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Employment and Labor Mobility: Diasporas Slavery versus Economic Empowerment

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Abstract

Most African countries face unemployment and poverty problems which may cause their citizens to migrate to seek employment. Questions are being asked whether such ventures are beneficial or an anticlimax for the seeker. The study interrogates the effects of unemployment on labour mobility on the one hand and labour mobility on economic development on the other. Effects of Remittances by Africans in the Diaspora from seven selected African countries: Nigeria, Ghana, Ethiopia, Kenya, Egypt, South Africa, and Morocco were also examined. The Hausman test is used to choose the best model, and the random model was found to be suitable for examining the causal relationships between the six variables in the panel data. Because their remittances have a significantly positive association with per capita income in these nations, the data demonstrate that labor mobility is not economic enslavement but rather economic empowerment. Nevertheless, it was discovered that the per capita income was negatively impacted by labor mobility. This is a confirmation that brain drain from these countries affects per capita income. Population growth was found to have a negative relationship with labour mobility. The study recommends the reversal of brain drain through efforts that will ensure political stability and also recommends that brain gain through remittances by Africans in the Diaspora should be effectively and efficiently utilized for economic growth. It also recommends the need for an effective policy on Diaspora issues to assist in curbing excessive immigration of African people from Africa. These findings are similar to that of Olayungbo and Adediran (2017) and Gnimassoun and Anyanwu (2019). The major contribution of this study to the existing literature is that labor mobility is not significantly determined by unemployment rather it is majorly due to political instability in the selected countries.

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Keywords: unemployment, labour mobility, diapora, economic empowerment.

JEL Codes: J01, J03, C33

Introduction

As globalization and interdependence between states progress, there is an ongoing rise in international migrant flows. These phenomena have served to highlight the critical connection between global migration and development, igniting discussion on the relationship to strengthen global migration strategies and policies. One of the effective strategies for alleviating poverty and global inequality both inside and between bordering countries has been migration (Adams & Page, [2005](#)). In the framework of modern development, since "not only is poverty systematically higher in LDCs, and falling more slowly, but the means available to them are also much more limited" (United Nations Conference on Trade and Development [UNCTAD], [2015](#)), migration can be viewed as a strategic opportunity for LDCs. The Committee for Development Policy ([2017](#)) reports that "their structural challenges and weak economic and social performance are rooted in the limited development of their productive capacity." From this perspective, it is argued that "migration is relevant to many of the other goals" and that countries "need to consider the impact of migration at all levels and on all outcomes, beyond the migration-specific targets" (Overseas Development Institute [ODI], [2017](#)).

Van der Mensbrugge and Roland-Holst ([2009](#)) posits that similar to international trade, migration benefits sending and receiving nations. Migration has advantages for both the sending and receiving countries, just like international trade does (van der Mensbrugge & Roland-Holst, [2009](#)). International migration has effects on development in both the origin and destination nations, in both the Southern and Northern hemispheres. Even though political persecution, human trafficking, and armed conflict are significant factors in international migration, more than 90% of migrants do so for economic reasons. In general, migration has favorable economic effects for the household that is migrating, both the nation of departure and the nation of origin.

In the late 20th and early 21st centuries, taking advantage of the expanding diaspora groups was one of the most crucial political and

economic strategic assets available to developing nations. One could argue that a new paradigm for development has emerged as a result of the growth of global Diasporas in recent decades. with remittances and other economic inflows essential to the reduction of poverty, the growth of business, and the securitization of national debts (Nurse, [2004](#)). Remittances have also surpassed more conventional forms of foreign aid, borrowing, and foreign direct investment for many emerging economies (Ratha & Plaza, [2011](#)).

According to the United Nations Development Program (UNDP, [2009](#)), it is estimated that 215 million individuals or approximately 3% of people on the planet live outside of their native nations. About 258 million people, or 3.4% of the world's population, were living abroad as of 2017 (Nurse, [2004](#)). An estimated 25.9 million people, or about 10% of all international migrants, were included in this number, with 82.5% of them being hosted in poor countries. With the exception of immigrants from Latin America and the Caribbean, who mostly travel to North America, most international migrants settle in a nation that is located in the region where they were born. Asia is the region that receives the most migrants, at around 80 million. With about 80 million migrants, Asia is the top region receiving migrants. North America comes in second with 58 million, closely followed by Europe with 78 million. With 24.7 million, Africa receives the most immigrants from the poor world, followed by Latin America, Oceania (8.4 million), and the Caribbean (9.5 million) (United Nations [UN], [2008](#)).

A decision to move has an impact on the economy in a variety of ways, as well as the family's well-being and that of the local community (Azam & Gubert, [2006](#)). Although this is not always the case, migration normally has a considerable and positive impact on the welfare of the country of origin. The main ways that migration improves poverty are through increased remittance income, the capacity to control consumption, getting finance to launch a new company, and utilizing the resources and expertise offered by the global network of migrant diaspora experts. Along with sheer financial benefits, higher investments in healthcare and education are made possible by migration and remittances. A nation's identity and sovereignty may be seriously threatened by mass immigration, and not all effects are good. For example, it has been stated

that exploiting migrants by dishonest recruiters or employers is commonplace.

Even while the remittances that migrants send home are without a doubt the most concrete and least contentious relationship between migration and development. Migration has an impact on the economics, communities, and cultures of both sending and receiving countries. (Ratha, [2007](#)). In addition, Ratha et al. ([2010](#)) argue that transmittals from migrants to developing countries were estimated to have reached over \$315 billion in 2009, more than triple the amount of formal development aid. The actual size of remittances, which takes into account unreported transfers through legal and illegal channels, may be far higher. Remittances to developing countries experienced a slight decline in 2009 because of the global financial crisis, but these flows have held up better than private capital flows and have grown in significance as a source of outside funding. Funding in the majority of third-world states.

When done for domestic gain, migration can, at its best, be a pleasant experience, but most of the time, moving away from family and abroad has a large emotional cost (D'Emilio et al., [2007](#)). Temporary circular movement, increases the likelihood of family disintegration, the dissolution of social networks, and psycho-social pressures. The emotional cost is felt by both the migrants and their relatives who stay behind. In impoverished households where the entire family cannot afford to emigrate at once, one family member departing at a time destroys family structures and relationships.

The long parents are away from their children, the less power they have over family decisions, authority over them emotionally and materially, according to D'Emilio et al. ([2007](#)). Other family members gradually take over parenting responsibilities, or the children volunteer to do so. Money gifts and remittances from outside do not change the feelings of rejection, abandonment, and loss that the children who are left behind endure. Technology improvements such as email and inexpensive phone calls may, in some cases, make it possible for international families to create and deepen social ties despite being geographically separated (United Nations Development Program [UNDP], [2009](#)).

There are two competing hypotheses about the effects of brain drain from emerging nations. According to the first idea, which is also the oldest

and most well-known, and postulate by Miyagiwa (1991), and Haque and Kim (1995), brain drain hurts the economies of the sending countries. According to Meyer (2002), Kerr (2008), Spilimbergo (2009), Docquier et al. (2011), as well as Agrawal et al. (2011) the second theory, which is more contemporary, contests the first by emphasizing two brain drain effects that could be advantageous to emigrant countries.

According to the first theory, families invest in their children's education with an impending departure in mind as an incentive consequence that occurs ex-ante of emigration itself. Since not all highly competent persons relocate, this incentive effect might lead to an increase in the stock of human capital. The second consequence is ex-post, and it has to do with the connections that members of the Diaspora maintain with their nation of origin, whether through remittances or a potential return, but also and notably by participating in networks in politics, science, and business. These networks may result in trade, capital, and technology transfers, as well as the spread of social and institutional norms that are helpful to development (Docquier et al., 2011).

Estimates of the macroeconomic effects of emigration or the African diaspora on the continent's economic growth that are not based on detailed empirical investigations are just hypothetical in light of these two competing perspectives. Furthermore, empirical research on brain drain is still relatively new because there was a lack of consensus information on migration according to ability level initially. Therefore, the purpose of this essay is to determine if migrant employment and labor mobility represent an economic emancipation or enslavement of the diaspora. It focuses on the seven African nations—Nigeria, Ghana, Kenya, Ethiopia, Egypt, South Africa, and Morocco—with the highest rates of brain drain on the continent.

There are five sections in the paper. After this introduction, Section 2 discusses the two opposing viewpoints on how the sending countries are impacted by the diaspora's labor mobility. The technique is presented in Section 3, and the results and a discussion of them are presented in Section 4. A few policy recommendations for strengthening the influence of migration on political stability and economic development are included in Section 5's conclusion.

Literature Review

The current studies on migration's and the Diaspora's effects have incessantly emphasized the result of brain drain, or highly educated immigrants leaving their home countries in search of better opportunities elsewhere. According to Docquier and Rapoport (2012), the consensus is that brain drain hurts the sending countries. The endogenous growth theory, which highlights the significant importance of education in speeding growth (Lucas, 1988), is the foundation of the main disagreement. Consequently, a considerable growth shortfall in sending nations can be summed up by the migration of skilled employees, sometimes known as the "brain drain". A prime example is the seminal work by Bhagwatis (1976), which shows how brain drain hurts third-world nations. Losses result from the idea that increased global mobility encourages highly skilled laborers in developing nations to negotiate higher salaries, while low-skilled employees change their wage demands in response (Gnimassoun & Anyanwu, 2019).

Some studies such as Bhagwatis (1976) and Bhagwati and Wilson (1989)—convinced of the adverse impacts of the loss of brains — suggested taxing the earnings of migrants abroad to lessen the burden on their home nations. Additionally, a theoretical model of brain drain developed by Miyagiwa (1991) demonstrates that brain drain raises the income and educational levels of the receiving nation. Contrary to popular belief, brain drain severely affects professionals with mid-level capacities more than unskilled people who remain in their home nation. This makes its impact all the more significant.

In a similar vein, it was discovered that brain drain hinders the economic development of the country of origin by slowing the rate of growth of the remaining productive human capital (Haque & Kim, 1995). In conclusion, early models of brain drain's effects (in the context of endogenous growth) indicated that it increased global inequality, favoring richer nations at the expense of sending nations, who fell into poverty.

However, many more recent studies by Mountford (1997) , Stark et al. (1997), Stark et al. (1998), Vidal (1998), Meyer (2001), Beine et al. (2008), Kerr (2008), Giuliano and Ruiz-Arranz (2009) and Spilimbergo (2009), Docquier et al. (2011) have concentrated on some of brain drain's positive effects. These are Future emigration drives investment in

education, with remittances, human capital benefits, and the transmission of knowledge through the Diaspora serving as main channels. The majority of theoretical contributions in this current research, however, suggest that brain drain can only have a positive impact in specific situations. For instance, Mountford ([1997](#)) contends that this impact operates within the context of ambiguity over emigration's likelihood of success. Brain drain can enhance equality and productivity in the source economy when human capital accumulation is endogenous and successful emigration is not a prerequisite.

The impact of brain drain or the Diaspora has only recently been the subject of empirical studies because there is no universal data accessibility. Numerous studies examine the effects of the diaspora from the viewpoint of the host countries, which are primarily developed OECD nations (Ortega & Peri, [2009](#); Boubtane et al., [2013](#); Ortega and Peri, [2014](#); Alesina et al., [2016](#); Jaumotte et al., [2016](#)). We won't get into the studies on host nations because the main focus of this study is on the effects of the diaspora from the standpoint of sending countries. There are few studies on how the diaspora or brain drain affects the economic development and affluence of the receiving nations. Beine et al. ([2003](#)) evaluate the effects of brain drain on 50 developing nations and find that these effects are mostly positive, based on recent US data. They discover that depending on the levels of human capital in the exporting nations, there are winners and losers: brain drain appears to harm home countries with large immigrant populations that are well educated. In a similar vein, Beine et al. ([2008](#)) examine the effects of brain drain on the growth of human capital by analyzing emigration data for 127 origin countries according to educational attainment. They find evidence that the exodus of competent workers boosts human capital.

Batista et al. ([2012](#)) used data from a household survey in Cape Verde to show that the likelihood of finishing intermediate secondary school increases by nearly 4 percentage points for individuals who do not migrate before the age of 16. This is because a 10 percentage point increase in the likelihood of owns future migration increases this likelihood. In their 2009 study, Giuliano and Ruiz-Arranz ([2009](#)) examine how remittances from emigrants help 100 poor nations prosper. They discover that remittances foster growth in less economically developed nations by offering an alternative method of financing investment and by circumventing credit

restrictions. Similarly, households receiving remittances in Ethiopia utilized their financial savings and avoided having to sell their cattle to deal with the hunger brought on by drought (Mohapatra et al., [2010](#)). Remittances also reduce the extent and intensity of poverty and indirectly increase economic activity, according to research from Africa, Latin America, South Asia, and other regions (Adams, [1991](#); Lachaud, [1999](#); Adams, [2006](#); Gupta et al., [2009](#); Anyanwu & Erhijakpor, [2010](#); Ajayi et al., [2009](#)).

According to the most recent data from Mali, a large amount of remittances is saved for unforeseen events, causing the migrant to serve as the home's sole insurance (Ponsot & Obegi, [2010](#)). Remittances are linked to increasing economic disparity in Latin America and Africa, according to cross-country studies (Barham & Boucher, [1998](#)). However, other research indicates that migration disproportionately improves the well-being of the rural poor, such as in Mexico rural Egypt (Adams, [1991](#)), and other regions (Portes, [2009](#)). As only the extremely wealthy have the means to send workers abroad and afterward get remittances, migration may as well initially widen inequalities. However, when migrant networks develop in the target nations, the cost of migration declines, making it more affordable for those who are less wealthy to migrate (Taylor et al., [2005](#); Koechlin & Leon, [2007](#); Docquier et al., [2011](#)).

However, some scholars, like Meyer ([2002](#)), Kerr ([2008](#)), and Agrawal et al. ([2011](#)), contend that diaspora externalities exist in the transfer of resources like money, information, and technology, as well as in the spread of democratic ideals and social-cultural norms. In contrast, empirical research by Docquier et al. ([2016](#)) and Spilimbergo ([2009](#)) focused on the contribution of migration to the formation of political institutions. Additionally, Spilimbergo ([2009](#)) reveals that international students are crucial in advancing democracy in their home countries—but only if they receive their education in democratic nations—using a global dataset. Furthermore, Docquier et al. ([2016](#)) discovered that overall emigration from third-world countries to OECD countries helps to the enhancement of institutional quality in their countries of origin by using cross-section and panel data. The effect of this diaspora on African economic growth has not been extensively studied, even though Africa has a sizable diaspora in industrialized nations and a significant part of emigrants is well educated. By evaluating both the impact of

unemployment on labor mobility and the impact of labor mobility (brain drain) on economic empowerment, this study closes this gap. We concentrate on the seven African nations—Nigeria, Ghana, Kenya, Ethiopia, Egypt, South Africa, and Morocco—with the highest rates of regional brain drain.

Theoretical Framework

Endogenous Theory of Growth

According to Solow’s growth model, countries with higher rates of savings and slower population growth have higher per capita incomes when all other variables are held constant and long-term economic growth is considered to be continuous. (Solow, [1956](#); Romer & Chow, [1996](#)). According to the hypothesis, long-term growth is built on a labor force and capital stock that are both enhanced by technical development. The Solow growth model is as follows in its simplest form:

$$Q = AK^\alpha L^\beta \text{-----}(1)$$

Even if Solow’s model ought to be the starting point for explaining the growth phenomena, it has some drawbacks. For instance, the model ignores other components of growth including infrastructure, institutions, and human capital. Because of these flaws in the Solow model, Mankiw et al. ([1992](#)) and Romer and Chow ([1996](#)) created the human capital-augmented Solow growth model, which expanded the original model to include factors like educational attainment. Endogenous growth theory is defined as the addition of human capital as an input in Solow's model (Aghion & Howitt, [1992](#); Aghion et al., [1999](#)). As a result, the new enhanced version of Mankiw’s et al. ([1992](#)) Solow’s model is as follows:

$$Q = K(t)^\alpha H(t)^\beta [A(t) L(t)]^{1-\alpha-\beta} \text{-----}(2)$$

Where,

Q = Output.

K(t) = Capital stock at time t.

H(t) = Human capital at time t

A(t) L(t) = Productivity augmented labor.

In which $\alpha, \beta (0, 1)$ and $\alpha + \beta (0,1)$ and t stands for time. This suggests that the three elements of the production function—human capital (H),

physical capital (K), and productivity-adjusted labor (AL)—display constant returns to scale. The endogenous growth theories, which emphasized the critical role of education in accelerating growth (Lucas, 1988), served as the researcher’s inspiration for putting the aforementioned concept into practice for this study. Therefore, the skilled worker movement (brain drain) is a major setback for the economies of sending nations like Nigeria, Ghana, Kenya, Ethiopia, Egypt, South Africa, and Morocco.

Method

Research Design and Data Sources

The study employs ex-post facto research design which means that there is an examination of past events using secondary data. Additionally, the World Development Indicators (WDI) for 2019 from the World Bank was used as data sources. For analysis, the Ordinary Least Square Panel data estimate method was used. This methodology was chosen because of its adaptability and capacity to identify random and fixed effects throughout the time series. The study period was from 2000 to 2017 with variables of labor mobility (proxy by number of emigrants), unemployment rate, population growth, institutional quality (proxy by political stability), and per capita income (GDP per head).

Model Specification

Model one: Unemployment and Labour Mobility Model

The study employed the following equation to build a model on the relationship between unemployment and labor mobility in a few African nations, drawing on empirical studies by Hussain (2013) and Altaf et al. (2015). The model looks like this:

$$LM = f(\text{UNEM}, \text{POPG}, \text{ISQ} \dots\dots\dots)(4)$$

For the estimation we developed the econometric model as follows:
 $LOGLM_t = \beta_0 + \beta_1 UNEM_t + \beta_2 POPG_t + \beta_3 ISQ_t + \alpha_t \dots\dots\dots (5)$

Where:

t = at time period t

LM = labour Mobility (proxy by number of emigration)

UNEM = Unemployment rate

POPG = Population growth

ISQ = Institutional Quality (Proxy by Political Stability)

α_t = error term

Model Two: Labour Mobility (Brain Drain) on Economy Empowerment

The study follows Gnimassoun and Anyanwu, (2010) with little modification by modeling income per capital (proxy for economic empowerment) which is the dependent variable and diaspora/labour mobility (emigration) which is the independent variable while institutional quality was adopted as the control variable in the model.

$$PCY = f(LM, REM, ISQ) \dots \dots \dots (6)$$

We developed the econometric model for the estimation as follows:

$$xPCY_t = \beta_0 + \beta_1 LM_t + \beta_2 REM_t + \beta_3 ISQ_t + \alpha_t \dots \dots \dots (7)$$

Where: at time period t

PCY = Per Capita Income (GDP per head)

LM = labour Mobility (proxy by number of emigration)

POPG = Population growth

ISQ = Institutional Quality (Proxy by Political Stability)

α_t = error term

Results

Model Evaluation

This section primarily presents the analysis findings. The study employed both fixed effect and random effect estimation techniques. The panel data’s structure—characterized by a relatively short time measurement with a fair number of datasets—influenced the choice of estimation techniques. Additionally, the fixed effect estimator allows the assessment of each cross-section’s individual effect by allowing the intercept to vary for each individual while assuming that the slope coefficients are constant across individuals. This is accomplished by using a variety of dummy variables (0 and 1) to represent each nation or cross-section. On the other hand, the random effect estimator views the individual effects as random disturbances while estimating the variance

components for individual and error under the assumption of the same intercept and slopes. The summary statistics, unit root tests, and variable correlation matrix were all included in the final presentation. The analysis makes use of the statistical program Eviews 10 for the regressions.

Discussion of Results

This part focuses on the analysis and result display. The fixed effect and random effect estimation methods are used in the investigation. The selection of these strategies is appropriate given the panel data's structure, which is characterized by a large number of data sets but a relatively limited time dimension. Assuming that each individual's slope coefficients remain constant while permitting each individual's intercept to differ, the fixed effect estimator enables us to quantify the individual effect of each cross-section. On the other hand, the random effect estimator treats the individual effects as random disturbances and estimates the variance components for the individual and error while assuming the same intercept and slopes. Additionally provided are summary statistics, unit root tests, and the correlation matrix of the variables. The Eviews statistics package was used to conduct the analysis.

Table 1

Descriptive Analysis

Variables	LM	PCY	UNEM	POPG	ISQ	REM
Mean	1005365	2343.326	10.4962	2.1377	30.225	4.74E+09
Median	601346	1802.877	9.332	2.44376	32.7348	1.29E+09
Skewness	1.189842	1.47232	1.22843	-0.4811	-0.0763	1.757234
Kurtosis	2.792165	4.202741	3.58286	1.69702	1.38624	4.714346
Jarque-Bera	8.321381	14.75468	9.29813	3.82589	3.83182	22.29859
Probability	0.015597	0.000625	0.00957	0.14765	0.14721	0.000014
Sum	35187789	82016.41	367.365	74.8196	1057.88	1.66E+11
Sum Sq. Dev.	3.04E+13	1.43E+08	1557.57	12.483	11918.1	1.69E+21
Observations	35	35	35	35	35	35

Note. UNEM = Unemployment rate, LM= Labour mobility, PCY = Per capita income, POPG = Population growth rate, ISQ = Institutional quality, REM = Remittance

According to Table 1, the mean value of labor mobility (LM), which serves as a proxy for overall emigration, was 1,005,365 emigrants between 2000 and 2017. LM had a mean value of 6,013,460. Additionally, as seen

in Table 1 above, there was a positive skewness of LM (1.18), which signifies that a distribution's degree of departure from symmetry was positive. The degree of peakedness of labor mobility in the chosen nations throughout the study period was not normally distributed, as indicated by the Kurtosis of 2.8 nearly 3, which is the normal value. In addition, because the associated probability is smaller than 0.05, the Jarque-Bera statistic also supports the non-normality of LM.

From 2000 to 2017, the mean PCY (per capita income) in a few nations was 2,343.326. PCY had a median value of 1,802.877. Additionally, as seen in Table 1, PCY had a positive skewness of 1.47, suggesting that a distribution's degree of departure from symmetry was positive. Similarly, the degree of peakedness of per capita income throughout the study period was not reflected by the Kurtosis of $4.202741 > 3$, which is the usual value. Additionally, because the associated probability is smaller than 0.05, the Jarque-Bera statistic also supports the non-normality of PCY in a few particular countries.

From 2000 to 2017, the mean UNEM (unemployment rate) in the chosen nations was 10.4962. The UNEM had a median value of 9.332. Additionally, as shown by Table 1, there was a positive skewness of trade openness (1.22), indicating that a distribution's degree of deviance from symmetry was positive. Kurtosis of $3.58 > 3$, which is not a normal value, also indicated that the degree of trade openness at its highest during the study period was not normally distributed. Additionally, because the associated probability is greater than 0.05, the Jarque-Bera statistic also supports the normalcy of trade openness.

In selected nations from 2000 to 2017, the mean POPG (population growth rate) was 2.1377. 2.44376 was the POPG's median value. Additionally, Table 1's findings showed that POPG had a negative skewness (-0.48), which denoted a negative degree of deviation from symmetry in a distribution. The degree of peakedness of the population growth rate during the study period was revealed to be regularly distributed by the Kurtosis of 1.693, which is the normal value. Additionally, because the corresponding probability is greater than 0.05, the Jarque-Bera statistic also supports the normalcy of the POPG ratio.

Additionally, from 2000 to 2017, the mean ISQ (institutional quality) score across several countries was 30.225. ISQ had a median value of

32.7348. Additionally, Table 1's results show that institutional quality had a negative skewness (-0.07), which means that the distribution's degree of deviance from symmetry was negative. Additionally, the degree of peakedness of the ISQ during the study period was revealed to be regularly distributed by the Kurtosis of 1.383, which is the normal value. Additionally, because the associated probability is greater than 0.05, the Jarque-Bera statistic also supports the non-normality of ISQ.

Last but not least, from 2000 to 2017, the mean REM (remittance) value in chosen countries was 4.74E+09. The REM's median value was 1.29E+09. Additionally, as shown in Table 1, there was a positive skewness of remittance (1.75), suggesting that a distribution's degree of deviance from symmetry was positive. Kurtosis of 4.71 > 3, which is the normal value, also showed that the degree of REM peaking throughout the research period was not regularly distributed. In addition, because the associated probability is smaller than 0.05, the Jarque-Bera statistic also supports the non-normality of trade openness.

Table 2

Correlation Analysis

Variables	LM	PCY	UNEM	POPG	ISQ	REM
LM	1					
PCY	0.163522	1				
UNEM	0.081228	0.848453	1			
POPG	-0.59671	-0.74535	-0.6569	1		
ISQ	0.383794	0.341423	0.27753	-0.6695	1	
REM	0.491393	0.049101	-0.1892	0.0169	-0.2355	1

The findings of the correlation coefficients between every pair of variables for every number of variables taken into consideration are shown in Table 2. No evidence of high or exact multicollinearity was observed in this investigation because every correlation coefficient is below the threshold of 0.8.

Panel Unit Root Test

Table 3 below shows the outcomes of panel unit root tests conducted using the Levin, Lin, and Chu (LLC) approach. For the seven (7) African countries taken into consideration in the study, it is clear that all variables are stationary at level values for all six (6) variables, including labor

mobility (LM), per capita income (PCY), unemployment rate (UNEM), population growth rate (POPG), institutional quality (ISQ), and diaspora remittance (REM). To estimate the Ordinary Least Square (OLS) Model, we therefore continue.

Table 3
Levin, Lin & Chu (LLC) Panel Unit Root Results

Variables	LLC Statistic		Order of Integration	Remark
	Level	Probability		
InLM	-11.8772	0.0000	I(0)	No Unit Root
InPCY	-2.37742	0.0087	I(0)	No Unit Root
InUNEM	-6.16762	0.0000	I(0)	No Unit Root
InPOPG	-6.53863	0.0000	I(0)	No Unit Root
InISQ	-9.22471	0.0000	I(0)	No Unit Root
InREM	-6.32451	0.0000	I(0)	No Unit Root

Panel Model Specification Test

The model is determined using the Hausman-specific test, which is shown in the table below. The test is used to determine whether a panel model should use a fixed effect (FE) model or a random effect (RE) model. The recommended model, according to the Hausman test, is a random effect.

Table 4
Random Effect (RE) and Fixed Effect (FE) Model for Relationship Between Unemployment Rate and Labour Mobility in The Selected African Countries

Variables	Dependent: LM (RE Model)		Dependent: LM (FE Model)	
	Coefficient	<i>t</i>	Coefficient	<i>t</i>
InUNEM	0.105780	0.715874	0.178120	1.125319
InPOPG	-1.375772***	-2.741686	-0.715140	-1.205060
InISQ	-0.570865***	-4.761167	-0.64512***	-5.150887
C	7.144194***	24.93592	7.105681***	27.00319
Hausman test	6.15(0.10)	$R^2 = 0.4626$	Hausman test	6.15(0.10)
Prob(<i>F</i> -stat)	0.0000	DW = 0.6894	$R^2 = 0.9543$	DW = 0.8948
<i>n</i> = 35			<i>n</i> = 35	

Note. ***, ** and * denotes at 1%, 5% level and 10% levels of significance respectively.

From the Table above, we fail to reject the Hausman test null hypothesis, hence, the study adopted a random effect model. The study begins with the F-Statistics presented in the model, it was unemployment rate and other control variables such as; population growth rate and institutional quality jointly explained labour mobility (labour emigration) in Nigeria, Ghana, Ethiopia, Kenya, Egypt, South Africa, and Morocco.

In addition, the unemployment rate (UNEM) has a positive and insignificant relationship effect on labour mobility (labour emigration) in these countries. These estimates indicate that a 1 percent increase in UNEM per capita will lead to about a 10 percent increase in labor emigration. This result is in line with the general belief that the lack of availability of jobs is among the major factors that influence people to migrate to foreign countries. Population growth has a negative and significant effect on labor mobility. Lastly, institutional quality (ISQ) (proxy by political stability) has a negative and significant relationship with labor mobility (labor emigration) in the selected countries. By inference, political instability is a major push leading to high labor mobility in the selected African countries.

Table 5

Random Effect (RE) and Fixed Effect (FE) Model for Relationship Between Labour Mobility and Economic Growth in the Selected African Countries

Variables	Dependent: PCY(RE Model)		Dependent: PCY (FE Model)	
	Coefficient	<i>t</i>	Coefficient	<i>t</i>
InLM	-0.48489***	-3.269221	-0.496380**	-3.157149
InREM	0.081208**	2.420428	0.077023**	2.255835
InISQ	0.046945	0.521605	0.035912	0.380708
C	-0.425382	-0.571688	-0.439326	-0.560328
Hausman test	2.49(0.47)	$R^2 = 0.7914$	Hausman test	2.49(0.47)
Prob(<i>F</i> -stat)	0.0000	DW = 0.7080	$R^2 = 0.9889$	DW = 0.8690
<i>n</i> = 35			<i>n</i> = 35	

Note. ***, ** and * denotes at 1%, 5% level and 10% levels of significance respectively.

The findings on the relationship between economic growth and labor mobility (proxied by total emigration stock) are shown in Table 5. The outcomes showed that the random effect model had been used to accept

the null hypothesis of the Hausman test. According to the model's F-Statistics output, economic growth in Nigeria, Ghana, Ethiopia, Kenya, Egypt, South Africa, and Morocco was jointly explained by labor mobility and other control variables including diaspora remittances and institutional quality.

Emigration serves as a proxy for labor mobility (LM), which has a negative and considerable impact on economic growth in these nations. As LM grows by one unit, the explanation for economic growth by labor mobility decreases by 0.48. This demonstrates how the brain drain affects development and how, when the emigration rate is high, its impact is negative. This outcome is consistent with the research.

Additionally, the economic progress of the chosen African countries is positively and significantly impacted by remittances from the diaspora. It was shown that a 1% increase in remittances from the diaspora would result in an 8% rise in economic growth in these nations. According to Gnimassoun and Anyanwu (2019), this result is accurate. Finally, the study found that institutional quality (ISQ) had a favorable impact on Nigeria's economic expansion. According to Olayungbo and Adediran (2017), this outcome is consistent.

Diagnostic Tests

Table 6

Post estimation Test – Random Effect (RE) and Fixed Effect Model for Relationship Between Unemployment Rate and Labour Mobility in the Selected African Countries

Residual Diagnostics	FE Model		RE Model	
	Statistic	Prob.	Statistic	Prob.
Pesaran scaled LM	3.784796	0.0002	1.44446	0.1486
Jarque-Bera	3.25284	0.196632	0.131240	0.93648

From Table 6 above, the normality test shows or accounts for the distribution of error terms to confirm if it is normally distributed or otherwise. The result however indicates a normal distribution of error terms as indicated by the Jarque-bera statistics and its probability, which indicates acceptance of the null hypothesis for both the FE and RE models. In addition, the Pesaran LM test reveals no presence of serial autocorrelation in the RE and FE models. Hence, these results validate the

adoption of the RE model for the relationship between the unemployment rate and labour mobility in the selected African Countries.

Table 7

Post estimation Test – Random Effect (RE) and Fixed Effect Model for Relationship Between Labour Mobility and Economic Growth in the Selected African Countries

Residual Diagnostics	FE Model		RE Model	
	Statistic	Prob.	Statistic	Prob.
Pesaran scaled LM	1.44291	0.1490	1.44446	0.1486
Jarque-Bera	36.4798	0.000	1.13576	0.56673

Table 7 above shows the normality test or accounts for the distribution of error terms to confirm if it is normally distributed or otherwise. The result however indicates a normal distribution of error term as indicated by the Jarque-bera statistics and its probability, which indicates acceptance of the null hypothesis for the RE model while it was observed that the residuals (error term) for the FE model are not normally distributed. In addition, the Pesaran LM test reveals no presence of serial autocorrelation in both RE and FE models. Hence, these results validate the adoption of the RE model for the relationship between labor mobility and Economic growth in the selected African Countries.

Conclusion, Recommendation, Contributions and Limitations

The study examines how unemployment affects labor mobility and how labor mobility affects economic development. Effects of remittances from seven specific African nations were also studied, including Nigeria, Ghana, Ethiopia, Kenya, Egypt, South Africa, and Morocco. The Hausman test is used to choose the best model, and the random model was found to be suitable for examining the causal relationships between the six variables in the panel data.

Because their remittances have a positive and significant association with per capita income in these nations, the data demonstrate that labor mobility is not economic enslavement but rather economic empowerment. Even so, it was discovered that labor mobility hurt per-capita income. This demonstrates how the brain drain from these nations has an impact on per capita income. Labor mobility was found to be negatively correlated with population growth.

The study recommends the reversal of brain drain through efforts that will ensure political stability and also recommend that brain gain through remittances by Africans in the Diaspora should be effectively and efficiently utilized for economic growth. It also recommends the need for an effective policy on Diaspora issues to assist in curbing excessive immigration of African people from Africa.

The study is limited to the interrogation of the effects of unemployment on labour mobility and labour mobility on economic development in seven selected African countries. There is the likelihood to conclude that there is brain drain from the selected countries and there is also brain gain through significant remittances by their Diasporas. These findings are similar to that of Olayungbo and Adediran (2017) and Gnimassoun and Anyanwu (2019). Its major contribution to the existing literature is that labor mobility is not significantly determined by unemployment rather it is majorly due to political instability in the selected countries.

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