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Research Article

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Are Immigrants Discriminated Against in Benin's Wage Labor Market?

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Abstract

This paper aims to explore immigrants' situation in the labor market in Benin from the point of view of both their access to salaried employment, their remuneration and their situation vis-à-vis nonimmigrant workers. Using data from the Harmonized Survey on Living Conditions of Households 2022 in Benin, the article combines statistical analysis with an Oaxaca and Ransom decomposition approach to highlight the presence of discrimination in salaried labor market access and remuneration perceived by immigrants and nonimmigrants alike. The analysis reveals that there is discrimination in favor of migrants in access to salaried employment and that immigrants are less paid than nonimmigrant workers. These results provide arguments in favor of labor market reforms to ensure equity in access and remuneration.

Keywords: Migration, Work, Employment, Remuneration, Discrimination.

1. Introduction

According to the United Nations Conference on Trade and Development (UNCTAD, 2018), approximately 41 million international migrants moving within, from or to Africa are counted on the continent, of whom 19 million reside on the continent. Similarly, the African Strategic Studies Center (SCS, 2021) reported that the number of legal migrants both within and from Africa has almost doubled since 2010, reflecting an increasing trend over the past twenty years. These statistics testify to the population movement scale on the continent, movements that are not without consequences for the African countries' economies.

In general, African population movements have multiple and generally interlinked causes, including economic, security and social factors. For example, the SCS's report in 2022 reveals that conflict, repressive governance and a lack of economic opportunities are the main factors driving population movements: among the fifteen (15) African countries from which the most migrants originate, nine (09) are in conflict. Similarly, according to Le Gouriellec (2022), many Africans migrate in search of better economic opportunities than they can find in their country. A summary of data from the Harmonized Survey of Household Living Conditions (HSHLC) from 2018--2019 reveals that over 12% of people in the labor market are immigrants from the Economic Community of West African States (ECOWAS), with a variety of reasons for immigration: 11% seeking better opportunities, 1.42% lacking employment in their original country, and a marginal share for reasons of political and economic instability.

The theoretical debate on the relationship between migration and the labor market has arisen in the economic literature, both in the field of access to employment and in the field of workers' remuneration [1]. In general, immigration is perceived as a cause of an increase in the labor supply, and this relationship's analysis in the field of labor economics raises questions about the labor market's adjustment mechanisms and its capacity to absorb immigrant labor. In this sense, neo-Keynesian analysis focuses on the impact of migrant inflows on native-born workers' employment opportunities and wage levels. The conclusions of these neo-Keynesian analyses vary according to the quality of immigrant labor. For example, in the presence of imperfectly substitutable skills for firm production, there is a comparative advantage for "rare" skills, and immigration affects the labor market only if it is able to modify the skill distribution [2]. From the perspective of the impact on wages, everything will then depend on the labor supply's elasticity, in the sense that an inelastic supply will lead to an appreciable effect of immigration on wage levels. These theoretical analyses of the effect of migration on the labor market are not lacking in empirical applications in the economic literature; however, it should be noted that most related research concerns developing countries, as attention to the immigration issue has increased since the 1964 immigration act in the United States of America (USA), which prompted numerous studies in Europe since the 1990s.

The effect of immigration on the economy in general and on the labor market in particular has been questioned empirically in the literature related to developed countries, notably by [3-7]. While some economists establish empirically that immigration negatively affects employment and wages, others find a positive

effect of immigration on both employment and wages, whereas a third category of researchers find little or no immigration's effect on the labor market.

Indeed, using American data, shows that doubling the number of immigrants in the USA results in a 3% decrease in wages and a 5% reduction in employment; these statistics concern low-level qualifications, according to the author, which calls for a relativization of the conclusion. On the other hand, when use French data, they find a positive effect on both wages and employment for French-born workers with the same level of qualification, a result that, according to the authors, can be explained by these workers moving toward more sophisticated jobs or more dynamic geographical areas. In addition to these two categories of opposing results, the economic literature points to the absence or near absence of any immigration effect on the labor market on French data between 1990 and 2010, taking into account the complementarity effects induced by immigration on nonimigrant workers whose qualifications differ from those of immigrants [8].

From a methodological point of view, the analysis of the effect of immigration on the labor market in the literature generally uses two categories of approaches. Regardless of whether the macroeconomic approach is the most commonly used or the microeconomic approach, the analysis techniques are generally econometric techniques that relate immigration measurement variables to labor market indicators [9-13]. Within this framework, macroeconomic approaches generally rely on models such as panels and dynamic regressions, whereas microeconomic approaches use methods such as models with qualitative dependent variables, quantile regressions and Tobit regressions.

The controversies that abound in the economic literature stem fundamentally from studies in developed countries, but the immigration issue is now a preoccupation of both developed and developing countries; unfortunately, the literature remains even less extensive, if not silent, in developing countries. If we agree that employment and remuneration issues are even greater concerns in developing countries, which face many challenges in terms of economic and social policy, it is entirely justified to investigate the problem of the immigration effect on the labor market in developing countries.

Benin, because of its geographical position in the West African subregion and the political stability it has enjoyed (and still enjoys), is considered a host country for many people moving from their countries for a variety of reasons (search for better opportunities, lack of employment, political instability in their countries, etc.). According to statistics from the United Nations Department of Economic and Social Affairs (UN-DESA, 2020), 3.3% of Benin's population were migrants in 2020, with the number of migrants increasing by 1.3% between 2000 and 2020. Women accounted for 52.9% of these migrants in 2020, and 71.1% of the migrants were of working age (between 20 and 64). In view not only of these statistics on immigration to Benin, which testify to the importance of the phenomenon for the country but also of the place occupied by employment and income in the country's social policy, the question arises as to whether the labor market is favorable to immigrants in Benin. This paper aims to explore immigrants' situation in Benin's labor market in terms of their access to salaried employment and their remuneration in this job.

This paper has a twofold interest: on the one hand, it contributes to the enrichment of the literature on the issue in developing countries, with most of the available literature on the issue being related to developed countries; however, the issue of migration has not ceased to preoccupy other countries in the world, which are also hit by major migratory flows due to mutations and crises shaking all countries. On the other hand, the paper explores a microeconomic approach to the problem and thus provides microeconomic tools for enriching employment policies that take into account the mutations to which contemporary economies are subject, mutations at the heart of which are the compelling issue of migration.

Section (2) of this paper proposes a methodological approach, describing the data sources and analysis methods; section (3) presents and discusses the results obtained; and section (4) concludes the paper by formulating policy implications.

2. Methodology

2.1. Data Sources

This paper uses data from the Harmonized Survey of Household Living Conditions 2022 in Benin, which was carried out by Benin's Institute of Statistics and Démographics (INStaD). This survey, whose objective is to produce data on household living conditions, comprises several sections, including one essentially devoted to the labor market; this section therefore enables data to be collected on labor market variables; a particular aspect of this section addresses the types of employment held by individuals; this section is completed by the sociodemographic section, which provides information on individuals' migratory status, among other things. The employment section of the survey covers a sample of 4,898 individuals, comprising 3,9573 individuals, including 1,852 international immigrants. The sample distribution according to some key variables is presented in Table 1.

Education level	immigrants	Nonimmigrants
none	3%	5%
Primary	15%	12%
secondary	51%	53%
higher	31%	30%
Total	100%	100%

Gender		
male	63%	53%
female	37%	47%
total	**100%**	**100%**
Mean age	**32.6 years**	**35.12 years**
Professional experience	2.3 years	3.3 years
Proportion in salaried employment	36.58%	35,82%
Mean of daily salary (fcfa)	2526.651	4171.463
Daily wage quintiles (fcfa)		
1er quintile	2,045	2510
2ème quintile	2,813.57	3,653.808
3ème quintile	4,150	5,980
4ème quintile	6,875	9,857
Source: According to estimations, after base weighting		

Table 1: Statistiques Describing Key Variables

2.2 Analysis Methods

2.2.1. Statistical Analysis

The analysis is primarily statistical, enabling us to understand the general trends that emerge from the data. To this end, we use statistics calculated on the basis of inference tools to highlight any significant differences in the chances of access to salaried employment and in the earnings of international migrants and nonmigrants. The results of these analyses are then subjected to explanatory analyses to assess the degree of influence of certain determinants on not only immigrants' access to the labor market but also their remuneration in the market.

2.2.2. Explanatory Analysis

The phenomenon of discrimination is based on a characteristic that has no influence on productivity and that disadvantages individuals not only in terms of access to employment but also in terms of remuneration. With respect to the literature, we use a technique inspired by [14]. This technique was used by, who, on the basis of a theoretical model developed by and Blinder, decompose the difference in wages between men and women into a component due to differences in productive characteristics (educational level, professional experience, etc.) independent of these characteristics. Drawing on the development of, we decompose an individual's chance of accessing job and earnings into two components explained by productive and nonproductive characteristics, respectively [15,16]. The component not explained by nonproductive characteristics is the one attributed by to discrimination. Indeed, the employer recruits a worker and pays him for his productive characteristics, and the presence of a component unrelated to these characteristics in a worker's chance of being recruited is assimilated, according to the logic of, to discrimination. (see for the model's development).

3. Results, Analysis and Discussion

3.1. Statistical analysis of Results and Differences in Benefits Between Immigrants and Nonimmigrants

3.1.1. The Labor Market Appears More Favorable to Immigrants Than to Nonimmigrants in Benin

We estimate the rate of access to salaried employment according to status (immigrant/nonimmigrant) in Benin on the basis of data from the EHCVM survey and then implement a comparison test of access rates to salaried employment. The null hypothesis of the comparison test assumes equal access rates. The results of the estimation are presented in the following table:

Status	**Mean**	**Standard deviation**	**Z_statistic**	**Confidence interval at 95%**
Nonimmigrants (0)	0.358	0.003		[0.352 , 0. 363]
Immigrants(1)	0.365	0.027		[0.311 , 0.419]
Difference : *Pr*(1)-*Pr*(0)	0.006 Sous H0 :	0.024 0.025	2.274	[0.006 , 0.007]
H_0:*differece=0* H_a:*differece<0* *Pr(Z<z)=0.980*		H_a:*differece≠0* *Pr(Z>z)=0.030*		H_a:*differece>0* *Pr(Z>z)=0.019*
Number of observations		Nonimmigrants: 37,721 Immigrants : 1,852		
Source: According to estimations, after base weighting				

Table 2: Estimated Salaried Employment Access Rate by Status

The table shows that, at the 95% confidence level, 36.58% of immigrants in Benin have access to salaried employment. Compared with 35.83% for nonimmigrants, this rate is significantly higher than that for nonimmigrants at the 95% confidence level, as shown by the results of the comparison test. This result indicates that the salaried labor market in Benin seems to be more favorable to immigrant workers in terms of hiring than to nonimmigrant workers.

3.1.2. Almost All Immigrants in Private-Sector Jobs

Salaried employees are generally offered either by the state structures or by private companies. To appreciate the main employers of the migrants, we establish the immigrant distribution by type of employer. The results in Table 3 show that almost all immigrants work in the private sector.

Type d'employeur	Fréquence(%)	Cumul(%)
Etat/Collectivités locales	0.94	0.94
Entreprise Privée	99.06	100
Ensemble	100	
Source: According to estimations, after base weighting		

Table 3: Distribution of Immigrants by Type of Employer

A detailed analysis of the data reveals that, in general, the companies in which these immigrants work are in the agricultural sector (43.15%), trade and ancillary activities (23.52%), manufacturing (18.86%), personal services (4.21%), hotels and restaurants (2.34%) and sometimes education (2.69%).

3.1.3. In Terms of Wages, Immigrants are Worse off

While immigrants have a greater propensity to enter a salaried job, the remuneration question also merits analysis to better understand immigrants' situation than nonimmigrants do in the salaried labor market. To highlight the difference in remuneration between immigrants and nonimmigrants in the salaried job market, we use tests to compare the means and medians of the daily wage logarithms between immigrants and nonimmigrants. For this purpose, the equality of variance is first verified via Bartlett's test [17,18].

Parameters	Worker's type	Daily wage (fcfa)	Logarithme of daily wage	
mean	immigrants	2526.651	4.125	
	Nonimmigrants	4171.463	6.055	
Variance	immigrants	698.147	1.081	
	Nonimmigrants	702.583	1.593	
Médian	immigrants	2813.570	4.674	
	Nonimmigrants	3653.808	5.062	
Tests	**Test Statistic**	**p-value**	**Test Statistic**	**p-value**
Bartlett's test (equality of variances)	182.136***	0.000	259.677***	0.000
Fligner's test (equality of variances)	72.275***	0.000	56.119***	0.000
Student's test (equality of means)	59.371***	0.000	2.491***	0.000
Mann–Whitney's test (equality of médians)	59.377***	0.000	2.391**	0.003
Source: According to estimations, after base weighting				

Table 4: Comparisons of Daily Wage Variances, Means and Medians

The results of the tests suggest a significant difference in variance between remunerations on the one hand and between their logarithms on the other hand. The results of the Student's test for comparisons of means between immigrants and nonimmigrants lead to the conclusion that there is a significant difference in daily remuneration between immigrants and nonimmigrants, and the result provided by the means' comparison test confirms robustness via the median Mann–Whitney comparison test.

3.2. Explanatory analysis: Confirmation or Denial of Discrimination Between Immigrants and Nonimmigrants?

As differences in access to salaried employment and remuneration have been highlighted between immigrants and nonimmigrants in the labor market, we implement explanatory analyses using approach to determine whether the differences observed are due to discrimination by investigating whether these differences are due to productive factors.

3.2.1. Positive Discrimination in Favor of Immigrants in Access to Salaried Employment in Benin

We first estimate a logit model of access to salaried employment on the immigrant subsample to predict access to salaried employment probabilities for nonimmigrants on the basis of the estimators obtained on the immigrant subsample. The estimation results are

presented in the Appendix (selection equation results). Using the parameters estimated in this result, we determine the predicted access to salaried employment probabilities for nonimmigrants (the counterfactual probability of access to salaried employment in the immigrant group if their characteristics are valued like those of nonimmigrants), which we average over the nonimmigrant subsample, to calculate the differences explained and not explained by the productive characteristics represented by the model's explanatory variables. We present this process result in Table 5.

Contrefactual mean probability (Immigrants/nonimmigrants) (A)	Explained gap		Unexplained gap	
	value	% of (A)	value	% of (A)
0.389	0.050	12.85	0.339	87.15
Source: According to estimations				

Table 5: Gaps in Immigrant/Nonimmigrant Access to Salaried Employment Probability.

We thus observe an explained gap of 0.050, or 12.85% of the counterfactual probability, whose source lies in the differences in productive characteristics between immigrants and nonimmigrants, far lower than an unexplained gap of 0.339, which represents 87.15% of the counterfactual probability. As the unexplained difference is greater than the explained difference, we conclude that there is discrimination in access to salaried employment, thus confirming the significant difference in access to salaried employment chances revealed in the statistical analyses. Beyond discrimination in access to salaried employment, we are also interested in the existence of discrimination in remuneration.

3.2.2. Discrimination Against Immigrants in Terms of Pay

Statistical analysis revealed a significant difference in remuneration between immigrants and nonimmigrants. Using the same approach as, we first estimate a linear regression model of daily earnings as a function of individuals' productive characteristics on the immigrant subsample to predict nonimmigrant earnings from the estimators obtained on the immigrant subsample. The estimation results are presented in the Appendix (wage equation result). Using the estimated parameters of this result, we determine the daily remuneration forecasts for nonimmigrants (counterfactual compensation in the immigrant group if their characteristics are valued like those of nonimmigrants), which we average over the nonimmigrant subsample, to obtain the differences explained and not explained by the productive characteristics represented by the explanatory variables in the model. We present this process result in Table 6.

Contrefactual wage's mean (Immigrants/nonimmigrants)	Explained gap in log(wage)		Unexplained gap in log(wage)	
	value	% of (A)	value	% of (A)
0.073	0.050	12.85	0.339	87.15
Source: According to estimations				

Table 6: Gaps of the Logarithm of Daily Earnings (Ln_Wage) Immigrants/Nonimmigrants

According to the statistics in the table, the difference in the logarithm of remuneration explained by the productive characteristics of individuals (composition effect) represents 12.85% of the counterfactual difference, which is very low compared with the unexplained difference (discrimination effect), which represents 87.15% of the total effect. Therefore, there is a significant difference in remuneration between immigrants and nonimmigrants, which, in view of the statistical analysis results, means that at equal productivities, immigrants are paid less than nonimmigrants.

To better understand this result, we begin by comparing wages with their monthly equivalents to compare them with the guaranteed interprofessional minimum wage (SMIG) in force in Benin, which is 52,000 fcfa (equivalent to 86.5 USD). In fact, in terms of its monthly equivalent (approximately 50,583 fcfa, equivalent to 84.27 USD), the average remuneration of immigrants is lower than that of the SMIG, whereas that of nonimmigrants (approximately 83,429 fcfa, equivalent to 139 USD) is higher than that of the SMIG. Second, according to Table 1, 25% of immigrant workers earn less than 3.4 USD per day, which denotes a high concentration in the lower income class.

These factors help us understand that, as nonimmigrants are generally not as precarious a situation as immigrants are (immigrants, given that the reasons for their immigration are in situations that sometimes force them to accept any type of job, for reasons of survival), the relatively low cost of waiting for a better-paid job can lead them to prospect the labor market for longer in order to find better-paid jobs, something that immigrants are generally unable to do, as the cost of waiting is higher for them; these waiting costs are higher for migrants because they generally have no other source of income to support themselves, being far from the relatives they left behind in the country; the existence of these sources of income would then have played the role of compensation for prolonged unemployment induced by the refusal of a low-paying job. However, as shown by the literature, notably by, a decrease in unemployment benefit generally leads to a shortening of the duration of the job search and consequently an acceptance of offers of lower-paid jobs [19-25].

4. Conclusion and Policy Implications

This paper aimed to explore immigrants' situation in the labor market in Benin, both in terms of their integration into the salaried labor market and their remuneration compared with that of nonimmigrant workers. Both the statistical and econometric

analyses generally reveal three conclusions. First, the salaried labor market is more favorable to immigrants than to nonimmigrants in Benin, with immigrant access rates significantly higher than those for nonimmigrants. Second, immigrant workers are present in a given segment of the labor market, that is, private enterprises. Finally, the results reveal a significant difference between the average remuneration.

This difference between immigrants and nonimmigrants in the labor market is due to the advantages of nonimmigrants. Taken together, these results prove the existence of discrimination in the labor market, with discrimination favorable to immigrants in terms of salaried labor market access but unfavorable to immigrants in terms of remuneration.

These different results have policy implications that need to be highlighted. First, in light of the principles of the free movement of production factors characterizing today's liberal economy, measures need to be taken to further strengthen and reinforce equal access to the market, regardless of the type of employment (private or public). public). Indeed, with the African Union's recognition of the importance of human resources skills for the continent's development since the adoption by the institution of the protocol on the free movement of persons in 2018, equal opportunity for immigrants and nonimmigrants workers should enable different countries to benefit from the skills of human resources in other countries who, for reasons, find themselves obliged to seek employment outside their country. country. Second, in terms of remuneration, measures also need to be taken to guarantee remuneration that considers individuals' productive characteristics, regardless of their origin. Indeed, equitable remuneration in a company generally generates greater commitment on the part of the workers to the company, which then improves the social climate, with positive repercussions on productivity within the company.

Despite this research's results, the paper is not without limitations. Moreover, it does not address the motivations for discrimination in the labor market. Knowing these motivations would be an important element in reducing discrimination in the labor market. Future research could be devoted to this discrimination dimension to shed more light on the problem of discrimination that is also present in most current debates on the labor market.

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Appendix

Variablles	wage equation (dep.var=log(wage)		Selection equation (dep.var=work)	
	Coefficient	**Standard error**	**coefficient**	**Standard error**
Education level (ref.=none)				
Primary	0.083***	(0.025)	-0.091***	(0.032)
Secondary_and_over	0.039***	(0.006)	-0.184***	(0.034)
Gender (ref.=male)				
female	-0.131***	(0.028)	-0.124***	(0.022)
Residence (ref : rural)				
urban	0.069***	(0.023)		
Experience (ref.=no)				
yes	0.118***	(0.030)	-0.116***	(0.023)
employer (ref.=public)				
private	0.294***	(0.036)		
Constant	-0.927***	(0.035)	1.067***	(0.022)
/athrho	-2.476***	(0.162		
Observations	1852	675		
Source: According to estimations				