Is Income Discrimination a Factor in the Recent Venezuelan Migration?

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Abstract: The following paper analyzes income discrimination during the recent Venezuelan migration in Peru. We use the survey "Encuesta Dirigida a la Población Venezolana (ENPOVE)" in order to proceed with our assessment. The ENPOVE surveys were conducted in 2018 with 9,487respondents (3,611 houses).The survey enabled the collection of socioeconomic variables and discrimination perceptions of Venezuelan residents in Tumbes, La Libertad, Arequipa, Cusco, Lima, and Callao. The results allow us to investigate the Peruvian labor market for low-skilled immigrant workers.

1. INTRODUCTION

The economic depression in Venezuela has induced significant migration across different countries in Latin America. During 2000–2020, the economy of Venezuela dropped 4.6%, increasing unemployment (WEO reports). In addition, the volatility of the exchange rate and hyperinflation has decreased families' incomes, making life more difficult and producing a significant wave of migration of millions of Venezuelan, mostly low-income, families.

According to later reports, Colombia has received the most Venezuelan immigrants of any country. As of 2022, Colombia has received 1.8 million Venezuelan migrants, Peru 1.2 million, and Chile about half-a-million Venezuelans. Gonzales (2011) noted that the Venezuelan diaspora wastriggered by the increasing rate of theft and criminality under the government of President Hugo Chavez. Jones (2009) showed that Caracas had become the most dangerous city in the world. The rate of homicides increased from 25 to 82 per 100,000 population in 1999. In addition, kidnapping tripled from 2011 to 2014.[1]

The Peruvian economy has had an outstanding average growth of 2.4% over the last 20 years (WEO Report). In some years, the Peruvian economy reached a 10% growth rate, with low inflation and inflow of capital for private investment. Although the Peruvian economy is not necessarily considered a developed economy, it has absorbed some low-skilled workers from Venezuela. Most studies have analyzed[2] the effects of migration from developing to developed economies. Our study considers a particular case in which the latter relationship does not hold true. However, the drivers of migration hold: search for jobs for migrants and reduction of labor costs for the host country.

Some studies have focused on Venezuelan migration in Latinamerican countries. For instance, Morales et al. (2020) studied the heterogeneous short-term responses to the inflow of Venezuelan migrants in terms of employment, informality, and earnings of Peruvian workers from 2008 to 2018. In addition, Asencios et al. (2020) studied the impact of Venezuelan migration in the Peruvian labor market and found heterogeneous results according to age and gender. The latter authors found that some immigrants increased productivity and potential GDP in the short and medium term.

In the case of Colombia, Caruso (2019) estimated the impacts of the recent labor supply shock, driven by the economic predicament in Venezuela, on the labor and poverty outcomes of native Colombians. They find a negative relationship in the informal market between wages and Venezuelan migrants. Peñaloza (2019) estimated the causal effect of Venezuelans' migration to Colombia on Colombian real wages. The author found that the increase in labor supply in these regions, which resulted from the migratory flow, generated a decline in real hourly wages of approximately 6–9% on average. This decrease in real wages appears to have been greater for men than women. There is also evidence of a greater drop in real wages among people with lower levels of qualification under conditions of informal employment.

In addition, discrimination[3] perception has been assessed in several studies. Groegger et al. (2022) provided evidence of Venezuelans' perceived discrimination in Peru. Using an instrumental variable strategy, the results document a causal relationship between the level of employment in the informal sector, where most immigrants are employed, and the reports of discrimination.

Along this line of research, Mouge not (2019) evaluated the association between self-perceived discrimination and mental health problems among Venezuelans living in Peru. They

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[1]See also Rueda (2018) for a discussion of the criminality problem in Venezuela

[2]Dustmann et al.(2012) and Manacorda et al.(2012) studied the effect of migration in the UK, considering gender and discrimination.

[3]A similarstudy wasconducted by Salgado (2018) in Chile.

also used the ENPOVE survey, since the latter data raise some questions about the stress of being an immigrant and therefore facing discrimination.

Venezuelan immigration to the equator has also placed pressure on the country's labor market. Botello-Peñaloza (2021) estimates that approximately 300,000 immigrants have settled permanently in the country. The latter study analyzes the salary differences between Venezuelan immigrants in Ecuador and the locals. This gap can amount to a 42% difference between migrants and locals.

Our study focuses on Venezuelan migration in Peru, which has the second-highest number of resettled Venezuelansin Latin America. A 2018 survey conducted in Peru provided evidence of income discrimination between locals and immigrants within the country. The result will permit us to find determinants of the income of Venezuelan immigrants in Peru and explore discrimination in the Peruvian labor market. Our hypothesis is that Venezuelan migrants in Peru face income discrimination.

2. VENEZUELAN MIGRATION IN THE PERUVIAN LABOR MARKET

As mentioned previously, Peru has the second-largest population of Venezuelan migrants. According to Super intendencia de Migraciones, the number of Venezuela migrants quadrupled from 2016 to 2018. The ENPOVE survey considered a cut in 2018, when there was a peak and some restrictions triggered the entry of Venezuelans. Because of the significant increase in the number of Venezuelan migrants, Peru started to put in place restrictions on their entry. Passport and visa requirements were enacted to tackle the flow of migrants. Venezuelan migrants tend to be employed in the service and commerce sectors (78.2 percent), with cooks and assistant cooks, wait staff, cleaners, domestic workers, and retail sellers being the most common occupations among them. If we consider education levels, there is an important gap between the skills of these migrants and their occupations (World Bank, 2019). Most Venezuelans were overqualified for their jobs. Jobs held by Venezuelanstend to be customer service jobs, as Venezuelans have better social skills. Most Venezuelan migrants compete with less-educated Peruvians. This situation is known as "skill downgrading" by the latter authors.

The next section explains the details of the data used to test the hypothesis, but we can also explore the characteristics of the Peruvian labor market and the Venezuelan migration. The data showed the main characteristics of the Venezuelan migrant population. We assume that if a worker pays social assistance, it is formal migration; otherwise, it is considered informal. Most Venezuelan migrants in Peru were employed. Among Venezuelan migrants, 91.5 percent are effectively employed (INEI reports). However, most of them (94.2 percent) were employed without any type of health insurance, which places them in the informal sector or black-market sector. As expected, the quality of their jobs is not optimal, and they are exposed to risk without labor regulation. For example, 78.3 percent of the Venezuelan working population (16–65 years old) are salaried workers, yet only 11.5% have a formal contract. Our study will further explore the latter situation according to our hypothesis.

The Peruvian labor market includes Venezuelan migrants, although they are not necessarily the workforce of a developed economy. Authors such as Loayza (2020) show that in a typical developing country, about 70 percent of workers and 30 percent of production are informal, and the case of Peru worsens over time. The latter author shows that informality is a cause and consequence of a lack of economic and institutional development. It results inproductive inefficiency and tax evasion and non-compliance with several labor regulations. Despite the latter situation, informality persists because it offers flexibility, under-regulation, and employment in economies with low labor productivity.4Informality triggers formal unemployment, poverty, and crime. Most Venezuelans have been involved in crime and deported from Peru to their countries of origin (Mininter report). Loayza (2020) notes that the causes of informality are complex and interrelated; reforms to reduce informal employment must include all relevant areas within a multidisciplinary approach.

The Peruvian workforce has increased significantly during the last decade, by 1.5% from 2008 and 2018. There were 16.8 million people working in 2018, 96% of whom were employed. On average, the employment rate increased by nearly 1% during the latter period. A gap exists that does not necessarily allow us to conclude that the Peruvian labor market is that of a developed country. The degree of informality (INEI reports) allowed for the inclusion of Venezuelan migrants. Peru has the third-highest rate of informality of any country in the world (see OECD, 2016 for more details). All economic activities are characterized by informality, and the informal sector is the most relevant type of employment in an economy. Developing nations normally have weaker labor markets and institutions; these particular economies shed light on interesting labor results compared to developed economies. For example, in the Peruvian context, which is that ofa developing country, the notoriety of informality results in the downgrading of migrant skills in the labor market (as explained above).It also helps us understand the significant effects that we mentioned with respect to the salaries of native workers with secondary education, even though most Venezuelan migrants have tertiary education.

Asencios et al. (2020) show a decline in income in the service sectors of the Peruvian economy occupied by Venezuelans. The service sector covers retail and wholesale trade, restaurants and hotels (including retail sellers, cooks, and wait staff), transportation and storage (including occupations such as drivers), and public and social services (including occupations such as health professionals, primary and secondary teachers, domestic workers, and cleaners). The "non-service" sector includes agriculture (most of the workers in the sample); mining; manufacturing; construction; financial intermediation; and electricity, gas, and water. Asensios (2020) excludes the financial sector from the "service" group, as only a few Venezuelans are working in this sector. The next section will describe the data used to assess our study.

[4]Loayza (2020) also explains the problem of excess labor regulation that incentivizes informality. The cost–benefit analysis of an entrepreneur leads him to decide to remain informal.

Table 1. Summary of Variables for the Research.

Variables	Mean	Standard Deviation	Minumun	Maximun
EDUCATION	6.78	2.63	1	11
FOREIGNER CARD	0.04	0.19	0	1
REFUGEE	0.03	0.18	0	1
SEX	1.47	0.50	1	2
AGE	26.95	13.97	0	93
TOTAL INCOME	841.00	663.58	0	10,000

Elaboration: Own
Source: ENPOVE (2018).

3. DATA

The data for the paper come from the "Encuesta Dirigida a la Población Venezolana (ENPOVE)." The survey was conducted in 2018 and included 9,487 respondents (3,611 houses). The survey covers Tumbes, La Libertad, Lima-Callao, Arequipa and Cusco, were 85% of the Venezuelan immigrant population lives. According to the BBC and migration Report, about 1.2 million Venezuelanslivein Peru.[5]

The purpose of the survey was to provide reliable data on their health, employment, and housing conditions, as well as their educational profiles and immigration status. This is useful information for decision-makers seeking to meet the needs of the Venezuelan immigrant population in Peru. The survey explored gender, age, and socioeconomic andethnic self-perception and considered the main aspects of the labor market for migrants, as well as perceptions of violence and discrimination. The infrastructure and main characteristics of Venezuelan migrants were also assessed.

In 2018, the Instituto Nacional de Estadística e Informática (INEI), with the support of international organizations, the World Bank, United Nations Refugee Agency (UNHCR), International Organization for Migration (IOM), the United Nations Population Fund (UNFPA), and the United Nations Fund for Children (UNICEF), carried out the "Survey Addressed to the Venezuelan Population Residing in the Country"—ENPOVE.

Of the sample population of Venezuelans residing in the country, 52.3% were men, and 47.7% were women. Since 52.0% of the population in the sample was between 20 and 34 years old, most migrants were of working age. In terms of their racial composition, 63.5% were considered hybrid; 22.4% were white; 6.7% were African descendants; and 3.2% were indigenous.

In addition, 98% of the respondents in the sample entered the country legally through migration controls. We focus on discrimination in the labor market and the determinants of the income of Venezuelan migrants.

We gathered some variables to conduct the research. Table **1** shows the variables collected to conduct our research.

The discrimination variable considers whether the respondent feels left behind because he is a migrant. The discrimination in our sample can be considered in the job, streets, school, health institutions, and so on. We did not have a discrimination variable that focused exclusively on the job. However, it is a good proxy for exploring the labor and income situation of Venezuelan in Peru. Almost 33% of the total population in the sample felt discriminated against (see Fig. (**2**) in the appendix of the paper). We did not consider ethnic self-perception since we determined that the variable had no significant relevance in our study. We suspect that the respondent's perception of discrimination was not related to ethnic issues. Peru has mostly hybrid and indigenous populations (INEI 2017).

We also consider the level of education shown in Table 2[6]. The education level ranges from elementary to master's and doctoral levels of education. Half of the surveyed population had completed high school. Some migrants were employed in jobs that did not necessarily match their levels of education.[7]

A foreign card is a dummy variable for whether the respondent has the document that allows him or her to work legally. There fugee answers the question of whether the respondent has this immigrant status.

Sex and age are variables that capture gender to capture any control effects for the regression, as explained in the next section of the paper. Total income varies from 0 to 10,000 per month.

[5]This number only considers formal migration, so the number of Venezuelans in Peru working in the black markets (illegal immigrants) is triple this number.Peruvian government media (Mininter, 2021) show that thousands of Venezuelans were deported from Peru.

[6]In addition, Figure 2 shows the educational distribution in the sample. The distribution shows almost a normal asymmetric shape. See Table 2 for the level of education,ranging from basic education to highest level of education.

[7]The migrant can be overprepared for the job, and discrimination may influence this situation. As mentioned previously, racial issues are not relevant for our study, so we have decided to drop discussion of racial questions.

Table 2. Level of Education Summary Statistics.

Variables	Frequency	Percent	Cumulative
No Level	230	2.52	2.52
Pre-School	338	3.70	6.22
Incomplete Basic	801	8.78	15.00
Complete Basic	651	7.13	22.13
Incomplete High School	557	6.10	28.23
Complete High School	2,031	22.25	50.48
Incomplete Technical	272	2.98	53.46
Complete Technical	1,204	13.19	66.65
Incomplete University	1,016	11.13	77.78
Complete University	1,942	21.28	99.06
Master's/Doctoral Degree	86	0.94	100.00

Total 9,128.
Elaboration: Own.
Source : ENPOVE (2018).

The income Venezuelans received for their labor participation was obtained from their main and secondary occupations. Income levels arestrongly associated with the well-being of children and their families. Income increases if the respondent is a productive middle-aged male (40–49 years old). The mean was 1,000 for the population, but for our adjusted sample, it was 849 soles per month.[89]

4. THE SPECIFICATION MODEL

The model specificationused to test the hypothesis of labor market discrimination for Venezuelan immigrants is as follows:

$$INCOME_i = \alpha + \beta_1 EDUCATION_i + \beta_2 FOREIGNER\ CARD_i + \beta_3 SEX_i + \beta_4 AGE_i + \beta_5 \widehat{DISCRIMINATION}_i \quad (1)$$

Where:

$INCOME_i$: Is the salary for individual "i"

$EDUCATION_i$: Is the level of education for individual "i"

$FOREIGNER\ CARD_i$: Is a dummy for whether an individual holds this job permission

SEX_i: Is a dummy that assumes the value of 1 for a female

AGE_i: Controls for the age of an interviewee

$\widehat{DISCRIMINATION}_i$: This is a predictor of previous regression that considers whether a person interviewed is discriminated against.

Some control socioeconomic variables plus the predictor of DISCRIMINATION will test our hypothesis of discrimination.

As discussed in previous sections,Botello and Peñaloza (2021), Peñaloza (2019), and Case et al. (2022) consider EDUCATION to be both positive and significant. In line with the literature, gender is expected to be negative because there must be gender discrimination. Most of the literature considers this value as expected, according to gender discrimination literature. We may also expect that the salary drops if the interviewee is older. FOREIGN CARD and DISCRIMINATION variables are consistent with our hypothesis. We may expect that the first variable is positive, and the second is negative and significant. If the migrant is legally installed, it may lead to some opportunities for better remuneration, and if the interviewee feels excluded on the basis ofprejudice, his salary may drop.

The database considers a survey conducted in 2018; therefore, there is no time variation to control in the model specification. To avoid endogeneity, we constructed a predictor of DISCRIMINATION from the following specification:

$$DISCRIMINATION_i = \alpha_2 + \beta_6 EDUCATION_i + \beta_7 FOREIGNER\ CARD_i + \beta_8 SEX_i + \beta_9 AGE_i + \beta_{10} REFUGEE_i + \beta_{11} e_i \quad (2)$$

The residuals (e_i) of the latter estimation capture the predictors of DISCRIMINATION. The dependent variables of DISCRIMINATION are the same, except REFUGEE, which is a dummy for whether the interviewees meet this migration condition. The residuals can explain what the other dependent and significant variables cannot. Then, our predictor captures DISCRIMINATION without the influence of the dependent variables in the specification shown above. Then, we can plug the predictor of DISCRIMINATION (in Model

[8]To conduct our research, we had to clean the data in order to remove outliers and consider relevant variables.
[9] Fig. (**1**) shows the distribution of income across the sample. It shows a skewness to the left.

Table 3. Logit Estimation Results for Discrimination.

DISCRIMINATION	Coef.	Linearized Std. Err.	t	Significance	[95% Conf. Interval]	
						0.07
FOREIGNER CARD	0.17	0.15	1.09		-0.13	0.46
REFUGEE	0.13	0.25	0.51		-0.37	0.63
SEX FEMALE	-0.08	0.07	-1.25		-0.21	0.05
AGE	0.01	0.00	3.28	***	0.00	0.01
_cons	-1.01	0.14	-7.20	***	-1.28	-0.73

*** Significant at 99%
** Significant at 95%
* Significant at 90%

1), avoid any endogeneity, and guarantee a consistent estimation free of any biases in the estimated coefficients.[10]

The ENPOVE database is a pool of individual observations over one time period. Model 1 was estimated using the Newey–West estimation, and heteroscedasticity and correlation were removed. The results are then presented in the next section.[11] Because we used the survey as input for estimation, we had to declare the survey design for datasets such as sampling units and weights.

The dataset has a one-stage design with the sampling weight identified in the survey as an expansion factor. The strata[12]are defined by variable levels of groups, and sampling units identified by count are all set before the estimation.

Model 2 considers a logit estimation with the dependent variable as a dummy that takes the value of 1 if the interviewees perceive DISCRIMINATION in general. This is an ancillary estimation of the plug in Model 1. Therefore, we estimate Model 2 and use the results as the input for the first model. If the predicted variable DISCRIMINATION results are negative and significant, then we can prove our hypothesis.

5. MODEL RESULTS

Tables **3** and **4** show the results for Models 1 and 2 specified in the previous section. The log it estimation for discrimination permits the identification of variables relevant to explaining the endogenous dummy. Education was positive and significant, which means that if educational level increases, discrimination rises. The latter result permits us to infer that racial prejudice is not an explanatory factor in Venezuelan migration to Peru. A unique explanation is the existence of labor discrimination against skilled workers. Asencios (2020) finds that an increase in Venezuelan migration reduces formal and adequate employment in Peru. The same situation occurred in Colombia, where an increase of 1% in Venezuelan migration decreased wages by 10% (Caruso, 2019). There is no room for skilled workers, and they can be left behind in the Peruvian labor market.[13,14]

The variable FOREIGN CARD was not significant and positive, as was the variable REFUGEE. These two variables address the migration status of Venezuelan workers in the country. It does not matter if the worker is legal (holds aforeign card) or illegal (holds refugee card) to be discriminated against. Normally, illegal workers work in the back market, but we are unable to find any type of discrimination in the formal or informal labor market according to the migration status.[15]This result contrasts with Groeger[16] et al. (2022), who found, using different empirical instruments, that discrimination decreases in the informal market.

In contrast with the literature (Groeger et al, 2022 and Asencios, 2020) being male or female has no significance to being discriminated against: There is no gender gap when it comes to prejudice. Groeger (2022) found discrimination in the case of both sexes, and we cannot infer that gender contributes significantly to the discrimination process.

However, the gender variable was positive and significant. The result contrast in Groeger et al. (2022) found the opposite and significant sign. This means that the perception of general discrimination rises as the age of the Venezuelan migrant in Peru increases. Neumark (2020) found similar results for a US database for blind and non-blind workers.[17] The result must be related to the outcome of the first variable. Older people generally have better skills, which can lead to discrimination.

[10]For a detail of this procedure, see Green (2021). We suspect that there is endogeneity between DISCRIMINATION and some dependent variables in model 1. DISCRIMINATION and EDUCATION are highly negatively correlated. As long as level of EDUCATION increases, then DISCRIMINATION may show up. The variable DISCRIMINATION is not subject to race, sex, and labor exclusion. The survey questionnaire does not consider a specific perception of intolerance or prejudice.

[11]Results permit us to find unbiased and consistent coefficients.

[12]The stratification considers three groups with certain numbers of householdsin each group. The sampling unit is the individual interviewed. Some individuals live in a household.

[13] Since socioeconomic variables are correlated with education, we cannot add the first variable. Some studies added socioeconomic variables to estimate the logit (Groeger et. al. 2022)

[14]Labor networking can also play an important role. It should be more difficult to allocate a skilled migrant worker. Few multinationalspermitrelocation of skilled workers.

[15]COVID-19 may have shaped the latter result, but we do not have a survey for the period of the pandemic.

[16]The author found discrimination.

[17]The approach of the authorcomes from the job offer. The older applicant receives the worst job offer when his age is revealed.

Table 4. Model Estimation for Income.

TOTAL INCOME	Coef.	Linearized Std. Err.	t	Significance	[95% Conf. Interval]	
AGE					9.19	28.15
SEX FEMALE	-263.44	49.50	-5.32	***	-360.48	-166.41
EDUCATION	99.96	24.65	4.05	***	51.63	148.29
Pr(DISCRIMINATION)	-6411.15	2577.83	-2.49	**	-11464.31	-1358.00
FOREIGNER CARD	401.44	111.37	3.60	***	183.13	619.75
_cons	2292.12	677.78	3.38	***	963.52	3620.72

*** Significant at 99%
** Significant at 95%
* Significant at 90%

As mentioned previously, the latter estimation is used as an input to capture the predictor of discrimination with the residuals of the previous logit regression. The predictor explains discrimination by removing all the variables discussed above.

Table **4** shows the results of the Newey–West estimation of the pool of individuals. We then test the hypothesis of income discrimination for Venezuelan migrants in Peru. All variables, including the predictor of discrimination, resulted in significant and interesting results according to the literature review discussed in the previous section of the paper.

Age was found to be both positive and significant. This means that when the migrant is older, he or she may find a better-paying job. We have removed any possibility of endogeneity because a previous estimation permits us to obtain consistent parameters.

Sex was a negative variable. This variable assumes a value of 1 if the respondent is female. Therefore, females receive less income, and a gender inequality issue arises in Venezuelan migration. The latter result was not verified in the literature discussed above. This is an interesting preliminary result that is consistent with our hypothesis.

The variable EDUCATION is both positive and significant with respect to income. Higher levels of education permit an increase in income despite discrimination. This variable is consistent with previous findings in the classical literature on labor economics. See, for example, Mincer's (1958) equations and theory as a seminal approach in the literature.

Discrimination is captured as predicted, without any concern about the correlation between determinants of income. The latter variable was both negative and significant with a large coefficient, explaining the reduction in income when discrimination increased. Labor discrimination is a factor in Venezuelan migration in Peru. This result is in line with previous studies (Groeger, 2022; Mougenotet al., 2021).[18] Discrimination is not based on racial issues; it may be considered a multidimensional assessment. Peruvian society is particularly complex in thatthe caste system is not subject to skin color, but shaped by one's descendants, family wealth, influence, connections and friends, education at a prestigious institution, and membership in a club or a beach house, all of which simultaneously determine social status and discrimination perception (Galarza, 2012).

Finally, the dummy variable FOREIGN CARD is associated with an increase in income. The legal status of migration influences the latter result, and formality matters to obtain a better salary. The latter outcome is consistent with our hypothesis and literature review. This study hasencompassed many features regarding the determinants of income: DISCRIMINATION, migration status, and socioeconomic variables.

6. CONCLUSIONS

We conclude that the recent Venezuelan migration in Peru is characterized by income discrimination. This discrimination does not necessarily have its origin in racial factors. Peru has numerous laws in place to protect its citizens (children, women, seniors, indigenous people, persons with disabilities, LGBT persons, and everyone else) from discrimination and racism. As previously mentioned, Peru's populationis made up of hybrids and different combinations of races. The Venezuelans are mostly African–-European descendants. The discrimination perceived and found to be significant in the study does not arise exclusively as a result ofethnicity, age, or gender drivers. Migration status may help explain the results.Migration status produces a labor competition environment for locals and alerts them to leave newcomers away.As pointed out in the preceding section, more factors fall under discrimination, such as education and socioeconomic status.

The model results show that when Venezuelan migrants in Peru have updated their legal documents,income inequalities in the Peruvian labor market are offset. The latter finding provides empirical insights into the literature on applied research that focuses on recent Venezuelan migration in Latin American countries.

This study shows a heterogeneous effect in formal and informal labor markets. Since most migrants working in the Peruvian labor market are underpaid and "skill downgraded,"the level of education is the key to improving theirearnings. The latter variable is higher and more attractive in formal markets. Therefore, contrary to the literature results already discussed in the previous sections of the paper, we are able to discover the divergence between formal and informal

[18]We do not discuss the mental health issue, as the author notes.

labor markets. Some results in the existing literature find homogeneity between formal and informal sectors. For example, the authors find that earnings drop in both sectorsin which Venezuelans participate. However, the participation of Venezuelan immigrants is significant in the informal sector, even though some of the most productive immigrants are able to work legally in the formal sector. Illegals operated in the informal sector. The results of our study capture the heterogeneity of the Peruvian labor market.

In addition to migrant income disparities in the Peruvian labor market, there are gender inequalities. These results are consistent with those of many studies on migrants and non-migrants. Thus, gender discrimination holds despite migrant conditions. Gender gaps in the labor market are an important issue that needs to be studied further. Exploring the determinants and causes of the latter inequality may be considered using the available data on Venezuelan migration. The analysis can be recurrent because most of this gap has been explained by quantifiable factors, such as educational attainment, occupational segregation, age, and work experience. The narrowing of the gap is largely attributable to the gains women have made for each of these socioeconomic variables.

The results of this study allow us to identifythe determinants of income inequalities in the recent Venezuelan migration to Peru. Further policies in the labor market will expose migrants and refugees to xenophobia.

APPENDIX

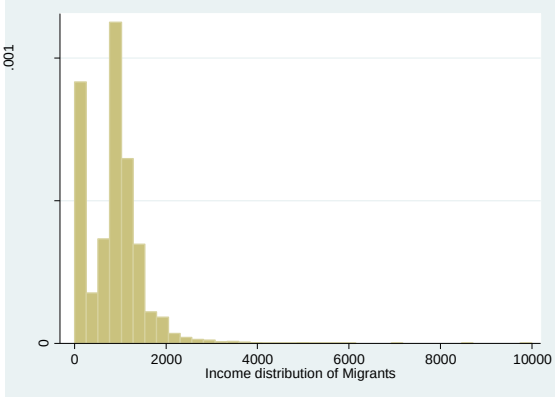

Fig. (1). Income distribution in the sample.

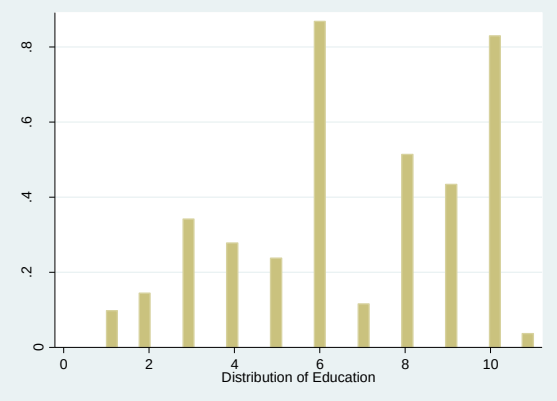

Fig. (2). Education Distribution.

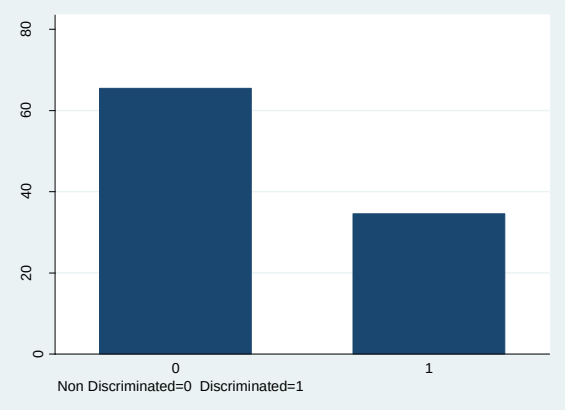

Fig. (3). Percentage of Discrimination.

REFERENCES

Asencios, R., & Castellares, R. (2020). Impacto de la Inmigración Venezolana en el Empleo y los Salarios: el Caso Peruano (No. 2020-002). BCRP Working Paper Series. Downloaded at: https://www.bcrp.gob.pe/docs/Publicaciones/Documentos-de-Trabajo/2020/documento-de-trabajo-002-2020.pdf

Borjas, G. J., & Cassidy, H. (2020). *The adverse effect of the COVID-19 labor market shock on immigrant employment* (No. w27243). *National Bureau of Economic Research*. Available at: https://www.nber.org/papers/w27243

Botello-Peñaloza, H. (2021). Wage Inequality of Venezuelan Migrants in Ecuador. *The Indian Journal of Labour Economics*, 64(1), 115–132. Available at: https://doi.org/10.1007/s41027-020-00300-y

Caruso, G., Canon, C. G., & Mueller, V. (2019). Spillover effects of the Venezuelan crisis: migration impacts in Colombia. *Oxford Economic Papers*, 73(2). Available at: https://doi.org/10.1093/oep/gpz072

Dustmann, C., T. Frattini, and I. P. Preston. The Effect of Immigration along the Distribution of Wages. *Review of Economic Studies* 80, no 1 (2012): 145–173

Galarza F. and Yamada G. (2012) Labor Market Discrimination in Lima, Peru: Evidence from a Field Experiment. UP-CIUP 12/03 WP

González, Ángel (2011). Venezuelan Diaspora Booms Under Chávez. *Wall Street Journal*.

Greene William (2000) H. Econometric Analysis. Upper Saddle River, N.J.: Prentice Hall. 6th edition.

Groeger, A., León-Ciliotta, G., Stillman, S. (2022). Immigration, Labor Markets and Discrimination: Evidence from the Venezuelan Exodus in Peru. Policy Research Working Paper, 9982. World Bank, Washington, DC. Obtained from: https://openknowledge.worldbank.org/handle/10986/37206

Jacques, R., Linares, Y., & Useche, E. (2019). (Geo) políticas migratorias, inserción laboral y xenofobia: migrantes venezolanos en Ecuador. En C. Blouin (Coord.). Después de la llegada: Realidades de la migración venezolana (103-127). Themis-PUCP. Available at: http://repositorio.pucp.edu.pe/index/handle/123456789/170254

Jones, G. (2009). Youth Violence in Latin America: Gangs and Juvenile Justice in Perspective. Springer.

INEI (2017) Report on Indigenous Communities downloaded at https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1598/TOMO_01.pdf

INEI Reports downloaded at https://www.inei.gob.pe/

Loayza N. (2020) Informality: Why is it so Widespread and How Can it Be Reduced?

World Bank Research and Policy Briefs No. 133110

Manacorda, M., A. Manning, and J. Wadsworth. The Impact of Immigration on the Structure of Male Wages: Theory and Evidence from Britain. *Journal of the European Economic Association* 10, no 1 (2012): 120–151.

Mincer, J. Investment in human capital and personal income distribution. *Journal of Political Economy* 66:4 (1958): 281−302.

Miniter news (2021) downloaded at

https://rpp.pe/politica/gobierno/mininter-autoriza-transferencia-de-s-422-847-para-traslado-aereo-de-venezolanos-que-seran-expulsados-del-pais-noticia-1360236

Morales, F., & Pierola, M. D. (2020). Venezuelan migration in Peru: Short-term adjustments in the labor market (No. IDB-WP-1146). IDB Working Paper Series. Available at: http://dx.doi.org/10.18235/0002594

Mougenot, B., Amaya, E., Mezones-Holguin, E., Rodriguez-Morales, A. J., & Cabieses, B. (2021). Immigration, perceived discrimination and mental health: evidence from Venezuelan population living in Peru. *Globalization and health*, 17(1), 1–9. Available at: https://doi.org/10.1186/s12992-020-00655-3

Neumark D. (2020) Age Discrimination in hiring: Evidence from Age-Blind vs. Non-Age-Blind hiring procedures Working Paper 26623 http://www.nber.org/papers/w26623

OECD (2016). Taxing Wages in Latin America and the Caribbean 2016. OECD Publishing.

Peñaloza, L. (2019). Living with the neighbors: The effect of Venezuelan forced migration on wages in Colombia (No. 248). Documento de Trabajo. Available at: http://hdl.handle.net/10419/214141

Rueda, Manuel. (2018) Venezuelan beauty queen gets carjacked at gun-point. Splinter

Salgado, F., Contreras, C. & Albornoz, L. (2018). La migración venezolana en Santiago de Chile: entre la inseguridad laboral y la discriminación. *Revista Internacional de Estudios Migratorios (RIEM)*, 8(1), 81 – 117. ISSN-e 2173-1950. Disponible en: http://repositorio.ual.es/bitstream/handle/10835/6158/2164-6290-1-PB.pdf?sequence=1

World Bank (2019). An opportunity for all: Venezuelan migrants and refugees and Peru's development. Technical report, World Bank, https://openknowledge.worldbank.org/handle/10986/32816. License: CC BY 3.0 IGO.

World Economic Forum Reports downloaded at https://www.imf.org/en/Publications/WEO

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