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#### INCOME DIFFERENTIALS BETWEEN MIGRANTS BY RACE/COLOR IN BRAZIL – 2000/2010

### DIFERENCIALES DE INGRESOS ENTRE MIGRANTES POR RAZA/COLOR EN BRASIL – 2000/2010

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#### Abstract:

The socioeconomic and demographic characteristics of individuals have influence on salary discrepancies arising from work. Therefore, this article aims to investigate income differentials among intercity migrants, dividing them into two specific groups, namely: non-whites and whites, based on microdata from Demographic Censuses of the years 2000 and 2010. , the empirical literature on labor earnings differentials is reviewed; and then resorts to a Mincerian income equation, estimated by Ordinary Least Squares with the purpose of analyzing wage inequalities among migrants. The results showed that white migrants had significantly higher incomes compared to non-whites, and that the characteristics of the employed influenced differently

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between the groups. However, it was found that these inequalities were reduced in the intercensal period.

Keywords: Labor market; Income differentials; migrants; Brazil.

#### **Resumen:**

Las características socioeconómicas y demográficas de las personas influyen en las discrepancias salariales derivadas del trabajo. Ante esto, este artículo tiene como objetivo investigar los diferenciales de ingresos entre los migrantes intermunicipales, dividiéndolos en dos grupos específicos, a saber: no blancos y blancos, a partir de los microdatos del Censo Demográfico de los años 2000 y 2010. Inicialmente se revisa la literatura empírica sobre las diferencias de ingresos laborales; y luego, se utiliza una ecuación de ingresos minceriana, estimada por mínimos cuadrados ordinarios, para analizar las desigualdades salariales entre los migrantes. Los resultados mostraron que los inmigrantes blancos obtuvieron ingresos significativamente más altos en comparación con los no blancos, y que las características de las personas empleadas influyeron de manera diferente entre los grupos. Sin embargo, se encontró que estas desigualdades se han ido reduciendo con el tiempo.

Keywords: Mercado laboral; Diferenciales de ingresos; Migrantes; Brasil.

Classificação JEL: J0, I25, I26.

#### **1. Initial Considerations**

Theoretical discussions about salary discrepancies in the labor market are addressed both in national and international literature (LEE, 1980; BORJAS, 1987; CAVALIERI; FERNANDES, 1998; SOARES, 2000; CAMPANTE; CRESPO; LEITE, 2004; MATOS; MACHADO, 2006; BATISTA; CACCIAMALI, 2009; ALMEIDA; ALMEIDA, 2014; AUGUSTO; ROSELINO; FERRO, 2015). There is a consensus that socioeconomic and demographic attributes have influences on wage disparities, varying in intensity depending on the country or region under analysis. Personal (especially race/color and gender) and regional characteristics of individuals are also determinant elements of wage disparities (MATOS; MACHADO, 2006; BATISTA; CACCIAMALI, 2009; FREGÚGLIA; PROCÓPIO, 2013).

Due to these wage inequalities and bearing in mind that the regions, states or municipalities that expel individuals are usually in unstable economic conditions, which results in low absorption capacity and/or insertion of labor, people are motivated to leave their place of origin in search of a better insertion and socioeconomic condition in the place of destination (SOARES, 2000; MATOS; MACHADO, 2006; FREGUGLIA, 2007; FREGUGLIA; PROCÓPIO, 2013; MACIEL; CUNHA, 2013; SILVA FILHO, 2017 ).

Thus, economic issues are one of the main reasons for population mobility, especially in countries with high economic heterogeneity. For this reason, economic dynamics directly influence migration flows when the region has low economic growth (LIMA; VALE, 2001; FREGUGLIA, 2007;

QUEIROZ; SANTOS, 2011; CAMBOTA; PONTES, 2012; SILVA FILHO, 2017).

In this way, inequality in income from work between regions is one of the main factors that drive people to migrate. Furthermore, personal attributes such as sex, age, education and race/color are configured, above all, as determinants of remuneration and occupation in the labor market (SOARES, 2000; MATOS; MACHADO, 2006).

In studies by Matos and Machado (2006), when analyzing the profile of discrimination in Brazil, based on information from the National Household Sample Survey (PNAD), carried out by the Brazilian Institute of Geography and Statistics (IBGE) in 1998, they found that white individuals had higher incomes than non-whites (blacks), and these differentials were directly related to the level of education.

Meireles and Silva (2019) also analyzed income differentials by gender and race in the Brazilian labor market, using the Heckman model (1979), the Oaxaca-Blinder decomposition (1973) and information from the National Household Sample Survey. (PNAD) in 2009. Among the results found, they found that in relation to the average monthly income of workers, white individuals – considering men and women, earned higher incomes (R\$ 1,138.38) compared to non-whites (R\$ \$649.37), confirming racial discrimination in the labor market in Brazil.

Given this context, this article aims to analyze the differentials in earnings from work between non-white and white migrants employed in the Brazilian labor market, in the intercensus period from 2000 to 2010, considering socioeconomic and demographic factors.

To achieve the proposed objective, the article will be composed of five sections: in addition to these initial considerations, there is a section on the methodological procedures adopted; then, a review of the empirical literature on labor earnings differentials in Brazil is presented; then, we discuss the estimates about the salary discrepancies of migrants; finally, the final considerations are made.

# 2. Methodological Procedures

# 2.1 - Temporal and spatial clipping

For the approach taken by this article, data from the Demographic Censuses of Brazil in the years 2000 and 2010 will be used, considering the category of fixed-date migrants. Therefore, it refers to migrants who answered that they resided on 07/31/1995 and 08/01/2005 in municipalities other than those who lived in 2000 and 2010, respectively. Fixed-date migration, according to the international literature (CHISWICK, 1979) and proven by the national literature (SILVA; SILVA FILHO; CAVALCANTI, 2016), allows observing the effect of the selectivity of the migrant in the place of destination. That is, to analyze the migrant before he acquires the characteristics of the natives, from living with them for many years. In this way, it is possible to capture the effect of discrimination in the labor market, as well as the effects of non-productive attributes that differentiate migrants from natives.

In this study, the selected sample is composed only of the Brazilian population that answered all questions from the 2000 and 2010 Demographic Censuses; who declared to be busy (working), with a positive income and less than R\$ 300,000.00 given that, by referring to outliers, they can increase the average of a certain group, resulting in incoherent and inconsistent results; and, selected individuals aged between 18 and 60 years. The purpose of the age grouping is to cover only individuals over the legal age to enter the labor market via a signed work card, as well as to eliminate from the sample those people who are, for the most part, of legal age to retire, according to legislation. In effect the time of application of the questionnaires. That is, the objective is to remove from the sample individuals who cannot, by their own decision, and for economic reasons, be included in the economically active population in the Brazilian labor market.

In addition to this selection, based on race/color, only people who declared themselves to be white and non-white were selected in the sample. The non-white people considered in this study are those who claimed to be black and brown, following a convention already commonly used in the Brazilian economic literature (CAVALIERI; FERNANDES, 1998; RIBEIRO, 2006; ALMEIDA; ALMEIDA, 2014; GAMA; HERMETO, 2017).. Yellow and indigenous people were excluded from the sample, in view of the low sample representativeness and the central core of this analysis having a comparative focus between white and non-white people.

#### 2.2 - Ordinary Least Squares Method

To carry out this work, a sample comprising 204,803 migrants in the year 2000 and 87,164 in the year 2010 was selected; and the Ordinary Least Squares method was used, which was developed based on the Mincerian income equation proposed by Mincer (1974). This equation makes it possible, in a simplified way, to estimate the salary of the employed workforce (dependent variable) as a function of explanatory factors such as education, experience, age, sex, among other individual characteristics.

The equation can be described as follows:

$$ln_w = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \varepsilon$$
(1)

Where,  $ln_w$  represents the natural logarithm of the employed workforce; the  $\beta$  are the model parameters; os X refers to the sets of observable socioeconomic and demographic characteristics that influence the earnings earned by employed individuals;  $\varepsilon$  is the stochastic error term.

Thus, based on the model described by Mincer (1974), the Ordinary Least Squares method is used to estimate the logarithm of migrant labor income (white and non-white) as the dependent variable; and, using the observable characteristics of individuals as explanatory variables, such as race/color, gender, age and education.

The empirical model is estimated as follows:

$$ln_{w} = \beta_{0} + \beta_{1} Raçacor + \beta_{2} Sexo + \beta_{3} Idade + \beta_{4} Idade^{2} + \beta_{5} Urbano$$

+ 
$$\beta_6$$
 Chefedom +  $\beta_7$  Estadocivil  
+  $\beta_8$  Fundcompmedinc +  $\beta_9$  Medcompsupinc  
+  $\beta_{10}$  Supcomp +  $\beta_{11}$  Previdência  
+  $\beta_{12}$  ICS +  $\beta_{13}$  NO +  $\beta_{14}$  SE +  $\beta_{15}$  SU +  $\beta_{16}$  CO  
+  $\varepsilon$  (2)

Where,  $ln_w$  represents the natural logarithm of the labor income of migrants;  $\beta_0$  is the intercept term of the regression. In addition, the following dummy variables were used: race/color (non-white = 1), sex (male = 1), age (in years), age<sup>2</sup> (proxy of experience), if you live in an urban area (urban = 1), head of household (headman = 1), marital status (married = 1). With regard to schooling, the reference categories (omitted) were migrants with no education or incomplete primary education (seminstfundinc), the other categories are: complete primary and incomplete secondary (fundcompmedinc); complete high school and incomplete high school (medcompsupinc); and higher complete (supcomp). Contributing social security workers (social security = 1); workers employed in industry, commerce or services (ICS = 1). Regarding the region, the reference category was the Northeast region (NE), the others are: North (NO), Southeast (SE), South (SU) and Midwest (CO), and finally, it  $\varepsilon$  represents the errors model residuals.

# **3.** Differentials in earnings from work in Brazil: a review of the empirical literature

Brazilian society is historically characterized by a social hierarchy, so that the majority of non-white people are clustered at the bottom of the social pyramid. One of the main features that mark this structural character is the

discrimination that occurs in the labor market. It constitutes one of the dimensions of social exclusion of the capitalist development model itself (AUGUSTO; ROSELINO; FERRO, 2015).

In recent studies on income differentials, one of the main issues that has been calling the attention of researchers refers to the context in which people who are equally productive are evaluated differently based on nonproductive attributes, such as race/color and the sex. Thus, it is important to highlight some studies that identify the existence of this trend of convergence between wage earnings in Brazil.

Soares (2000) analyzed the profile of discrimination in the labor market between whites and blacks in Brazil, based on microdata from the National Household Sample Survey - PNAD of 1987 and 1988, using the decomposition of Oaxaca and Blinder (1973). ). The results showed that between that period, the earnings earned by black men and black women were considerably lower compared to white men. However, the situation of black women was higher, because according to the aforementioned author, they suffer double discrimination: for being women and for being black. It was found that in 1987, the income of black women corresponded to about 33% of the wages of white men, increasing to 40% in 1988. With regard to black men, wages represented about 5% to 20% of income earned by white men. For Soares (2000), this difference between black and white men was explained by the gap in terms of qualification, given that white individuals had a higher level of education. Discrimination in the Brazilian labor market is confirmed by Cavalieri and Fernandes (1998) in Brazilian metropolitan regions. These authors used microdata from the 1989 PNAD and the wage equation or Mincerian equation that allows estimating returns to experience, education, gender, among other variables. They found that, on average, men's earnings are higher than women's, as well as the wages of non-white people are lower than those of white individuals. This result was observed both for the metropolitan regions and for the regions analyzed separately. Thus, with regard to the difference by gender, it was found that analyzing the set of metropolitan regions, men earned, on average, a salary of 58.38% more than women who had the same level of education, race /color, age and region of residence. With regard to white people, they earned on average 143.72% more than black individuals and 102.70% more than brown individuals. With regard to discrimination by race/color, the most significant difference was between white and brown individuals, verified in the metropolitan region of Salvador (about 51.13%), and the lowest for the State of São Paulo (9. 97%).

In the studies by Campante, Crespo and Leite (2004) the existence of discrimination in the Brazilian labor market was also verified. The authors investigated income differentials between races in the urban labor market, considering only workers with a formal contract, without a formal contract and civil servants, using microdata from the 1996 PNAD, based on the use of the decomposition of Oaxaca and Blinder (1973). The results showed that whites earned about 70% more than blacks. They also established a comparison of discrimination between the Southeast and Northeast regions.

Discrimination was higher in the Southeast, ranging from 11% to 26%, and less pronounced in the Northeast, ranging from 4% to 11%. Analyzing Brazil in all its territorial extension, the discrimination component of the wage gap was 25% in 1996.

Salvato et al. (2008) carried out an analysis on race/color and sex discrimination in the labor market in Minas Gerais and Bahia, based on microdata from the 2005 PNAD. To analyze the effect of discrimination, they used the decomposition of Oaxaca and Blinder (1973). The results showed that 31% of the difference between the income of white and black men in Bahia; and, 27% in Minas Gerais, were explained by the discrimination factor. On the other hand, discrimination against black women compared to white men was higher, 67% in Bahia and 66% in Minas Gerais, confirming the result of Soares (2000) in which it was found that discrimination becomes even greater if the individual is a woman, especially if she is black.

Almeida and Almeida (2014) studied wage differentials and discrimination by sex and race/color in the labor market in the state of Rio Grande do Norte, based on microdata from the 2012 PNAD and the decomposition of Oaxaca and Blinder (1973). The results obtained showed that around 139% of the average wage difference between men and women is not explained by productive attributes, but by the effect of discrimination. And, regarding the decomposition of income related to race/color, it was found that 81% of the wage gap between whites and non-whites was determined by the discrimination component.

Thus, empirical studies show that there are income differentials in the Brazilian labor market and that personal attributes, especially gender, education and race/color, directly influence salary discrepancies arising from work.

# **3.1.** Differences in earnings from work between migrants and nonmigrants in Brazil

Santos Júnior, Menezes-Filho and Ferreira (2005) investigated migration flows, selectivity and regional income differences in Brazil, based on microdata from the 1999 PNAD and bivariate and trivariate analyzes and Mincerian regressions of wages with migration dummy. The results found, considering the bivariate analysis, revealed that considering Brazil as a whole, migrants earned, with a level of 5%, more than non-migrants. While migrants earned BRL 18.62 per hour, as wages for all jobs carried out according to the Cost of Living Index (ICV), non-migrants earned only BRL 15.18 per hour. In the trivariate analyses, when comparing the average income of migrants and non-migrants, they found that the wage/hour of an individual who had migrated less than 9 years ago was R\$ 19.61 and that of a non-migrant R\$ 15.18 being this significant difference at 1%. On the other hand, when comparing the average income of non-migrants (R\$ 15.18) with individuals who had migrated more than 9 years ago (R\$ 18.28), they found that migrants continued to earn higher incomes compared to non-migrants. Migrants, regardless of the time of migration. In the regression analyses, it was also found that migrants earned higher incomes than non-migrants.

Ratifying these results, Maciel and Oliveira (2011) investigated migration and selectivity in the Brazilian labor market, based on Heckman's model (1979) in two stages and microdata from the 2008 PNAD. In addition, they estimated the return to migration, based on the OLS method and Quantile Regressions. The results found based on the first method found that migrants earned, on average, 6.4% more than non-migrants. On the other hand, when analyzed using the second method, the income differentials between migrants and non-migrants increased according to wage distribution. The difference between them was 5.4% at the 25th percentile; 10.1% at the median and 18.3% at the 75th percentile, in favor of migrants. For the authors, these wage disparities between migrants and non-migrants were associated with the return on investment in migration, corroborating the theory of human capital.

In turn, Maciel and Cunha (2013) verified income differentials between migrants and non-migrants in Brazil, estimating a Mincerian regression for the logarithm of income, based on data from the 2009 PNAD. That of non-migrants, especially those who migrated less than 10 years ago. They found that after the arrival of the migrant at the destination, his salary was, on average, 17% higher than the income earned by non-migrants. However, this differential tended to reduce over time, an average of 1.2%, without, however, being eliminated. For the authors, this result was also associated with greater investment in human capital, where migrants seek to qualify for the labor market.

Rodrigues et al. (2015) analyzed the wage gap according to migration status and gender in the State of Bahia, based on microdata from the 2013 PNAD, estimating wage equations with Heckman's selection bias correction (1979) and the wage decomposition of Oaxaca and Blinder (1973). The results revealed that migrant workers in Bahia received higher incomes than non-migrants, regardless of gender. They found that migrant men received an hourly wage of BRL 22.92 compared to non-migrant men who earned BRL 15.66. For migrant women, the hourly wage was R\$12.97 and that of non-migrants was R\$11.03. Thus, the wage gap for migration was R\$7.26 among men and R\$1.94 among women.

On the other hand, Machado, Pero and Nascimento (2018), investigated the income differentials between migrants and non-migrants in the formal labor market in the State of Rio de Janeiro in the period of 10 years (2000-2009), having as reference the year of 2009, and using the OLS method and the Fixed Effect Panel, based on data from the Annual Social Information Report - Migration (RAIS-MIGRA) for those respective years. The results showed that migrant workers in the State of Rio de Janeiro earned, on average, 6.1% less than non-migrants. As for migrants from the city of Rio de Janeiro, they earned, on average, 8.4% less than non-migrants.

Thus, empirical studies show that earnings from work in Brazil are different between migrants and non-migrants, and most of the time; migrants are positively selected, earning higher incomes compared to non-migrants.

# 4. Migration and income from work: an approach in the 2000 and 2010 demographic censuses

There are several studies in the economic literature (SOARES, 2000; SANTOS JÚNIOR; MENEZES-FILHO; FERREIRA, 2005; MATOS; MACHADO, 2006; FREGUGLIA, 2007; FREGUGLIA; PROCÓPIO, 2013) which demonstrate that personal characteristics, such as sex, education and race/color, directly influence income differentials, occupation conditions and permanence in jobs when individuals move from their region of origin to the region of destination. Given this, this section seeks to examine the income differentials between non-white migrants and white migrants employed in the Brazilian labor market, in the year 2000 and in 2010.

From the results plotted in Table 11, there is a greater participation of men (white and non-white migrants) employed in the Brazilian labor market, aged between 18 and 60 years, compared to employed migrant women, in both years. However, when comparing the last with the first year, it appears that there was a reduction in the relative participation of migrant men, to the detriment of the increase in the participation of migrant women. This record corroborates that found by Silva Filho, Santos and Siqueira (2018), where they found a greater participation of migrant and non-migrant men employed in the state of Ceará, in the 2000s and 2010, but with an increase in the participation of migrant women between the two Censuses analyzed. Furthermore, the participation of married white migrants was relatively higher compared to married non-white migrants. However, the participation of both groups is reduced, albeit slightly, when comparing the year 2010 to the year 2000. With regard to the education of the workforce, there is an improvement in the participation of both non-white migrants and white migrants. The reduction in the participation of individuals without education or with incomplete primary education is noteworthy, since in 2000, non-white migrants were 74% in this educational range, reducing to 53% in 2010, despite still being quite high. White migrants went from 53% to 35% in the first and last year, respectively. In addition, the participation of both groups in other schooling ranges increases. It is worth mentioning the increase in the relative participation of white migrants with higher education who left from 4% in 2000 to 16% in 2010, while non-white migrants left from approximately 1% to 5%, respectively.

In view of this, it appears that despite both groups improving their level of education, white migrants were relatively more educated than non-white migrants. These results converge with those found by Almeida, Almeida and Besarria (2014), who, when analyzing income differentials by gender and race in the formal and informal labor market in the state of Bahia, based on data from the 2012 PNAD, found that white men and women had, on average, higher levels of education than non-whites.

	2000	2000		2010	
	Migrant	white	Migrant	white	
Variables	not white	migrant	not white	migrant	
Male)	67.75	64.51	61.60	58.32	
Age	32.60	33.74	34.13	35.42	

Table 01 - Mean values of socioeconomic and demographic variablesfor non-white migrants and white migrants in Brazil - 2000/2010

Age2	1172.60	1246.98	1282.19	1374.60	
Marital status			32.77	42.08	
(married)	37.13	47.96	52.77	42.00	
head of household	53.91	54.39	51.89	51.84	
seminstfundinc	73.54	53.15	52.41	34.84	
Fundcompmedinc	13.33	17.28	19.32	18.28	
medcompsupinc	11.16	24.82	22.92	30.47	
supcomp	0.72	3.93	5.18	16.23	
poor at home	28.34	13.78	91.31	44.08	
poor at work	8.81	4.42	62.04	32.48	
social security	8.56	19.78	13.88	26.52	
ICS	38.64	49.88	31.47	39.96	
North	14.76	6.17	15.52	6.61	
North East	36.49	17.57	33.37	17.28	
Southeast	26.62	34.07	28.58	37.21	
South	7.12	29.33	7.76	27.04	
Midwest	15.01	12.85	14.86	11.86	
per capita income	447.62	974.02	736.41	1361.79	
income from work	719.81	1534.24	893.77	1625.20	

Source: elaborated by the authors based on data from the 2000/2010 Demographic Census.

With regard to the poor at home and at work, it is analyzed that the participation of non-white migrants was markedly high in relation to the participation of white migrants, in both years. It is recorded that in 2000, 28% of non-white migrants were poor at home and 14% were poor at work, increasing significantly to 91% and 62%, respectively, in 2010. Regarding white migrants, in 2000, 14% were poor at home and 4% were poor at work, rising to 44% and 32%, respectively, in 2010.

Furthermore, the average income of non-white migrants was BRL 719.81 in 2000, rising to BRL 893.77 in 2010. White migrants earned BRL 1,534.24 in the first year, rising to BRL 1,625.20 in the second year. Thus, when comparing incomes between them, it appears that white migrants earned R\$814.43 more than non-white migrants in 2000, reducing the gap to R\$731.43 in 2010. However, despite the discrepancy between the income earned by non-white and white migrants having decreased, a higher average income from work can be confirmed for white migrants.

It is important to highlight that white migrants are more educated and most have formal ties. Therefore, wage differentials can be attributed to these observable productive characteristics of white migrants, compared to nonwhite migrants. However, it is also relevant to point out that it is not only socioeconomic and demographic characteristics that enable better income for migrants, but also unobservable attributes that directly affect wage discrepancies, as suggested by studies by Santos Júnior (2002), Santos Júnior, Menezes- Filho and Ferreira (2005), Freguglia, (2007), Gama and Machado (2014).

In Table 02, income differentials among migrants are analyzed using the Ordinary Least Squares Method. It appears that in the year 2000, a non-white migrant earned 18% less, compared to a white migrant. In 2010, the gap reduced, but non-white migrants still earned 14% less than white migrants. Thus, there is a difference between the average salary of non-white and white migrants in Brazil, in both years, being higher for the latter than for the former. In addition, it is observed that male migrants earned higher incomes

than female migrants and these differences increase when comparing the first to the last year under analysis.

These analyzes corroborate those found by Cavalieri and Fernandes (1998), when analyzing migration in Brazilian metropolitan regions based on microdata from the 1989 PNAD and using the MQO method, they found that migrant men had higher incomes in relation to women. Migrant women, as well as white individuals earned, on average, higher incomes than non-whites.

Table 02 - Differentials in earnings from work according tosocioeconomic and demographic characteristics of migrants: Estimatesby MQO - 2000/2010

Coefficients	2000	2010
Coefficients	I estimated	I estimated
(Intercept)	4,109***	4,189***
(intercept)	(0.021)	(0.031)
Race/color (not white)	-0.178***	-0.135***
Kace/color (not winte)	(0.004)	(0.006)
Male)	0.394***	0.483***
Male)	(0.004)	(0.006)
Age	0.050***	0.056***
Age	(0.001)	(0.002)
Age2	-0.001***	-0.001***
Agez	(0.000)	(0.000)
Urban	0.290***	0.259***
Cibali	(0.005)	(0.007)
head of household	0.227***	0.109***
	(0.004)	(0.006)
Marital status (married)	0.103***	0.086***

	(0.004)	(0.006)
Fundacomprending	0.301***	0.224***
Fundcompmedinc	(0.005)	(0.007)
madaampsupina	0.739***	0.455***
medcompsupinc	(0.005)	(0.007)
supcomp	1,522***	1,177***
supcomp	(0.012)	(0.010)
social socurity	0.596***	0.429***
social security	(0.006)	(0.007)
ICS	0.254***	0.206***
	(0.004)	(0.006)
North	0.372***	0.340***
North	(0.007)	(0.010)
Southeast	0.387***	0.369***
Southeast	(0.005)	(0.007)
South	0.301***	0.342***
	(0.006)	(0.009)
Midwest	0.440***	0.467***
muwest	(0.006)	(0.009)

Significance: \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

Note 1: To calculate the values referring to the variables: Supcomp and Previdência, the natural exponential function was used, as suggested in the literature.

Source: elaborated by the authors based on data from the 2000/2010 Demographic Census.

A migrant head of household, in the year 2000, received 23% more, to the detriment of the one who occupied any other position in the household, reducing this differential to 11% in the year 2010. Furthermore, it is observed that schooling corroborated in a high way on income differentials among

migrants. We highlight the fact that, in 2000, a migrant with higher education earned 358% more than a migrant without education or with incomplete primary education (reference category). In 2010, there was a reduction in this differential, earning 224% more, compared to that in the reference category, which contributes to the work carried out by Machado, Pero and Nascimento (2018).

The aforementioned authors used RAIS data, the OLS method and the fixed effect to examine income differentials between migrants and non-migrants in the State of Rio de Janeiro in the years 2000 to 2009. They found that employed individuals who had education complete higher education, earned a higher hourly wage than those without education or with incomplete primary education and other schooling ranges. Thus, it can be stated that schooling is a strong determinant of earnings differentials. That is, the market responds positively to investment in formal education in Brazil.

It is also verified that being a social security contributor had a positive impact on income differentials. In the first year, a migrant contributing to social security received 81% more, compared to a migrant who was not insured by social security. In the last year, it started to receive 54% more compared to its comparison. In addition, migrants employed in the ICS and those residing in the North, Southeast, South and Midwest regions earned relatively higher incomes, to the detriment of migrants who were working in other sectors of activity and those residing in the Northeast region (reference category ), in the 2000s and 2010s.

# 5. Final Considerations

This study aimed to investigate the income differentials between non-white and white migrants in the Brazilian labor market, based on the socioeconomic and demographic characteristics of those employed. For this, microdata from Demographic Censuses of the years 2000 and 2010 and the Ordinary Least Squares Method were used, considering inter-municipal migration and in the fixed-date category.

The most relevant results showed a greater participation of migrant men (white and non-white) employed in the Brazilian labor market, compared to migrant women, in 2000 and 2010. In addition, there was a greater insertion of married white migrants, in to the detriment of non-whites, in both years.

Furthermore, there was a significant increase in the level of schooling, both for white and non-white migrants, when comparing the year 2000 to the year 2010. However, it was found that whites had more schooling, highlighting, above all, the reduction those who declared they had no education or had only incomplete elementary school; and the increase of those with higher education. Furthermore, non-white migrants were poorer at home and at work compared to white migrants. These, in turn, had an average income from work higher than non-whites.

With regard to the differentials in earnings from work analyzed using the OLS method, a high disparity in the average wage was found between white and non-white migrants, the latter in favor of whites. It should be noted here that

schooling was a strong condition for higher income, that is, the higher the migrant's level of education, the higher the income from work.

In addition, those with more schooling, those who contributed to social security, those employed in some industry, commerce or service sector and those who lived in the North, Southeast, South and Midwest regions, earned higher incomes, compared to those who did not. Had education or had only incomplete primary education, those who did not contribute to social security, and those who were employed outside the ICS and those who lived in a municipality in the Northeast.

Thus, the results found in this study showed that white migrants earned higher incomes than non-whites in the Brazilian labor market in 2000 and 2010, and those socioeconomic and demographic characteristics had a differentiated influence on the wage returns of the force of work. However, it was found that wage discrepancies between migrants reduced over time.

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