Article

The Dynamics of Remittances Impact: A Mixed-Method Approach to Understand Ghana's Situation and the Way Forward

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Abstract: Many scholarly articles on remittance have focused on its positive or negative impact on the macro- or microeconomy. Given that trend, remittance is usually analysed without its sociological elements embedded within the migration process. Therefore, this paper employs a bird's eye view to advance our understanding of the dynamics of remittance within the Ghanaian migration framework. By this, the paper uses a mixed-method approach to shed light on the Ghana case. First, through multiple linear regression, the paper shows that remittance inflow to Ghana is positively related to GDP per capita. Specifically, the evidence indicates that a 1% increase in remittance leads to an approximately 4% increase in the GDP per capita. Second, with the aid of household survey data from Ghana Statistical Service and Ghana's poverty dimension, the paper shows that while the empirical finding suggests an improvement of the populace's standard of living, the evidence on the grounds, however, conflicts with such findings. This is because remittance is primarily a private resource and is likely to reach only a few well-off homes in Ghana; hence, it does not consider an effective redistributive dimension. Third, to further elucidate why remittance reaches these few groups, the paper analyses within the Marxist political framework how legal migration to the developed countries has always been an option only for the well-off and middle-class Ghanaians who could afford the cost. With this clear establishment of the remittance dynamics in Ghana, the study proposes plausible suggestions to enhance the redistributive effect of remittance in Ghana. In particular, the study recommends a state-led online app for migrants to send money to Ghana. Notably, the state should champion this agenda because subsidising the transaction fees would make it relatively cheaper for migrants. While this would encourage migrants to use the official means, which undoubtedly is significant for the macroeconomy, the app's returns could be used in addressing the country's social inequality gap at the micro-level.

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1. Introduction

Available data from the World Bank database indicate that the volume of remittance inflow to Ghana has increased over the years, surpassing that of the Official Development Assistant (ODA) (World Bank 2020). Specifically, between 2004 and 2017, the volume of remittances increased from USD 1287 million to USD 3536 million (International Organization for Migration 2019). This upsurge in remittance has several implications. One of such implications points to Castles and Miller (2009)'s assertion that we are in the age of migration. Hence, such mass movement may have transpired in the volume of financial remittances that reached the sending countries. However, despite this supposed rise in international migration, the chief point here is that migration from Ghana to the developed or wealthy countries is limited to those who can afford it. Indeed, this dissenting viewpoint on restriction should at least prompt us that the concept of remittances, which is a consequence of migration, has been narrowly analysed in the literature, focusing on

just the numbers. Therefore, this paper does not attempt to analyse remittances within a narrow perspective that focuses on a single narrative. Instead, I employ a bird's-eye-view to demonstrate that since remittances emerge from migration (a social process), its analysis would benefit substantially from mixing diverse methodological approaches that can help present a holistic narrative.

To do that, this paper builds on the assumption that remittances do not only affect the receiving countries macroeconomic landscapes but also their sociological landscapes understood here as the micro-level. In fact, there is a substantial debate among scholars that financial remittance can be complicated as it can either be problematic (see [Adams and Cuecuecha 2010](#)) or beneficial (see [Lokshin et al. 2010](#)) to the overall society. In particular, to the less privileged social segments, remittance could strengthen or weaken social cohesion.

Despite its complexities, it is interesting to note that the remittance discourse and its linkage to development have amounted to a surge in research works predominantly on cross-panel and country by country analysis. More importantly, most of the findings (see, for instance, [Martey and Armah 2020](#); [Ehwi et al. 2021](#); [Adams 2011](#); [Peprah et al. 2019](#)) have been diverse and enriching for the migration and development discourse in Ghana. However, considering the vast volume of research works so far, it is somewhat startling to see how rarely any attempt to understand why remittance reaches a particular "group" of people is discussed, at least in Ghana's case. Essentially, the lack of a clearer understanding of this situation would hinder our ability to design and execute a meaningful intervention plan centred on remittances' economic effectiveness and social benefits. Therefore, throughout this paper, I take a critical look at the common unanswered questions: Why do remittances reach few and relatively privileged Ghanaians? What are the root causes? Additionally, how does this situation correspond to the impact of remittances at the macroeconomic level? In addition to these, is it possible to implement a strategy aiming to reduce social inequality in Ghana with remittances?

These questions point to a tripartite relationship, namely, remittances, social inequality and development. While using remittance to address inequality-free development may seem ideal in the macroeconomy, its subjective nature (private resources) presents a challenging situation, at least at the micro-level. It is for this reason that a broader analytical lens is needed to understand the remittances dynamics holistically. With a holistic viewpoint, it would be relatively easy to see the impact at the macroeconomic level and what that means at the micro-level or perhaps how it coheres with the realities of the economy. Through this, we can then investigate further and make informed policies that will benefit all citizens. Given these cues, this paper first analyses the impact of remittances at the macroeconomic level. However, unlike other empirical studies that focus on GDP growth (see, [Peprah et al. 2019](#)), this paper employs GDP per capita as it directly relates to individuals. It then delves into the microanalysis of remittances distribution in Ghana and an eventual discussion of the root causes within a historical lens. Upon these discussions, alternatives to address the uneven distribution of remittances are presented. In the next section, I reflect on some theoretical concerns and elucidate why employing quantitative and qualitative analysis could help us understand the migration and remittance discourse, particularly the sociological dimensions, from a broader perspective.

In the remaining sections, I show the impact of remittances on GDP per capita in Ghana by running an OLS multiple regression empirically. Another foreign inflow of capital, the Official Development Assistant (ODA), is used in the estimation to confirm further how significant foreign inflows are to the GDP per capita in Ghana. Generally, the rationale was first to test the relationship between these variables, with the reported results serving as the foundation for further analysis. Expectedly, the results from the estimation confirm a positive relationship between remittances and GDP per capita, which, in a way, reaffirm some of the findings in the literature. In essence, an increase in remittances forces the GDP per capita to rise, giving a general impression of a reflex improvement of the livelihood of the general populace in Ghana. However, in the second part of the analysis, I establish the shortfalls of these findings by using micro (household) data to show the

uneven distribution of remittances and how they are linked to social inequality. I then use the political economy perspective to show the root causes of how international migration started in Ghana and further confirm why and how remittances are skewed towards a particular group of people in the country. Subsequently, I relate the macroeconomy findings to the reality by arguing that an increase in remittances is likely to improve the livelihood of the “well-off” and not the “poorest people”. Based on these findings, I finally propose two plausible ways by which we can use remittances to improve the macroeconomy and simultaneously address the issue of social inequality and poverty.

Given this overview, it is worth noting that this paper adds three significant contributions to the migration and remittance literature. First, it adds and complements the existing literature bringing onboard some empirical evidence from Ghana. Second, this paper is among the few studies on remittances that go beyond whether remittance is “adding” or “subtracting” to the macroeconomy in Ghana. Further, it explains the root causes of migration and justifies why its consequence, remittances inflow to Ghana, seem to benefit the well-off citizens, causing an increase in social inequality. To some extent, this paper shows that while econometrics analysis is essential, it is imperative to connect it to sociological analysis, and the micro-level since migration in itself is a broader part of a social change. Third, I suggest two novel solutions to help maximise remittances at the macro- and micro-level in Ghana.

2. Theoretical Reflection

2.1. Justification of a Holistic Approach towards Migration

While there has been a massive increase in empirical studies on migration, not much has changed regarding its theoretical discussion. Emphatically, [De Haas \(2021\)](#) maintains that migration as a social-scientific inquiry remains under-theorised and that the recent trend is more of a theoretical retrogression than progression. Indeed, casting our minds back to the earlier writers of migration theories, we could notice that most of them tried to develop a generalised explanation for the concept ([De Haas 2021](#)). However, [Massey et al. \(1993\)](#) noted that much of those generalised explanations were rooted in nineteenth-century concepts, assumptions and models. Given that society evolves, it may be theoretically inaccurate to assume that these nineteenth-century assumptions could accommodate the current migration dynamics. This reason suggests that some of the writings may need critical amendments or perhaps revision. Unfortunately, [De Haas \(2021\)](#) contends that not much has changed in this regard.

Taking, for instance, the neoclassical theory, which is undoubtedly mired with the push-pull model, it explicitly suggests that people make rational decisions centred on income and other opportunities to migrate. While this may be somewhat significant, the theory fails to account for how inequality, poverty, and the “notorious” political restrictions to immigration could prevent some people even after making “rational decisions” to travel. Perhaps, the Global North migration dynamics context, especially the Fordist model of mass production in north-western European countries, may partly justify some elements of the neoclassical theory’s effectiveness. In particular, the mass production of north-western Europe led to a shortage of labour and the urgency to call for an increase in labour supply in the 1950–1960s, specifically from the peripheral countries from southern Europe ([Iosifides 2016](#)). Some researchers (see [Mousourou 1991](#); [Bade 2003](#); [Ventura 2006](#)) found that demographic dynamism, GDP per capita and high mean income differentials were the factors that compelled most people who migrated to north-western Europe at the time to help with the mass production. Today, the free movement of people within the European Union bloc has facilitated circulation and enabled people to migrate for several reasons, including the neoclassical’s income differentials. Therefore, blindly assuming that migration dynamics in recent times solely rest with higher income and opportunities may be misleading. If that were solely the case, the migration statistics would have depicted a higher migration from the poorer countries to developed countries ([De Haas 2021](#)). Though

the neoclassical's primary argument remains valid to some extent, its application within our contemporary world may be challenging considering the other socio-economic elements.

Likewise, the new economics of labour migration (NELM) is not without some theoretical concerns. The NELM assumes that households are the key agency in determining migration (Stark 1984, 1991). This position assumes that families diversify their incomes by sending some members abroad to work, and in return, they are obliged to send remittances to the left-behind members. While this assumption may confirm the remittances upsurge, especially in the Global South, it does not consider the social elements of migration in some other parts of the world. In the particular case of Ghana, few would disagree that many low-income families may ideally like to diversify their incomes using the NELM model. However, to begin with, most of them lack motility capital and could only fantasise about the idea of NELM. In fact, most destitute families hardly get a chance to sponsor any member abroad due to financial constraints and the lack of necessary documentation for visa applications (Adepoju 2010).

What has possibly generated a one-sided, if not a myopic, way of analysing migration dynamics could stem from the attempt by several disciplines to discuss it within their scope of study or perspective. Specifically, while anthropology, sociology and geography frequently employ a qualitative approach in analysing migration, economics and demography are keen on using mean aggregates and quantitative regression analyses to address similar pursuits. As De Haas (2021) notes, the bone of contention among these two is that those who wrestle within the qualitative lens reject the concept of explanatory migration theory, which has its framework skewed towards economics. On the other hand, most quantitative researchers firmly stay within the economics confines, most notably the push–pull theory, where migrants are mostly seen as income maximisers. In the opinion of De Haas (2021), two key factors depict setbacks of the qualitative and quantitative towards migration. First, he argues that they have failed to accurately capture the significant role of the difficulty in quantifying structural factors, such as inequality and the state's role in the migration discourse. Second, they cannot go beyond the neoclassical migrants' voluntaristic assumption and the historical–structural theories depicting migrants as mere victims of capitalist forces.

Given the above overview, what merits critical attention is that migration is a social process that encompasses several sociological dynamics. Therefore, any attempt to develop a generalised framework to address its myriad concerns may be somewhat challenging as society is multidimensional and keeps evolving. This argument does not suggest that we should reject any of the diverse schools of thought. Instead, combining several perspectives and methodologies could help us present a holistic picture of our evolving societies. At best, using several tools to understand the specific historical and social context of migration should be a common framework employed by researchers. Upon this premise, this paper seeks to employ a quantitative regression analysis, on the one hand, to discuss the impact of migrants' remittances on the macroeconomy. On the other hand, it employs a political economy approach and microanalysis to add a bit of flesh to the bones.

2.2. Empirical Works: The Role of Remittances and the Need for a New Direction towards Social Elements

Generally, remittance influx to developing countries impacts their economic landscapes. However, the broader question remains the magnitude that impact remittances have on these countries. Primarily, developing countries' reactions toward remittances tend to differ across their macro and microeconomy. Even so, some scholars (see Chowdhury 2016; Gupta et al. 2009) largely contend that remittance is a critical financial resource that can drive economic growth and development within the macroeconomy. Empirically, Solimano (2003) and the World Bank (2006) reason along a similar line as they found that remittances can positively influence a developing country's economic growth. Fayissa and Nsiah (2010) maintain that in worst-case scenarios where a country may have a weak financial system, remittances can still enhance economic development by providing an alternative way to finance investment and incapacitate liquidity constraints. More significantly,

a well-functioning financial market can also help channel remittances towards investment that could yield economic upturns at the macro levels (Guiliano and Ruiz-Arranz 2009). Connell and Conway (2000) contribute to the discussion by pointing out that remittance inflow positively affects current accounts. Their main argument is that remittance boosts forex reserves at banks and provides additional savings that enhance economic development. In other words, remittances within the framework of capital accumulation offer the banking sector extra support to provide credit to the SMEs, investors and the private sector at large (Aggarwal et al. 2011).

Similarly, Yassen (2012) confirms a positive relationship between remittances and the financial system development in developing countries. Further, the IMF contends that remittances can help stabilise the macroeconomy and mitigate poverty in developing countries, something they deem as welfare-enhancing effects (Spatafora 2005). In contrast, some research works highlight the negative impact of remittances at the macroeconomic level. For instance, Stratan et al. (2013) argue that regardless of a rise in remittances as a percentage of Moldova's GDP, the correlation between it and national growth is ambiguous. There are cases where remittances are seen as a potential influencer of inflation (see Nishat and Nighat 1991; Iqbal and Abdus 2005) and even contributing towards the so-called Dutch disease (see Barajas et al. 2010; Eromenko 2016; Nguyen 2017) in some countries.

Contrary to these assertions, when remittances are reflected on the micro-level, it seems to provide what Taylor et al. (2005) call conflicting findings, especially its impact on inequality. That is, on the one hand, researchers focus on distributional effects of remittances by comparing income disparity with or without remittances (see Oberai and Singh 1980; Knowles and Anker 1981; Barham and Boucher 1998), and on the other, the attention has been on income-source decomposition. For instance, Stark et al. (1988) documented that international remittances had a non-equalising effect on the income distribution in a Mexican village that had just begun sending people abroad. However, it had an equalising effect on a different village with a rich history of international migration.

In a nutshell, these conflicting results presented in the literature reaffirm the assumption that remittances' impact should be critically and holistically analysed. For instance, it could be argued that an improvement in macroeconomic growth resulting from remittances may not necessarily affect the country's entire population. Likewise, we cannot say that all citizens would be victims of the negative impacts associated with remittances inflow to the country. At least we have seen from the financial crisis in 2007 that not all losses affect all people and vice versa (Stiglitz 2012). Specifically, remittances boosting the financial sector and economic growth may benefit a group of people with a substantial connection to the business world and have high social status. People who are high in the social ranking or hierarchy can meet all the requirements to access credit from banks, whereas most marginalised people continue to wobble in poverty. By saying this, few will doubt that the analysis of the impact of remittance should go beyond the general statistical and macroeconomic evidence. Additionally, the analysis should focus on its contribution to the eventual generation of inequalities and the reasons behind it. These arguments are the specific focus of the paper.

3. Methodology

In order to address the primary objectives, this paper employs a mixed-method approach. Particularly, the paper uses quantitative techniques (econometrics and micro (household) data) and Marxist political economy within a historical lens. To put them into context, first, I rely on an econometric approach to show the impact of remittances on the macroeconomy. Second, I use micro (household) survey data to uncover the distribution of remittances across the country and show why a one-sided argument centred on the macroeconomy may hamper the broader understanding of the dynamics of remittances. Third, the political economy analysis within a historical lens enables me to present the international pattern of emigration and its linkage to the social construct of remittances distribution in Ghana.

3.1. The Model

In order to find the impact of remittance on GDP per capita, a basic linear model is estimated. Essentially, it follows a similar approach to the one [Peprah et al. \(2019\)](#) employed in their study on financial development, remittance and economic growth. This model follows the Ordinary Least squares (OLS) regression model, which is quoted primarily as

$$y = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \varepsilon.$$

where Y is the dependent variable, represented by Gross Domestic Product (GDP). X_{ij} are the independent variables, which include Gross Capital Formation (GCF), Consumer Price Index (CPI), Official Development Assistance (ODA), and Remittances (Rem). β_j represents regression coefficients, and lastly, the error term is denoted by ε . Significantly, these selected variables are expressed in per capita and are all logarithm transformations, making them elastic for iterations to achieve the best line of fit equation. Hence, these variables are represented as $LNREM$ for the log of remittances, $LNGCF$ for the log of Gross Capital Formation, $LNCPPI$ for the log of the Consumer Price Index, $LNODA$ for the log of Official Development Assistance and $LNGDP$ for the log of Gross Domestic Product. However, the Consumer Price Index is in the first difference logarithm transformation $D(LNCPPI)$ used in an iteration as part of the data cleaning process to produce static data.

The dependent variable, GDP per capita, is used as a proxy for national economic development and the people's standard of living ([Nolan et al. 2016](#)) in Ghana. Given the continual increase in remittances flow to Ghana (see [Bank of Ghana 2019](#)), I needed to include additional variables that are likely to influence GDP per capita to prevent overestimating the effect of remittances on GDP per capita. For this reason, I control for the influence of other factors such as ODA, CPI and GCF, which have a higher probability of affecting GDP per capita (see [Benmamoun and Lehnert 2013](#); [Peprah et al. 2019](#)).

3.2. Data Source and Description

For empirical data, this study primarily uses annual Ghana data that range from 1980 to 2018. As noted above, they encompass GDP, GCF, CPI, ODA and REM sourced from the World Development Indicators database. As used in this study, CPI data capture the dynamic behaviour of prices of a pre-determined basket of goods ([Boarini et al. 2015](#)). GCF data measure the value of acquisitions of new or existing fixed assets by the private and government sectors (see [Chowdhury 2016](#)). The [UNDP \(2009\)](#) explains that the official migrants' remittances are the total amount of migrants' recorded money sent to their native countries. While it is common knowledge that the majority of these remittances sent to native countries pass through unofficial means and are not recorded, the data used in this paper connote the official annual records. In addition, ODA enriches the estimation because it is an external inflow of capital, mainly from receiving countries to sending countries. Notably, it has been compared with remittances by academics and policymakers in recent times ([Aggarwal et al. 2011](#); [Dessy and Rambeloma 2009](#)).

The variables are selected in their per capita form for two reasons. First, the paper focuses on looking beyond the statistical impact of remittances at the macro level, with a particular interest, preferably on its reflection at the individual level. Second, this choice enables one to understand the average living standard in Ghana and how remittances can influence it. More importantly, remittances data sources were expressed in current USD, and hence a US GDP deflator was used to convert it to constant USD. All other variables were originally in constant USD.

The micro (household) data used in this study for the microanalysis were sourced from the Ghana Living Standard Survey (GLSS), a national survey database under the auspices of the Ghana Statistical Service. The data were collected within a one-year period (from October 2012 to October 2013). The survey captured detailed household data, including remittances recipients and the usage of remittances.

Finally, the data used for the entire discussion in the Marxist Political Economy section are secondary data sourced from several scholarly articles.

4. Results

This section presents the descriptive statistics, which summarise the variables used for the regression, results of the estimation and micro (household) evidence of remittances recipients in Ghana and discusses the pattern of Ghana's emigration within the perspective of Marxist political economy. Before proceeding to the estimation, it was imperative to first check for the stationarity of the data. Detailed results of the stationarity test can be found in Appendix A of the paper.

4.1. Summary Statistics

Table 1 presents a simple description, including mean values and other basic statistical measures of all variables used in the estimation. As seen, the average GDP per capita is USD 6.93, with the average remittances per capita being USD 4.08.

Table 1. Summary Statistics of logarithms of CPI, GCF, GDP, ODA and REM per capita from 1980 to 2018.

	GDP	GCF	CPI	ODA	REM
Mean	6.931411	9.430690	2.383965	−9.821681	4.084335
Median	6.846872	8.565914	2.825483	−10.06363	4.107707
Maximum	7.499458	12.99713	5.541670	−4.586451	6.275405
Minimum	6.541699	6.989855	2.805889	−14.29474	2.398568
Std. Dev.	0.280299	1.829813	2.369218	2.662037	0.979850
Probability	0.128742	0.200034	0.233205	0.372845	0.464539
Sum Sq. Dev.	2.985556	117.1876	213.3014	269.2847	36.48405
Observations (no. of years of the series)	38	36	38	38	38

4.2. Unit Root Test

The Augmented Dickey–fuller (ADF) (see Appendix A, Table A1) and Philip Perron (PP) (see Appendix A, Table A2) were used to test for the stationarity of the variables before running the regression. Both results confirmed that all variables were stationary at the first difference and not stationary at levels. Hence, the null hypothesis was rejected at the first difference on both the PP and ADF. This was necessary as regression with non-stationary data tends to produce spurious relationships, resulting in wrong inference among or between macroeconomic variables.

4.3. Estimation Results

In writing the equation using the results from Table 2, I substitute the coefficients into the equation to generate the following result.

$$LNGDP = 4.3835 + 0.0390LNREM + 0.0781LNGCF - 0.1870 D(LNCPI) - 0.1682LNODA.$$

I noticed from Table 2 that both remittance and GCF are positive and highly significant with respect to GDP per capita based on their coefficients and probability values, respectively. Indeed, this confirms that these variables are essential as far as economic growth is concerned. A 1% increase in remittance could lead to an approximately 4% increase in GDP per capita. On the other hand, both the consumer price index (CPI) and official development assistance (ODA) were highly significant but negatively influenced GDP per capita, judging from their probability values and coefficients.

Table 2. OLS linear multiple regression results (log of GDP per capita is the dependent variable).

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.383537	0.388260	11.29019	0.0000 ***
LNREM	0.038999	0.013999	2.785848	0.0090 ***
LNGCF	0.078052	0.024679	3.162727	0.0035 ***
D(LNCPI)	−0.187033	0.088150	−2.121762	0.0420 **
LNODA	−0.168275	0.017704	−9.505154	0.0000 ***
R-squared	0.961155			
Adjusted R-squared	0.956143			

Note: ** $p < 0.05$, *** $p < 0.01$.

Further interpretation of the test confirms the adjusted R-squared result of 0.9561, indicating that 95.61% of the independent variables used in the estimation contributed significantly to predicting the dependent variable. Hence, the Adjusted R-square results can be interpreted as proof of the purity of the test. The probability values of all four variables are highly significant, with Remittance, GCF, and ODA being statistically significant with values less than 1%. CPI had the highest probability value of 4.2%, which is less than 5% but greater than 1% compared to the other variables.

Empirically, Table 2's results show a positive relationship between GDP per capita and remittances, indicating that the latter contribute to Ghana's economic growth. These results may not be surprising, as [Russell and Teitelbaum \(1992\)](#) and [Cattaneo \(2005\)](#) have argued that this form of official capital influx is bound to affect countries economically. In the particular case of Ghana, a positive one, as seen from Table 2. Nonetheless, while this presented evidence may suggest that remittances remain crucial in macroeconomy development, analysing it further within a broader lens encompassing social issues produces two contrasting arguments. First, as noted, the remittance data used in this study are the officially recorded transfers, and hence it is expected to pass through the banking system. This official inflow of capital via the banking system has several benefits at the macro and micro levels. Some benefits include easing liquidity constraints at the macro level and giving enough room for the banks to grant loans to the private sector at the micro level ([Nyamongo et al. 2012](#)). Practically, it is worth noting that this is mostly the case when the remittances sent are being channelled into investment and growth-generating activities ([Fayissa and Nsiah 2010](#); [Guiliano and Ruiz-Arranz 2009](#)). More so, regular inflow of remittances over time helps stabilise the economies of recipient countries, mainly serving as a plank upon which nations could be secured ([Ketkar and Ratha 2001](#)). Second, there is a question of how this positive relationship between remittances and GDP per capita reflects the realities on the grounds. In the particular case of Ghana, there is a disparity between beneficiaries of these investments and even loan applications. Realistically, a successful loan application requirement in Ghana tends to favour people with better social status due to the documentation and collateral needed to complete the process. Hence, the general idea is that remittances may play a role in helping the well-off to the detriment of those who actually "need" help.

4.4. Micro-Analysis: The Inequality and Poverty Situation at the Household Level and How It Is Linked to Remittances

Given the dynamics and multifaceted nature of poverty and inequality, it is imperative that I place the discussion within the Ghanaian context. First, the [Ghana Statistical Service \(2018\)](#) sets the extreme poverty line to GHS 792.05 (approximately USD 131) per adult equivalent per year. The simple reason for this index was that people needed more than GHS 792.05 to meet the minimum threshold for nutrition. Though the [Ghana Statistical Service \(2018\)](#) confirms that an estimated 8.2% (a drastic decrease from previous years) of Ghana's population falls within the extreme poverty ratio (see Figure 1), poverty within rural areas increased. For instance, the survey reveals that poverty in rural savannah had

increased from 27.3% in 2012/2013 to 36.1% in 2016/2017. However, in Greater Accra Metropolitan Area (GAMA), extreme poverty decreased from 4.5% in 2012/2013 to 0.0% in 2016/2017. The survey's data on inequality reaffirm these findings as they indicate that inequality had increased in rural areas (Ghana Statistical Service 2018). The study notes that over 2.2 million persons living in rural areas fall within the extreme poverty ratio.

Figure 1. Extreme Poverty incidence (PO) by region. Source: Ghana Statistical Service (2018).

Upon this backdrop, I return to the primary argument that the extremely poor hardly migrate to the developed countries, which has undoubtedly reflected in the distribution of overseas remittance in Ghana. That said, there is a “common perception” that defies this argument. That perception is, however, not convincing for two main reasons. First, it would be misleading to suggest that people living within the extreme poverty line can pay for the cost of travelling to developed countries, given their income as identified by GSS. On average, one would need approximately \$2000 for processing of visa and tickets to fly. Even those migrants who travel via the deserts are somehow required to pay for some expenses along the way, which people within this extremely poverty category cannot afford. Specifically, Tonah and Codjoe (2020) found from a Ghanaian irregular returnee that one needs at least USD 500 to begin the journey from Ghana to Libya. In addition, Hamood (2006) and Mensah (2012) note that irregular migrants are charged fees between USD 1000 and 2500 to use a boat to Italy. Second, stowaways, which require less finances or perhaps no finances, are usually the ideal option for the poorest people. However, there have been stringent measures to curb such acts resulting in a decline in such patronage.

Notwithstanding, the few who may still get the chance to engage in the act are not a solid representation to counter the majority middle class who do not use such a medium to travel. Analytically, the fact that legal migration to developed countries remains an option to only the elite and well-off groups, relegating the poorest people to clandestine means inequality in the country is sustained or somewhat deepened (De Haas 2021). The by-product is how remittances are distributed in the country (see Table 3).

Table 3. Households remittances data in Ghana.

Regions	Total Number of Households	No. of Households That Receive Remittances Overseas	Percentage of Households Remittances Received
Western	753,642	4067	0.54%
Central	607,837	1160	0.19%
Greater Accra	1,324,504	32,158	2.43%
Volta	547,455	4033	0.74%
Eastern	857,405	8001	0.93%
Ashanti	1,661,560	6569	0.40%
Brong Ahafo	678,208	3707	0.55%
Northern	479,675	1108	0.23%
Upper East	226,983	625	0.28%
Upper West	162,655	130	0.08%
Total	7,299,925	61,558	0.84%

Source: [Ghana Statistical Service \(2019\)](#).

Remittances and Inequality in Ghana

The table below has two significant strands of arguments within the framework of remittance and inequality in Ghana. First, as noted, there is an uneven distribution of remittance across the country, with households in the Greater Accra region receiving the highest percentage of 2.43% and the Upper West region with as low as 0.08%. Primarily, this disparity has its roots linked to the migration dynamics in Ghana. Essentially, there has always been a fundamental issue of spatial inequality in development levels that force people to move ([Awumbila 1997](#); [Anarfi and Kwankye 2005](#)). This movement is, however, subject to a person's financial capacity. Most people with low income, mostly from the northern parts (resource-poor areas), migrate to the southern part (resource-rich areas) of the country ([Twumasi-Ankrah 1995](#)). On the other hand, those with high income who desire to migrate, usually from the southern part, choose affluent western countries as their destination ([Adepoju 2005, 2010](#); [Awumbila et al. 2008](#)). This argument supports why regions with high poverty (see [Figure 1](#)) receive low overseas remittances and vice versa. More significantly, there are many less-skilled people within the high poverty areas, whereas areas with low poverty tend to have much high-skilled labour ([Awumbila et al. 2008](#)). All of these play a significant role in international migration and its consequences, remittance.

Second, despite the massive number of households in Ghana, only a few receive remittance (see [Table 3](#)). Since remittances remain a tangible medium that Ghanaian migrants use to maintain ties (see [Awumbila et al. 2008](#)), one would expect a larger percentage of households to receive remittances if the assumption that most of the poorest people get to migrate to affluent countries holds. The Gallup survey poll from 2015 to 2017, for instance, indicates that 49% of Ghanaians over 15 years old would like to travel overseas if they had the chance. This evidence reaffirms the assumption that while international migration may be appealing to most people, only a few well-off get the chance ([De Haas 2021](#)). The migration in the Ghana report (2020) notes that recipients of remittances chiefly spend them on daily needs, education, medical bills and rent/utility bills. A further breakdown of the recipients' spending, according to the report, encompasses the purchase of new houses and lands, helping others to migrate and paying for social functions. [Massey \(1990\)](#) has already emphasised this argument, stating that remittances increase income inequality and emigration. Arguably, *ceteris paribus* remittance in this regard has the propensity to give some of the few recipients an advantage in terms of quality of life over their peers who may be non-recipients.

4.5. Marxist Political Economy Perspective

To ascertain the path that has led to the remittance and social inequality nexus, I have to establish the root causes of the problem. To do this, I employ a political economy approach

within the Marxist and qualitative viewpoint. In his works, Karl Marx analyses most concepts of socio-economic change within a historical lens. To him, we could understand the future much better if we first try to comprehend what happened in the past. [Ekbja and Nardi \(2016\)](#) argue that sociological concepts are best comprehended through the purview of sociohistorical development, environmental impacts, government policies and politics. Hence, applying the Marxist viewpoint suggests clarifying the historical context of emigration from Ghana, as remittances do not happen in a vacuum ([Cohen 2005](#)). In essence, people should first migrate before they can send remittances. Further to history, the Marxist political economy uses labour migration dynamics of the capitalist development process to analyse the migration situation ([Delgado Wise and Veltmeyer 2018](#)). These ideologies form the basis of the analysis in the subsequent section.

4.5.1. Historicising the International Migration Situation in Ghana

Visiting the historical trajectory that frames the migratory movements may enable us to understand why people send remittances, why remittances reach the few well-off and its use for social functions and property investment. Central to this assumption stems from most scholars' presumption that migrants send remittances because of their commitment or agreement with their families before they migrated ([Stark and Bloom 1985](#)). Thus, sending remittances back home justifies the migratory movement and is an essential element for the family members who stayed in the origin country and region. By saying this, I do not presuppose that even the forced or involuntary migrants have this kind of commitment or agreement before migrating. However, advocates of mixed migration remind us that the causes and motivations of migration may change along the way ([Van Hear 2009](#)). Therefore, it seems cogent to argue that there is a possibility that even forced migrants, after reaching a "safe haven", may decide to help the family members that they have left home. Certainly, such endeavours could materialise by sending remittances. Hence, my focus remains on both voluntary and involuntary migrants within the historical context to understand the situation of Ghana.

In the case of Ghana, the first wave of international migration emerged in the 1960s, a period [Awumbila et al. \(2008\)](#) labels as "minimal emigration". Ghana, at that time, was a net immigration country because it had good economic prospects ([Anarfi and Emmanuel 2018](#)). Specifically, there were several industries, massive extraction of minerals and cocoa production. These activities boosted the economy and attracted economic migrants from neighbouring countries and other African countries ([Peil 1974](#); [Antwi Bosiakoh 2008](#)). Therefore, emigration was specifically for further education, training, trading and foreign services in this era ([Anarfi et al. 2000](#)). Emigration began skyrocketing during the 1970s as a result of economic misfortune. This economic misfortune was partly due to the government's ambitious plans towards industrialisation that resulted in high inflation. Echoing [Faist \(2019\)](#), failure of governance undoubtedly can induce migration, and this seems to be what happened in Ghana during that era. Most professionals such as teachers, lawyers, lecturers, doctors and administrators fled to seek greener pastures, jobs within the African continent and English-speaking countries in Europe, notably the United Kingdom, where their skills were in demand ([Owusu 2000](#); [Kabki 2007](#)). Within the 1980s, the economic crisis became highly abysmal to the extent that fleeing was the only coping strategy that seemed feasible to most people. This era observed the mass emigration of unskilled and semi-skilled labour. While these groups of people could only meet the financial requirements in travelling to their neighbouring countries, the few skilled workers, in particular, could fund migrating beyond the African continent. Hence, they embarked on such a sojourn ([Awumbila et al. 2008](#)). This era was also characterised by political instability, which led to many fleeing the country due to political persecution, confiscation of property, imprisonment without trial and even fear of execution. Expectedly, this resulted in many Ghanaians seeking asylum between 1980 and 1991. UNHCR registered over 90,000 Ghanaians at that time, making Ghana one of the top ten countries hit by forced migration ([Bump 2006](#)). In the 1990s, emigration was mainly aimed at Europe and North America. Today, Ghanaians

are dispersed all over the world ([Arthur 2008](#)). [Peil \(1995\)](#) estimated that one-tenth of the Ghanaian population lives abroad. The [United Nations Department of Economic and Social Affairs \(UN DESA\) \(2019\)](#) also estimates that 970,625 Ghanaians live outside the country.

Indeed, as [Jones \(1998\)](#) has argued, time and scale within a historical framework remain significant variables when we try to understand remittances usage and its impacts on social inequality. Critically observing the trend within the lens of mixed migration theory, I share the view that, *ceteris paribus*, the first group of migrants who left in the 1960s, were not expected to return due to the economic standstill in the country they had left. In this case, the only rational decision for those migrants was to continue to reside in the receiving country. More importantly, since their skills were in demand at the time, one could assume that they at least had better living conditions and would not have traded that with the economic turmoil in their native country. Perhaps if there were something beneficial they could do, it would have been to assist the family they left financially or fund new emigration for a family reunion overseas. Arguably, given the country's political climate at the time, they might have funded the migration of some of the family members overseas whilst financially assisting the rest who remained back home. The latter assertion seems to explain how the few well-off in Ghana started to benefit from remittances.

In contrast, the former somewhat resonates with [Rubenstein's \(1992\)](#) assertion that migration leads to remittance and demand for remittances unequivocally triggers further migration. Conceptually, this idea has some implications. Thus, it could be traced to how migration within the households of these people moved from having limited resources to fund cross-border migration to migration being an open opportunity to all family members ([Massey 1990](#)). This is because migration has a short-term negative impact on the funders and a long-term positive impact on the family's status at large. That is to say, an increase in the number of family members who migrate positively correlates with improving the family's social status. Therefore, as the population belonging to this group of people increases within both sending and receiving countries, remittances become a mediator that plays a significant role. Remittances within this context improve lives and serve to keep people in touch and show affection to the rest of the family left behind. All these are in line with the claim that pioneer migrants usually come from relatively wealthier homes and are likely to become even more wealthier compared to the poor, who hardly practice cross-border legal migration unless they engage in risky and detrimental means ([Ellis 2000](#)).

4.5.2. Blending History and Marxist Political Economy on Migration

The migration pattern during the 1960s (see [Awumbila et al. 2008](#)) until now shows that it was rather skilled and better off Ghanaian citizens who could use the legal means of travelling to the developed countries. This assertion seems to resonate with Marx's discussion on the labour migration dynamics of capitalist development. From his viewpoint, capital and labour always form the economic base of the social structure. Within this structure, there are two fundamental social classes; the capitalist class, who own the means of production, and the working class, who sell their labour force and become the labourers to the former. Per Marx's reasoning, it was expected that the capitalist class, who represented a small percentage of the population in their quest to enrich themselves, exploit the "labourers" by underpaying them and extracting the added value. Putting this framework in the context of migration, one would anticipate that this situation would force the working class to move elsewhere for better working conditions. Instead, however, the capitalist class could relocate their families overseas at any given point in time. Applying this to the particular situation of Ghana seems to suggest that, in the 1970s, the few who could afford to pay for the cost of migrating to developed countries were the capitalist class. Notably, those with political power and a few educated elites. This is also applicable to the mass emigration between 1980 and 1990 when the government's structural adjustment policy led to large-scale redundancies in the public sector. Those who lost their jobs

migrated to Europe, North America, Lebanon and China ([International Organisation for Migration 2019](#)).

Further, with the continual growth of the working class, within a capitalist economy, it is not by accident that Ghana continues to lose its best talents to the West with the notion that they will receive better wages. Given this contextual overview, the more significant logic is that migration becomes a “choice” only for those who can afford it. In this sense, a choice limited to the working class who might not necessarily be “poor”, and the wealthy capitalist. By this, it is reasonably clear to argue that social inequality set boundaries for legal cross-border migration where only the skilled and the better-off citizens become the ones who could cross it. Therefore, while other unskilled citizens, usually the poor, might have made their way somehow to most developed countries through clandestine means, history points to the fact that most of the first migration wave were the skilled and well-to-do citizens. It may be true that remittances at the early stages were geared towards raw consumption and upkeep; however, as this never-ending cycle of migration within such families keeps evolving, there are higher possibilities of a twist in the usage of remittances ([Russell et al. 1990](#)). Thus, *ceretis paribus*, a migrant who transfers remittances for a housing project and to sponsor education in the last 20 years would not have a similar goal at present. Indeed, remittances could become an extra income used for social functions, as argued above.

With this rationale, remittances would help the few well-off, though contributing to the country’s social inequality gap. [Portes and Rumbaut \(2006\)](#) and [Lipton \(1980\)](#) share a similar conviction: they contend that first-generation migrants come from the upper-middle or top of the sending areas of income distribution. Hence, the probability that the remittances that they send back home will widen income inequality remains high. In the case of the 90,000 people who sought asylum during 1980 as they had to flee political persecution, as far as history is concerned, it is believed that the educated, politically involved, brave and better off citizens stood a chance in challenging government decisions at the time. Ghana at the time was under a military regime that had birthed the new mantra “culture of silence”, where citizens were unable to share their views regarding whatever was going on in the country. Therefore, challenging these officials or even commenting via any media space could only provoke their anger, which was synonymous with imprisonment. Hence, most of those who fled arguably belonged to the upper and middle class with excellent educational backgrounds and some funds to sponsor travelling overseas. This assertion reiterates that migration is a constrained choice, applicable even in so-called displaced people. In reality, these migrants had a choice to stay and suffer or to flee and seek refuge elsewhere ([Cohen 2005](#)). However, to choose between the two at that time would certainly depend on a person’s financial background, and since most of them found themselves overseas, we can only assume that they belonged to the upper or middle class. There is also a possibility that they might have left some family members in Ghana before fleeing. Hence, one means to help them whilst continuing to take refuge abroad was to send remittances.

By these assertions, I share the view that Ghana’s historical legal emigration pattern to developed countries favoured skilled and well-to-do citizens as they were either fortunate to be overseas before the economic chaos or could afford a cross-border legal migration. However, whatever strand they may be in, it has become clear that there were higher possibilities that they were still in touch with their families. Additionally, to some extent, sponsored members of their families and took care of them whilst they continued to stay abroad. This, in a way, explains why remittances are generally skewed to a few wealthy people in Ghana and contribute towards the social inequality gap.

5. Discussion

The study’s results in their entirety can be said to have addressed the primary objectives introduced. Essentially, while the regression results present strong evidence that remittances positively affect GDP per capita, the micro and political economy analysis

show that remittances remain a significant household resource that is unevenly distributed in Ghana. Broadly, the regression results (see Table 2) can be interpreted as remittances positively influencing Ghana's general population. With an optimistic lens, remittances in this effect seem promising, and hence migrants should be encouraged to send them officially. However, to be blindly optimistic by ignoring the fact that remittances are private resources may narrow its holistic interpretation. For instance, it is general knowledge that recipients of remittances determine when and how to use the money. As seen in some research studies in Ghana (see, [Mazzucato et al. 2008](#)), the few well-off remittances recipients tend to spend the money on luxurious commodities or invest it in properties.

Some scholars (see [González et al. 1991](#); [Cohen and Rodriguez 2005](#)) have similarly argued elsewhere that remittances recipients usually spend the money on luxury items and home improvement. In theory, I agree with these findings, as generally, people's purchasing power tends to increase whenever they acquire or get access to extra income. To place these arguments within the Ghanaian context, the evidence from the [Ghana Statistical Service \(2019\)](#) confirms that recipients of remittances usually spend the money on several things, including social functions, fund emigration, buying properties such as land, investing in real estate (see [Grant 2007](#)), funding quality education and addressing health-related problems. These claims are not entirely new as they corroborate several empirical studies undertaken in the 1980s. Specifically the research studies by [Mines \(1981\)](#), [Reichert \(1981\)](#) and [Stuart and Kearney \(1984\)](#) migrants' roles in the central-west region of Mexico reveal that remittances transferred by migrants elicited land price inflation, encouraged social differentiation and positioned local resources into the hands of the few well-off. This finding reverberates with the view that most of the poorest people cannot fund cross-border legal migration to the affluent countries, so they rarely receive remittances, which in this context can help improve their social status.

Then again, as seen from the regression results, an increase in remittances forces GDP per capita to rise. This rise somewhat represents an improvement in the livelihood of a majority of the population in Ghana. However, given the ineffective distribution of remittance (see Table 3), only a modest percentage of households benefit directly. Even so, some scholars (see [Durand et al. 1996](#); [Jones 1998](#); [Massey and Parrado 1998](#)) posit that when remittances are either invested or consumed by the few recipients, the country benefits in the long term. Such arguments have their roots in the idea that those actions from recipients enhance money circulation and generate spillover effects that benefit several people in the country. While this argument may seem cogent, other contentious sociological perspectives about this claim require critical attention. For example, [Ratha \(2003\)](#) has contributed modestly to the remittances spent on consumption argument and its spillover effects on several people in a country. In particular, he argues that recipients are more likely to spend remittances on domestically made products. However, one possible effect of such a practice is an increase in money circulating and, subsequently, high consumption. All of these actions can force the prices of commodities to rise. In the long term, this may affect people, especially those with fixed low income and those below the middle class who barely receive remittances ([Nishat and Nighat 1991](#); [Iqbal and Abdus 2005](#)).

Further to that, high inflation can increase the cost of business, which distorts savings and investment. Thus, those with fixed and low incomes are adversely affected in the long run as their purchasing power may be hindered ([Delgado Wise and Marquez 2009](#)). Using the bounds testing approach, [Abdul-Mumuni and Quaidoo \(2016\)](#) present empirical evidence on the consumption and remittance debate in Ghana. They note that the consumption pattern of recipients of remittances in Ghana influences inflation in the long run. As argued, recipients of remittances are the few well-off people, indicating that while an increase in GDP per capita may be generally good for the economy, it may stymie the poorest peoples' progress.

Theoretical Implication and the Way Forward

The argument established so far has focused on two main strands: how remittances are partly significant towards economic growth and improvement of people's standard of living on the one hand and how this same financial inflow somehow adds up to the social inequality gap in Ghana. Theoretically, these can be linked to the historical-structural paradigm and dependency theory. Concerning the latter, I pay particular attention to Cardoso's (1972) thesis on dependency theory. Coining the term "associated dependent development", Cardoso argues that dependency is not a substitute for economic growth stagnation; rather, it can spur economic growth. However, despite this optimistic reasoning, Cardoso contends that economic growth within the dependency theory has repercussions such as inequality and marginalisation (Cardoso 1972). Perhaps this is anticipated, given that Cardoso's ideology focused a bit more on capitalism (see Delgado Wise and Veltmeyer 2018), a concept that has been argued to have created an uneven society. Nevertheless, based on the evidence presented so far, I agree with Cardoso that some level of dependency can simultaneously lead to economic growth and create inequality. In departing from Cardoso's thoughts, however, I believe that states could champion economic growth within the dependency framework while putting in measures to decrease any form of social inequality. To advance in this direction, I propose two plausible policies that could be the way forward for Ghana regarding the remittances and social inequality nexus.

First, because a rise in remittance positively influences GDP per capita, which is somewhat vital towards the economy of Ghana, there should be appropriate measures to induce migrants to send remittances in bulk. One way to do this is to introduce the "role of the state" in spearheading agendas such as establishing a public online software application for those in the diaspora to send money to Ghana. This initiative could begin by being very competitive with many subsidies, making it cheaper for the diasporas. This approach should first target winning the people's confidence, as many might have lost interest in the state's activities. However, an app that is cheaper than the ones in the market stands a chance in propelling many diasporas to patronise it. With many diasporas trying to avoid the higher charges associated with the usual remittances systems, this could be the "silver-wand" to address their longstanding nightmare, eventually leading them to remit more. In the end, this could result in two-fold benefits; thus, first, the issue of migrants paying higher charges and other physical barriers that may prevent them from transferring remittances would be mitigated. By this, remittances to Ghana are likely to increase, and this would positively affect the macroeconomy.

Second, returns from the app could be reinvested in setting up a state-owned remittance bank in Ghana. This bank could solely perform three functions that could mitigate the social inequality gap in the country. The first is functions such as setting up education and training centres in the rural areas and where it is unlikely for people to receive remittances. This training could provide the populace with the needed skills to at least enable them to find employment or to start up businesses. Second, the bank could provide policy loans and incentives to key industries to establish branches in areas receiving less remittances. Moreover, as usually used by economists, the bank could use financial repression by providing loans with low interest to genuine people with a good business plan and lack the necessary documentation due to their social status.

6. Conclusions

This paper has explored how and why financial remittance, on the one hand, contributes to Ghana's social inequality gap and, on the other hand, has a significant impact on the macroeconomy. In particular, I took cues from the fact that remittances that go into Ghana mostly reach a few percentages of the well-off people in the country. To ascertain why this happens, it was necessary first to confirm the relationship between remittances and GDP per capita at the macro level, where GDP per capita was the proxy for national economic development and improvement of living standards. Therefore, from a methodological perspective, that section of the study used an OLS quantitative approach applied

to annual data to find if financial remittances to Ghana have a relationship with GDP per capita. After the estimation, I found strong evidence suggesting that remittances positively influence GDP per capita in Ghana.

More importantly, the evidence indicates that a rise in remittances increases the country's GDP per capita. While this was encouraging at the macroeconomic level, partly because remittances, as argued, tend to stabilise the economy, improve the country's foreign reserve, ease the banking sector's financial constraints and improve the general standard of living of people, a different story emerges at the micro level. Specifically, remittances remain private resources, and their practical usage seems to widen the country's social inequality gap indirectly. Indeed, an increase in the GDP per capita meant an improvement of many lives in the country. However, unfortunately, quite a few of the people benefitting from this improvement are well-off people. Though these findings complement existing literature (see, [Mazzucato et al. 2008](#)), it is distinct in the sense that I move beyond the statistical evidence and introduce a microanalysis to the discussion. Thus, to robustly improve the analysis, the study employed a political economy approach by looking through a historical lens. This was because, to ascertain why remittances reach the few well-off people and how its usage contributes to social inequality, it was necessary to further delve into the historical path of Ghana's emigration.

Per the findings, the study argues that since the historical trajectory of legal migration to the affluent countries was mostly by the skilled and well-off citizens owing to the finances involved, it is not surprising that remittances reach only a few groups in Ghana. As explained within the Marxist political economy, the country was already uneven, and this gave room for only the rich and few educated elites to embark on cross-border legal migration. In essence, their remittances serve as a means of keeping in touch, showing their benevolence and, more importantly, assisting their family and friends in all their financial endeavours. As [Russell et al. \(1990\)](#) have argued, remittances during the initial stages of migrants' experience abroad serve the purpose of sponsoring education, providing shelter and helping to improve the social status of the family. However, these would all be taken care of with time, and the only thing left would be for other pursuits such as housing properties and land investment. When limited resources such as land and housing are placed in the hands of only a few well-off in the country, this will continue to contribute to the social inequality gap. While I agree that there are few instances whereby the poorest people embark on a clandestine medium of travelling to developed countries, the evidence presented implies that their numbers are not substantial enough to counter the middle class and elites. In other words, their numbers are unable to bridge the remittance and social inequality gap. Upon these premises, I suggested two reasonable measures as the way forward. First, considering the positive impact at the macro-level, remittances should be induced through the state-funded online app. Second, the app's returns are to be reinvested in remittances banks that would focus more on addressing social inequality in Ghana.

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Data Availability Statement: The dataset used to conduct the regression analysis will be made available to any researcher for purposes of reproducing the results or replicating the procedure via email.

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Appendix A

Table A1. ADF stationarity test.

Unit Root Test Results Table (ADF)				
Null Hypothesis: The Variable Has a Unit Root				
	At Level		At First Difference	
	Intercept	Intercept + Trend	Intercept	Intercept + Trend
LNREM	−3.4459	−3.4183	−7.0553	−7.0962
	0.0153	0.0639	0.0000	0.0000
	**	*	***	***
LNODA	−1.1401	−4.3468	−7.7565	−7.6316
	0.6898	0.0072	0.0000	0.0000
	n0	***	***	***
LNGDP	0.6088	−2.6622	−3.4663	−3.7804
	0.9881	0.2571	0.0147	0.0291
	n0	n0	**	**
LNCPID1	−5.7106	−7.2054	−5.6214	−5.4017
	0.0000	0.0000	0.0000	0.0006
	***	***	***	***
LNGCF	−2.4488	−1.1768	−4.2162	−4.6469
	0.1364	0.8999	0.0022	0.0038
	n0	n0	***	***

Note: * $p < 0.10$ ** $p < 0.05$, *** $p < 0.01$ signifies rejection of the null hypothesis of unit root at 10%, 5%, and 1% significance level.

Table A2. PP stationarity test.

Unit Root Test Results Table (PP)				
Null Hypothesis: The Variable Has a Unit Root				
	At Level		At first Difference	
	Intercept	Intercept + Trend	Intercept	Intercept + Trend
LNREM	−3.4233	−3.4183	−9.0884	−18.9150
	0.0162	0.0639	0.0000	0.0000
	**	*	***	***
LNODA	−1.2433	−4.3556	−9.2873	−9.0123
	0.6454	0.0071	0.0000	0.0000
	n0	***	***	***
LNGDP	2.3286	−3.2849	−3.3088	−3.5070
	0.9999	0.0841	0.0216	0.0533
	n0	*	**	*
LNCPID1	−5.7106	−10.8523	−33.4338	−36.1001
	0.0000	0.0000	0.0001	0.0000
	***	***	***	***
LNGCF	−2.4534	−1.2521	−4.2396	−4.5219
	0.1353	0.8833	0.0021	0.0051
	n0	n0	***	***

Note: * $p < 0.10$ ** $p < 0.05$, *** $p < 0.01$ signifies rejection of the null hypothesis of unit root at 10%, 5%, and 1% significance level.

References

- Abdul-Mumuni, Abdallah, and Christopher Quaidoo. 2016. Effect of International Remittances on Inflation in Ghana Using the Bounds Testing Approach. *Business and Economic Research* 6: 192–208. [\[CrossRef\]](#)
- Adams, Richard. 2011. Evaluating the Economic Impact of International Remittances On Developing Countries Using Household Surveys: A Literature Review. *The Journal of Development Studies* 47: 809–28. [\[CrossRef\]](#)
- Adams, Richard, Jr., and Alfredo Cuecuecha. 2010. *The Economic Impact of International Remittances on Poverty and Household Consumption and Investment in Indonesia*. World Bank Policy Research Working Paper 5433. Washington, DC: World Bank.
- Adepoju, Aderanti. 2005. Patterns of Migration in West Africa. In *At Home in the World. International Migration and Development in Contemporary Ghana and West Africa*. Edited by Takyiwaa Manuh. Accra: Sub-Saharan Publishers, pp. 24–54.
- Adepoju, Aderanti. 2010. *International Migration within, to and from Africa in a Globalised World*. Accra: Sub-Saharan Publishers.
- Aggarwal, Reena, Demirgüç-Kunt Asli, Peria Maria, and Soledad Martinez. 2011. Do remittances promote financial development? *Journal of Development Economics* 96: 255–264. [\[CrossRef\]](#)
- Anarfi, Kwasi John, and Ofosu-Mensah Ababio Emmanuel. 2018. A Historical Perspective of Migration from and to Ghana. In *Migration in a Globalising World. Perspectives from Ghana*. Edited by Awumbila Mariama. Accra: Sub-Saharan Publishers, pp. 51–71.
- Anarfi, John, and Stephen Kwankye. 2005. The Costs and Benefits of Children's Independent Migration From Northern to Southern Ghana. Paper presented at the International Conference on Childhoods: Children and Youth in Emerging and Transforming Societies, Oslo, Norway, June 29–July 3; Oslo: Migration, Globalisation & Poverty, pp. 1–57.
- Anarfi, Kwasi John, Kofi Awusabo-Asare, and Nicholas N. N. Nuamah. 2000. *Push and Pull Factors of International Migration—Country Report: Ghana*. Working Paper No. 2000/E(10). Luxembourg: Eurostat.
- Antwi Bosiakoh, Thomas. 2008. 'Understanding Ghana's Migrants: A Study of Nigerian Migrant Associations in Accra, Ghana. Master's thesis, Sociology Department, University of Ghana, Legon, Accra, Ghana.
- Arthur, John. 2008. *The Africa Diaspora in the United States and Europe*. Minnesota: Routledge.
- Awumbila, Mariama. 1997. Gender and Structural Adjustment in Ghana: A Case Study in Northeast Ghana. In *Tradition, Location and Community: Place-Making and Development*. Edited by A. N. Teymur. New York: Awotoma, Avebury Aldershot, pp. 161–72.
- Awumbila, Mariama, Manuh Takyiwaa, Tagoe Quartey Peter, Addoquaye Cynthia, and Bosiakoh Antwi Thomas. 2008. *Migration Country Paper: Ghana*. Accra: Centre for Migration Studies, University of Ghana.
- Bade, Klaus. 2003. *Migration in European History*. Oxford: Blackwell Publishing.
- Bank of Ghana. 2019. *Annual Report 2019*. Accra: Bank of Ghana.
- Barajas, Adolfo, Chami Ralph, Fullenkamp Connel, Gapen Michael, and Montiel Peter. 2010. *Do Workers' Remittances Promote Economic Growth?* IMF Working Paper WP/09/153. Washington, DC: International Monetary Fund.
- Barham, Bradford, and Stephen Boucher. 1998. Migration, remittances, and inequality: Estimating the net effects of migration on income distribution. *Journal of Development Economics* 55: 307–31. [\[CrossRef\]](#)
- Benmamoun, Mamoun, and Kevin Lehnert. 2013. Financial Growth: Comparing the effects of FDI, ODA, and International Remittances. *Journal of Economic Development* 38: 43–65. [\[CrossRef\]](#)
- Boarini, Romina, Fabrice Murtin, and Paul Schreyer. 2015. *Inclusive Growth: The OECD Measurement Framework*. OECD Statistics Working Papers, 2015/06. Paris: OECD Publishing.
- Bump, Micah. 2006. *Ghana: Searching for Opportunities at Home and Abroad*. Georgetown: Institute for the Study of International Migration, Georgetown University.
- Cardoso, Fernando Henrique. 1972. Dependency and Development in Latin America. *New Left Review* 74: 83–95.
- Castles, Stephen, and J. Mark Miller. 2009. *The Age of Migration: International Population Movements in the Modern World*. Basingstoke: Palgrave MacMillan.
- Cattaneo, Cristina. 2005. *International Migration and Poverty; Cross-Country Analysis*. Milan: Università Degli Studi di Milano.
- Chowdhury, Murshed. 2016. Financial development, remittances and economic growth: Evidence using a dynamic panel estimation. *The Journal of Applied Economic Research* 10: 35–54. [\[CrossRef\]](#)
- Cohen, Jeffrey. H. 2005. Remittances outcomes and migration: Theoretical contests, real opportunities. *Studies in Comparative. International Development* 40: 88–112.
- Cohen, Jeffrey H, and Leila Rodriguez. 2005. Remittance Outcomes in Rural Oaxaca, Mexico: Challenges, Options and Opportunities for Migrant Households. *Population, Space and Place* 11: 49–63. [\[CrossRef\]](#)
- Connell, John, and Denis Conway. 2000. Migration and remittances in Island microstates: A comparative perspective on the South Pacific and the Caribbean. *International Journal of Urban and Regional Research* 24: 52–78. [\[CrossRef\]](#)
- De Haas, Hein. 2021. Theory of migration: The aspirations-capabilities framework. *Comparative Migration Studies* 9: 1–35. [\[CrossRef\]](#) [\[PubMed\]](#)
- Delgado Wise, Raul, and Humberto Marquez. 2009. Understanding the Relationship Between Migration and Development: Toward a New Theoretical Approach. *Social Analysis* 53: 85–105.
- Delgado Wise, Raul, and Henry Veltmeyer. 2018. Rethinking Development from a Latin American Perspective. *Canadian Journal of Development Studies* 39: 1–18.
- Dessy, Sylvain, and Tiana Rambeloma. 2009. *Immigration Policy, Remittances, and Growth in the Migrant-Sending Countries*. Working Paper 09–15. Quebec: CIRPEE.

- Durand, Jorge, Parrado Kandel William, and Douglas Massey. 1996. International migration and development in Mexican communities. *Demography* 33: 249–64. [\[CrossRef\]](#)
- Ehwi, Juvenile, Maslova Sabina Richmond, and Asante Lewis Abedi. 2021. Flipping the page: Exploring the connection between Ghanaian migrants' remittances and their living conditions in the UK. *Journal of Ethnic and Migration Studies*, 1–24. [\[CrossRef\]](#)
- Ekbia, Hamid, and Bonnie Nardi. 2016. Social Inequality and HCI: The View from Political Economy. Problem-solving or not? *The Boundaries of HCI Research*, 4997–5002. [\[CrossRef\]](#)
- Ellis, Frank. 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.
- Eromenko, Igor. 2016. *Do Remittances Cause Dutch Disease in Resource-Poor Countries of Central Asia?* MPRA Paper 74965. Munich: University Library of Munich.
- Faist, Thomas. 2019. *Migration and the Politics in Social Inequality in the Twenty-First Century*. Oxford: Oxford University Press.
- Fayissa, Bichaka, and Christian Nsiah. 2010. The Impact of Remittances on Economic Growth and Development in Africa. *The American Economist* 52: 92–103. [\[CrossRef\]](#)
- Ghana Statistical Service. 2018. *Poverty Trends in Ghana 2005–2017*. Ghana Living Standards Survey. Accra: Ghana Statistical Service.
- Ghana Statistical Service. 2019. *Ghana Living Standard Survey 7 Main Report*. Household Survey. Accra: Ghana Statistical Service.
- González, Mercedes, Agustín Escobar, and Agustín Latapik. 1991. The Impact of IRCA on the migration Patterns of a Community in Los Altos, Jalisco, Mexico. In *The Effect of Receiving Country Policies on Migration Flows*. Edited by Díaz-Briquet. Boulder: Westvie, pp. 205–31.
- Grant, Richard. 2007. Geographies of investment: How do the wealthy build new houses in Accra, Ghana? *Urban Forum* 18: 31–59. [\[CrossRef\]](#)
- Guiliano, Paola, and Marta Ruiz-Arranz. 2009. Remittances, financial development, and growth. *Journal of Development Economics* 90: 144–52. [\[CrossRef\]](#)
- Gupto, Sanjeev, Catherine Patillo, and Smita Wagh. 2009. Effect of Remittances on Poverty and Financial Development in sub-Saharan Africa. *World Development* 37: 104–15. [\[CrossRef\]](#)
- Hamood, Sara. 2006. *African Transit Migration through Libya to Europe. The Human Cost*. Cairo: American University of Cairo.
- International Organisation for Migration. 2019. *Migration in Ghana, a Country Profile*. Geneva: IOM.
- Iosifides, Theodoros. 2016. *Qualitative Methods in Migration Studies; A Critical Realist Perspective*. London and New York: Routledge.
- Iqbal, Zafar, and Sattar Abdus. 2005. *The Contribution of Workers' Remittances to Economic Growth in Pakistan*. Research Report No: 187. Pakistan: PIDE.
- Jones, R. 1998. Introduction: The renewed role of remittances in the New World Order. *Economic Geography* 74: 1–7.
- Kabki, Mirjam. 2007. *Transnationalism, Local Development and Social Security: The Functioning of Support Networks in Rural Ghana*. Leiden: African Studies Center.
- Ketkar, Suhas, and Dilip Ratha. 2001. *Securitisation of Future Flow Receivables: A Useful Tool for Developing Countries*. Finance and Development. A Quarterly Magazine of the IMF 38(1). Washington, DC: World Bank.
- Knowles, James, and Richard Anker. 1981. Analysis of Income Transfers in a Developing Country: The Case of Kenya. *Journal of Development Economics* 8: 205–26. [\[CrossRef\]](#)
- Lipton, Michael. 1980. Migration from the rural areas of poor countries: The impact on rural productivity and income distribution. *World Development* 8: 1–24. [\[CrossRef\]](#)
- Lokshin, Michael, Bontch-Osmolovski Mikhail, and Glinskaya Elena. 2010. Work-related migration and poverty reduction in Nepal. *Review of Development Economics* 14: 323–32.
- Martey, Edward, and Ralph Armah. 2020. Welfare effect of international migration on the left-behind in Ghana: Evidence from machine learning. *Migration Studies* 1: 1–30. [\[CrossRef\]](#)
- Massey, Douglas. 1990. Social Structure, Household Strategies, and the Cumulative Causation of Migration. *Population Index* 56: 3–26. [\[CrossRef\]](#)
- Massey, Douglas, and Emilio Parrado. 1998. International migration and business formation in Mexico. Commentaries. Authors' reply. *Social Science Quarterly* 79: 1–34.
- Massey, Douglas, Arango Joaquin, Hugo Graeme, Kouaouci Ali, Pellegrino Adela, and Taylor Edward. 1993. Theories of International Migration: A Review and Appraisal. *Population and Development Review* 18: 229–60. [\[CrossRef\]](#)
- Mazzucato, Valentina, Bart Van Den Boom, and Nicholas Nsowah-Nuamah. 2008. Remittances in Ghana: Origin, Destination and Issues of Measurement. *International Migration* 46: 103–22. [\[CrossRef\]](#)
- Mensah, Esi Akyere. 2012. *The Saga of the Returnee. Exploring the Implications of Involuntary Return Migration for Development. A Study of the Reintegration Process for Ghanaian Migrant Workers from Libya*. Master's thesis, Development Management, University of Agder, Kristiansand, Norway.
- Mines, Richard. 1981. *Developing a Community Tradition of Migration: A Field Study in Rural Zacatecas, Mexico, and California Settlement Areas*. San Diego: Monographs in U.S.-Mexican Studies no.3, La Jolla: Center for U. S.-Mexican Studies, University of California at San Diego.
- Mousourou, Loukia M. 1991. *Migration and Migration Policy in Greece and Europe*. Athens: Gutenberg. (In Greek)
- Nguyen, Phuc Hien. 2017. Remittances and competitiveness: A case study of Vietnam. *Journal of Economics, and Business Management* 5: 79–83. [\[CrossRef\]](#)

- Nishat, Muhammed, and Bilgrami Nighat. 1991. The impact of migrant worker's remittances on Pakistan economy, Pakistan. *Economic and Social Review* 29: 21–41.
- Nolan, Brian, Max Roser, and Stefan Thewissen. 2016. *GDP Per Capita Versus Median Household Income: What Gives Rise to Divergence Over Time?* LIS Working Paper Series, No. 672. Luxembourg: LIS Cross-National Data Center.
- Nyamongo, Esman, Misati Morekwa, Kipyegon Leonard Roseline, and Lydia Ndirangu. 2012. Remittances, financial development and economic growth in Africa. *Journal of Economics and Business* 64: 240–60. [CrossRef]
- Oberai, A. S., and Manmohan K. Singh. 1980. Migration, Remittances and Rural Development: Findings of a Case Study in the Indian Punjab. *International Labor Review* 119: 229–41.
- Owusu, Thomas. 2000. The Role of Ghanaian Immigrant Association in Toronto, Canada. *International Migration Review* 34: 1115–81. [CrossRef]
- Peil, Margaret. 1974. Ghana's Aliens. *International Migration Review* 8: 367–81.
- Peil, Margaret. 1995. Ghanaians Abroad. *African Affairs* 94: 336–45. [CrossRef]
- Peprah, James Atta, Isaac Kwesi Ofori, and Abel Nyarko Asomani. 2019. Financial development, remittances and economic growth: A threshold analysis. *Cogent Economics & Finance* 7: 1625107.
- Portes, Alejandro, and Ruben Rumbaut. 2006. *Immigrant America: A Portrait*, 3rd ed. Berkeley: University of California Press.
- Ratha, Dilip. 2003. Workers' Remittances: An Important and Stable Source of External Development Finance. In *Global Development Finance 2003*. Washington, DC: World Bank, pp. 157–75.
- Reichert, Joshua. 1981. The migrant syndrome: Seasonal US labour migration and rural development in central Mexico. *Human Organization* 40: 56–66. [CrossRef]
- Rubenstein, Hymie. 1992. Migration, Development and Remittances in Rural Mexico. *International Migration* 30: 127–153. [CrossRef]
- Russell, Sharon Stanton, and Michael Teitelbaum. 1992. *International Migration and International Trade*. Washington, DC: World Bank.
- Russell, Sharon Stanton, Jacobsen Karen, and William Deane Stanley. 1990. *International Migration and Development in Sub-Sahara Africa*. World Bank Discussion Papers 101. Washington, DC: World Bank.
- Solimano, Andres. 2003. Workers Remittances to the Andean Region: Mechanisms, Costs, and Development Impact. Paper present at the Multilateral Investment Fund-IDB Conference, Quito, Ecuador, May 12.
- Spatafora, Nikola. 2005. Worker Remittances and Economic Development. In *World Economic Outlook April 2005*. Washington, DC: International Monetary Fund.
- Stark, Oded. 1984. Rural-to-Urban Migration in LDCs: A Relative Deprivation Approach. *Economic Development and Cultural Change* 32: 475–86.
- Stark, Oded. 1991. *The Migration of Labor*. Oxford and Cambridge: Basil Blackwell.
- Stark, Oded, and David Bloom. 1985. The new economics of labour migration. *The American Economic Review* 75: 173–78.
- Stark, Oded, Edward Taylor, and Shlomo Yitzhaki. 1988. Migration, Remittances in Inequality: A Sensitivity Analysis Using the Extended Gini Index. *Journal of Development Economics* 28: 309–22. [CrossRef]
- Stiglitz, Joseph E. 2012. *Price of Inequality*. New York: W. W. Norton & Company.
- Stratan, Alexandru, Marcel Chistruga, Victoria Clipa, Alexandru Fala, and Viorica Septelici. 2013. *Development and Side Effects of Remittances in the CIS Countries: The Case of the Republic of Moldova*. San Domenico di Fiesole (FI): CARIM-East RR 2013/25. Fiesole: Robert Schuman Centre for Advanced Studies, European University Institute.
- Stuart, James, and Michael Kearney. 1984. *Causes and Effects of Agricultural Labor Migration from the Mixteca of Oaxaca to California*. La Jolla and San Diego: Center for U.S.-Mexican Studies, University of California.
- Taylor, J. Edward, Jorge Mora, Richard Adams, and Alejandro Lopez-Feldman. 2005. *Remittances, Inequality and Poverty*. Evidence from Rural Mexico: Working Papers n° 05-003. San Diego: University of California.
- Tonah, Steve, and Emmanuel Codjoe. 2020. Risking It All: Irregular Migration from Ghana through Libya to Europe and Its Impact on the Left-Behind Family Members. In *Global Processes of Flight and Migration. The Explanatory Power of Case Studies*. Edited by Eva Bahl. Göttingen: Göttingen University Press, pp. 25–40.
- Twumasi-Ankrah, K.waku. 1995. Rural-urban migration and socioeconomic development in Ghana: Some discussions.10(2). *Journal of Social Development In Africa* 9: 13–22.
- United Nations Department of Economic and Social Affairs (UN DESA). 2019. *International Migrant Stock 2019. Data Set*. New York: United Nations. Available online: www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp (accessed on 1 October 2021).
- United Nations Development Programme (UNDP). 2009. *Human Development Report 2009: Overcoming Barriers: Human Mobility and Development*. New York: Palgrave Macmillan.
- Van Hear, Nicholas. 2009. *Managing Mobility for Human Development: The Growing Salience of Mixed Migration*. UNDP Human Development Research Paper, 2009/20. New York: UNDP Human Development.
- Ventura, Lina. 2006. Europe and migrations in the 20th century. In *Immigration and Immigrant Integration into Greek Society*. Edited by Papadopoulou Eleni. Athens: Gutenberg, pp. 83–126. (In Greek)
- World Bank. 2006. *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. Washington, DC: WorldBank.

-
- World Bank. 2020. World Bank Data. Retrieved from Personal Remittances Received (Current US\$)-Ghana. Available online: <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT?locations=GH> (accessed on 1 October 2021).
- Yassen, S. Hadeel. 2012. The positive and negative impact of remittances on economic growth in MENA countries. *Journal of International Management Studies* 7: 7–14.