REMARKS

This research demonstrated the close link between economic/social environment and the young people labor and education condition. Given the fact that Brazilian labor Market was able to create 11 million formal jobs during the years 2000, households' income increased and, as a result, a great number of young people had an alternative to leave the condition of simultaneously work and study (dropped around 20%) to simply study (increased 10%). During the period 2001-2014 the number of people in this group was stable. Despite the positive functioning of Labor Market we must be aware of the worrying number of NEETs (over 4 million people).

Demographic aspects, individual or Family characteristics continue to be important factors in determining young people condition in education and Labor Market. Socioeconomic estimations showed that the possibility of being NEET was greater among migrants, both in 2001 and in 2014. Women tend to migrate more than men and proportionally there are more NEET youngsters between migrants. A household with children has more chances to have a young NEET and this suggests that the women rather than men take care of the child, a cultural norm of individuals' roles in the Brazilian society. Thus, it is necessary to include one more variable in the model, i.e. the position of the person at home in a future work.

Our hypothesis was partially proved, once migrant families have proportionally more NEETs. However, Blinder-Oaxaca decomposition demonstrated that unobservable gap was responsible in determining the decrease of NEETs among migrant families. It also showed that gender had less relevance in determining the probably of a woman being a NEET both in 2001 and in 2014. Childcare assistance was probably of main importance but it is necessary to expand effective support to these families as the probability still remains.

The risk of becoming a NEET increases significantly with age. Compared to the 15–19 age groups, for example, a more substantial rise in the NEET rate is observed between the ages of 20 and 24, the point when young people have completed upper secondary and/or tertiary education.

Developing this line of research for other Latin American countries remains a future challenge we intend to face in the future as well as including other variables.

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