Effect of Diaspora Remittances on Economic Development in Kenya

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Abstract

Purpose: This study intended to establish the effects of remittances from Kenyans residing abroad on the country's economic growth from 1988 to 2021. The study specifically calculated how diaspora remittances would affect the country's absolute poverty from 1988 to 2021, as well as how they would affect gross domestic product and gross national product.

Methodology: The study implored the error correction model to conduct the estimation due to the stochastic nature of remittances. The modified Granger causality test by Toda and Yamamoto was applied to examine the connections between GDP and remittances as well as the connections between poverty and remittances. Using STATA software, an econometric estimation was performed.

Findings: According to the study, remittances per capita had a significant impact on Kenya's GDP, GNI, and degree of absolute poverty. It was discovered that GDP and GNI per capita were granger causes of remittance per capita, but neither absolute poverty nor remittance per capita were granger caused by absolute poverty.

Unique Contribution to Theory, Policy and Practice: The report recommends that, in order to guarantee a steady stream of remittances into the country's economy, essential efforts be taken to stabilize the currency rate and inflation.

Keywords: *Diaspora, Remittances, Economic Development*

INTRODUCTION

1.1 Background of the Study

Remittances, or frequent payments made by foreign workers to family back home, have become a vital part of economic growth, particularly in developing nations (Ratha, 2017). In 2019, $271 million was sent by international migrants, making it one of the largest sources of overseas aid for emerging countries. The total global remittances rose to $707 billion in 2019, with $746 billion predicted for 2020. Low- and middle-income countries received an increase of $554 billion in 2019, surpassing foreign direct investment. Top recipients included India, China, Mexico, the Philippines, and Egypt (World Bank, 2020).

However, remittance flows were forecasted to decrease across all regions by 2020 due to the COVID-19 pandemic and economic fallout. Obstacles to growth include restrictive banking laws and high remittance costs, with fees often above 10% in certain areas. Despite this, remittances have been shown to significantly support economic growth, enhancing living standards and comprising up to 33% of the GDP in some nations. Some studies have found a positive correlation between remittances and GDP, others found a negative or no relationship, while cross-country studies increasingly indicate that remittances help in reducing poverty (World Bank, 2020).

Kenya has recognized the economic and poverty-reduction potential of remittances from its emigrants, leading to the introduction of a special diaspora policy on January 20, 2015. This policy emphasizes cooperation with Kenyans abroad, aiming to engage, empower, protect, and encourage them to contribute to national development. Strategic objectives include developing measures to enhance the protection of Kenyans abroad, fostering dialogue, and establishing mechanisms for coordination and administration (Kimenyi, Mwega & Ndung'u, 2016).

In 2019, there were over 500,000 foreign migrants from Kenya across the globe, mainly in countries like Tanzania, Uganda, Canada, South Africa, Australia, Germany, South Sudan, and Switzerland. Remittances from the USA are the highest, constituting 47.1% of inflows. Remittances have become the largest source of foreign exchange in Kenya, surpassing income from tea, horticulture, and tourism. Between 2013 and 2018, remittances even overtook foreign direct investment as the main source of external financing in low- and middle-income countries, including Kenya (World Bank, 2019).

The Central Bank of Kenya (CBK) monitors remittances and estimated that transfers from Kenyans abroad totaled $2.838 billion in the 12 months ending in March 2020. Remittances are used for various purposes ranging from consumption to investment. Despite limited data on the micro and macroeconomic benefits in Kenya, remittances have become a crucial part of the country's economy, supporting the shilling and offering banks a cheap source of funds and exchange commissions.

Kenya, with the largest economy in East Africa and ranking third in Sub-Saharan Africa, has exhibited a complex economic trajectory. Classified by the World Bank as a lower middle-income economy, Kenya has a GDP of $89 billion in 2019, driven primarily by agriculture, industry, and services. Agriculture alone contributes one-third of GDP and employs 75% of the workforce. From 1963 to 1979, Kenya enjoyed robust GDP growth rates of 6.6% and 7.2% fueled by agricultural innovations. However, the growth rate diminished to 4.2% and 2.2% in the 1980s and 1990s. GDP figures continued to rise in the 2000s, reaching $63.8 billion in 2015 (World Bank, 2020).

The study distinguishes between GDP, reflecting domestic production, and GNP, including production by citizens abroad. While the U.S. moved from GNP to GDP measurement in 1991, GNP remains an essential metric for countries like Somalia where overseas operations significantly impact the economy. Kenya's GNP was $1,750 (World Bank Atlas Method) and $4,420 (PPP Method) in 2019. Kenya Vision 2030, the nation's development blueprint, targets transforming Kenya into a newly industrialized, middle-income country by 2030, with a projected average GDP growth rate of 10%. This goal is supported by increasing remittances, foreign investment, and overseas development aid (World Bank, 2020).

Despite being an economic giant in the region, Kenya struggles with poverty, driven by high population growth, inequality, and agricultural stagnation. Although poverty rates declined from 43.6% in 2006 to 35.6% in 2016, they remain high compared to other lower middle-income countries. Poverty is more pronounced in rural areas, with a slower decline rate than in urban regions. Various policy documents emphasize the role of diaspora remittances in poverty alleviation. According to Kenya Vision 2030, 2% of Kenyan households receive overseas remittances, predominantly used for food and education. The focus on remittances as a means to enhance living standards reflects a multi-dimensional approach to development, incorporating factors like education, healthcare, and social development, to not only boost the economy but also work towards reducing poverty in its multifaceted manifestations.

Several studies have explored the relationship between remittances from the Kenyan diaspora and the nation's GDP, using various methodologies like OLS. Across these studies, a positive impact of diaspora remittances on Kenya's GDP has been consistently found. However, the causal relationship between remittances and GDP has not been investigated, and the results may indicate only a one-way association. Concerns over data quality have led to calls for further empirical study. World Bank research from 2006 also revealed that diaspora remittances reduce the number of Kenyans living in absolute poverty by approximately 2% annually (Bett, 2013).

1.2 Statement of the Problem

Kenya's Vision 2030, the country's economic blueprint, and the government's Diaspora Policy view remittances from the diaspora as a significant factor in the country's economic growth and development. The Diaspora Policy's stated goal is to create and carry out plans to involve, enlighten, and mainstream Kenyans living abroad in the nation's growth. According to Kenya

Vision 2030, receiving remittances can increase people's prospects in and outside of the labor market and contribute to the eradication of poverty.

However, despite the strategic intentions of the government with regard to diaspora remittances, diaspora remittances so far seem not to have helped the country achieve the economic growth and economic development targets it has set for itself. Remittances have not yet assisted Kenya achieve the 10 per cent GDP growth rate targeted in its economic blue print, the Kenya Vision 2030 since its inception in 2008. Diaspora remittances have not helped Kenya alleviate absolute poverty given that prevalence rate in the country is still high in comparison to other lower middle-income countries in Africa and other parts of the world.

Presence of absolute poverty within populations is also against Kenya's objective of providing a high quality of life to all its citizens as stated in the country's Vision 2030 blue print. High GDP and GNP growth rates and eradication of absolute poverty requires large amounts of capital expenditure in the economy and remittances may be such one source of funds.

Last but not least to mention, this analysis found flaws in how earlier studies estimated the impact of remittances on GDP or GDP per capita. The time series data on these variables were analyzed using regression in all of the investigations by Irungu (2016), Ocharo (2014), Kiio et al. (2014), and Bett (2013) using the Ordinary Least Squares (OLS) estimate technique. Due to autocorrelation issue, which is a regular occurrence in time series data, OLS estimation may not be effective when used with such data. The error correction model (ECM) was employed in this work to carry out estimations. This is due to the fact that it is very challenging to anticipate future remittances using simply historical data. That is, because remittances are impacted by a variety of stochastic geopolitical events, lags of remittance data can be used to capture the short-term link between GDP and remittances but not the longterm relationship. The ECM is suitable because it has a term for the departure from the longrun relationship, which calculates how much of the disequilibrium will vanish in the upcoming forecasting period.

 The study has also used the modified Granger causality test by Toda and Yamamoto to test for causality in the empirical models because the relationship between GDP and remittances; and, poverty and remittances may not necessarily be unidirectional. For instance, as well as remittances may affect GDP, a lower GDP in a country on the other hand may force its citizens to migrate to other countries implying increased remittances back home. Or, diaspora remittances may reduce incidences of poverty but poverty also forces people to migrate from their home countries thereby creating the potential for increased remittances back home.

1.3 Research Questions

The research questions that the study intends to answer are:

  i.   What is the effect of diaspora remittances on gross domestic product in Kenya?
  ii.   What is the effect of diaspora remittance on gross national product in Kenya?

iii.   What is the effect of remittances on absolute poverty in Kenya?

1.4 Objectives of the Study

The general objective of the study was to investigate the effects of diaspora remittances by

Kenyans abroad on the development of the country's economy.

The specific objectives of the study were to:

i.   Examine the effect of diaspora remittances on gross domestic product in Kenya.
ii.   Explore the effect of diaspora remittances on gross national product in Kenya.
iii.   Investigate the effect of diaspora remittances on absolute poverty in Kenya.

LITERATURE REVIEW

2.1 Introduction

The theoretical review and review of past studies is presented in this chapter. The research looked at many hypotheses that clarify or indicate relationships between remittances, economic growth, and poverty. Additionally, empirical research on the connection between remittances and poverty and economic progress will be presented, along with a literature review.

2.2 Theoretical Literature

2.2.1 Solow-Swan Growth Model

The exogenous growth model was developed in 1956 by Robert Solow and Trevor Swan and is comparable to the Harrod-Domar model. The model seeks to explain long-run economic growth in terms of neoclassical economics by focusing on capital accumulation, labor or population growth, and increases in productivity (technological innovation). The model is built on a neoclassical production function of the Cobb-Douglas type.

Mathematically, the model is premised on the Cobb-Douglas function type which is

illustrated as follows:

$$Q = AK^aL^b \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 2.1$$

Where;

Q = Output; A = Labor augmented technology or knowledge; K = Capital; L = Labor units;

When the sum of parameters a and b is less than 1 indicates production is experiencing diminishing return to scale; and, a+b is equal to 1 indicating constant returns to scale to factor product.

The model noted that any rise or increase in Q comes from one of the following three areas: An increase in L, however, due to diminishing returns to scale, this would imply a reduction in Q/L ratio or output per worker leading to decline in production. Additionally, it could be due to a change in K and a change in the stock of capital in the economy over time would change both output and

Q-L ratio as well; moreover; it also signifies a rise in A or in multifactor productivity of labour could also increase Q-L ratio or output level per worker.

Paying much attention on the intentions of the model, that is what happens if growth is due to capital accumulation, Solow re-wrote the Cobb-Douglas production function in per capita form as follows:

$$q = Ak^a …………………………..……………………………………………………2.2$$

where, q = Q/L which is output per capita; k = K/L which is capital per unit of labor; and, a = returns to a factor.

Based on the model, the question is that will the expansion slow down over time? In other words, will the output reach steady state equilibrium? Yes. When savings are just enough to replace the depreciated capital stock, the economy will enter a steady state or equilibrium, and if we assume that capital depreciates completely every period, the equilibrium condition is simply s = k. According to the model, people save a portion of their income, and the money they save in one period becomes their capital in the following. The predictions of the model are:

(i) When a nation initially starts to acquire capital, its growth will be quite strong, but as the process continues, it will begin to slow down. This is the situation with Japan, where growth was much stronger in the 1950s and 1960s than it is now (in the 2000s).

ii) In terms of output per person and level of living, countries tend to converge. This is the case for Hong Kong, Singapore, and Taiwan, where as they acquire capital, their standard of living catches up with the initially more developed nations.

The Solow-Swan model was considered appropriate in this study because diaspora remittances are one source of capital required to spur economic growth and development as postulated in this model.

2.2.2 Theories on Drivers of Remittances by Migrants

There is no specific theory on behavior of migrants and remittances but scholars have applied Pure Altruism Theory and Pure Self Interest Theory to explain motivation by a country's citizens abroad to send money back home for development of the economy through repatriation. Hagen-Zanker & Siegel hypothesized in their study from 2007 that migrants send money home out of concern for the welfare of the remaining family members while adopting the Pure Altruism theory. The utility of a migrant is generated from the utility of his or her family welfare back home, according to Chami *et al*., (2003), who used the utility theory to explain the behavior of migrants. The fact that the migrant is more content when his family's welfare is better at home suggests that the migrant is motivated to send more money home when the economy in his country of origin is struggling. Remittances are "compensatory transfers" because they rise during economic downturns in the migrant's home country, such as droughts and financial crises. Remittances are not always

countercyclical, according to the Pure Self Interest theory, as it has been observed that the volume of remittances has decreased even during times of poor economic performance in recipient countries, refuting the assumed inverse connection between the volume of remittances inflow and the degree of economic performance as well as welfare of their family members in home country (Brown, 2006).

2.2.3 Theories on Poverty

Although there is no single theory explaining the causes and effects of poverty, experts have historically offered a range of perspectives on the issue. Over time, several definitions of poverty have been used, indicating a shift in the focus of the issue from financial considerations to larger issues like political participation and social exclusion. The classical economic tradition, which maintains that humans are ultimately to fault for poverty, is in favor of laissez-faire policies. Neoclassical (mainstream) economics suggests other factors that contribute to poverty but are beyond the poor's control, most notably market failures. The individual is prioritized over the group, and government plays a minor role in both classical and neoclassical approaches. Neoliberal and Keynesian schools place a strong emphasis on macroeconomic dynamics as well as the government's function in providing public goods and ensuring economic stability. The majority of people think that poverty is an uncontrollable state brought on by unemployment.

Marxist or radical ideas emphasize the role of the state in market intervention and regulation and identify class and group prejudice as the primary contributor to poverty. Examples of such anti-poverty measures include minimum salaries and anti-discrimination laws. Both social and economic factors are significant, according to the ideas of social exclusion and social capital. They support understanding of the root causes and enduring nature of poverty. Consequently, a well-chosen synthesis of approaches is needed to maximize the relevance of insights to the reduction of poverty. This should rely on social sciences like political theory and sociology to recognize a larger range of incentives for human behaviour beyond material and individualistic traits. As a result, recommendations for policy should emphasize the need for capital provision (including education), the enforcement of anti-discrimination laws, community development, and actions to combat the unfavorable incentives and market failures that underlie poverty.

The impact of remittances from the diaspora on poverty eradication in receiving countries has nevertheless been studied. Ravallion and Chen created the most well-known model on poverty and remittances in 1997. As a function of per capita income, a measure of income inequality, and the ratio of remittances to GDP, they expressed poverty in this model. On a 2007 study, the IMF also applied a related idea. According to Ravallion (Ravallion, 1997), the substantial income inequality in developing nations lessens the effects of economic progress on poverty. Since the amount of poverty rises as income disparity rises, a positive regression coefficient for income inequality is anticipated.

The Lorenz's curve is the direct source of the Gini coefficient, a statistic used to measure income inequality. According to the model, poverty should decline as per capita income increases. The model can determine the direct impact of the share of remittances in GDP on poverty after accounting for these two factors. Le Goff (2010) issued a warning that if the indirect effects of remittances on GDP growth and inequality are not taken into account, the true impact of remittances on poverty may be overstated. Remittances' ability to combat poverty may be partially mediated by income and inequality. As a result, the study utilized the GDP-per capita and the Gini coefficient index net of remittances as variables in his estimation process. The indicator of poverty that is calculated the most commonly is the poverty headcount. The poverty headcount is the proportion of the population with consumption per person below the absolute poverty line.

2.3 Empirical Literature

Arapi-Gjini, Mollers, and Herzfeld (2020) looked into the dynamic impacts of remittances on household poverty and income distribution, in Kosovo in 2011. They advanced by relating the first response functional methodology to measure the effects on poverty caused by changes in the length of receiving remittances. They examined the consequences based on counterfactual scenarios using cutting-edge matching techniques. Their research showed that remittances lower absolute and relative poverty levels while, in Kosovo's case, slightly increasing inequality. They also showed that remittances have a beneficial long-term impact, despite the fact that impacts on poverty reduction are more apparent in the short term. For low- and middle-income economies that rely heavily on remittances, these findings had significant welfare policy implications.

Pekovic (2017) used panel data for a sample of nine countries from the years 2002 to 2013 to investigate the effects of remittances on three poverty indices in Europe's transition economies. To calculate the effects of remittances, he utilized the Least Squares Dummy Variable (LSDV) model with panel-corrected standard errors. The findings indicated that all three indices of poverty are significantly influenced by remittances. Given the endogenous regressor problem, a 10% increase in remittances per capita would result in an average 4.7% decrease in poverty, as well as a 5.2% increase in depth and a 5.8% increase in severity. The study revealed that the findings might be significant in determining the policy approaches for more effective management of remittances in a country to steer growth in a given nation.

The World Bank (2016) used panel data to evaluate the impact of remittances on economic growth in 67 countries between 1991 and 2005. The study's control variables all converted into natural logs included the initial GDP per capita, private domestic credit to GDP ratio, secondary school enrollment rate, ICRG political risk index, inflation rate, real exchange rate overvaluation, real export and import to GDP ratio, government consumption, and time period dummies. The endogeneity of remittances was taken into consideration by conducting an SGMM estimate procedure with the aid of outside factors and time-varying instruments. According to estimations, GDP growth increases by 0.27 percent when the remittance to GDP ratio increased from 0.7

percent to 2.3 percent. When the investment to GDP ratio is taken into account together with the other control variables, the computed coefficient on remittances to GDP, however, loses some of its significance. The study concluded that one of the key ways' remittances function is through boosting domestic investment.

Sebil and Badejo (2015) investigated the connections between remittances and Nigerian economic expansion. A method to error correction modeling served as the study's foundation. The study's time frame ranged from 1981 to 2011. The study's conclusions showed that repatriation from foreign countries had a favorable impact on output level in Nigeria. Remittances did, however, have a strong negative association with productivity in the short term. Additionally, foreign aid as an external source of money had a substantial impact on Nigeria's economic progress over the long and short terms. The short-term impact of foreign direct investment (FDI) on real GDP was favorable. The results supported the notion that there exists a strong linkage between trade and economic growth suggesting that the more an economy is open, the more stimuli it has on real gross domestic output now and future dates. Ordinary least squares (OLS) estimation was employed by Ocharo (2014) to assess the impact of Kenyan diaspora remittances on national economic growth from 1970 to 2010. The study concluded that the ratio of remittances from the diaspora to the nation's gross domestic product was positive and considerable and advised the government to implement measures to promote remittances from the diaspora.

A study between 1975-2010 by Sibindi (2014) looked into the relationship between remittances, financial development, and economic growth in Lesotho. Per capita remittances, the broad money supply, and real per capita GDP were used as proxy for remittances, financial development, and economic growth, respectively. The Granger causality test was based on the vector error correction model (VECM), and the Johansen approach was used to check for co-integration between the variables. The findings showed that whereas financial development causes remittances without feedback, remittances themselves cause economic growth. However, no correlation between financial development and economic growth was discovered. The investigation into the relationship between economic expansion and financial development was not successful in the study.

According to Ravallion (1997) and Ravallion and Chen (1997), poverty was seen as a function of per capita income, a measure of income distribution, and the ratio of remittances to GDP. The study used the Three Stage Least Squares approach to assess two equations and adjust for endogeneity. Remittances significantly reduce poverty in recipient nations, according to the study's findings, although the effects are more trustworthy for countries where remittances make up more than 5% of GDP.

Chami, Fullenkamp, and Jahjah (2013) used aggregate remittance data for a sample of 83 countries between 1970 and 1998 to examine the relationship between worker remittances and per capita GDP growth. Panel regressions were used to examine the relationship between the increase of real

GDP per capita and workers' remittances to GDP under the parameters of starting per capita income, investment to GDP ratio, inflation rate, geographical dummy, and the ratio of net capital flows to GDP. In contrast, the remittances of workers to GDP ratio was either not significant or negatively associated with growth, according to Chami et al.'s (2013) analysis of the ratios of investment to GDP and net private capital flows to GDP.

Gazdar and Kratou (2012) looked into the effects of remittances on a country's economic growth. The study looked at panel data from 24 African countries from 1998 to 2011. Utilizing the System Generalized Method of Moments (SGMM), the study focuses on remittances, financial development, and how these factors affect economic growth. The results of the study demonstrate that remittances supported economic expansion in countries with advanced banking systems. The study's conclusions agreed with those of other studies carried out around the country.

According to Chimhowu (2005), there is no recognized way to assess how remittances affect a country's capacity to fight poverty. But it is obvious and comprehensible to conclude that the volume of transfers made by migrants to their family members back home does, in fact, have a general impact on reducing poverty. Adams and Page (2005) examined how migration from outside affects poverty using household surveys from 71 developing countries. They discovered that foreign remittances have a sizable statistically significant negative influence on poverty, even after controlling for the level of income, economic inequality, and geographic region. There is a 1.6% drop in the number of people living in poverty for every 10% increase in remittances as a percentage of GDP.

3.0 METHODOLOGY

The study used an autoregressive distributed lag with error correction model to capture the impact of remittances on the gross domestic product in both the short- and long-term. The dataset for the study's variables was time series for the period 1988 to 2021. The dataset is both high tailed and less tailed therefore the study concluded that the dataset does not follow a normally distributed across the period of the study. Augmented Disckey was carried out for the study variables on both levels and first differences at intercept to ensure that the result obtained during analysis were not spurious. This data was obtained from secondary data sources of the National Treasury of Kenya; Kenya Bureau of Statistics; the World Bank the Central Bank of Kenya; and, International Monetary Fund. The study also used the modified Granger causality test by Toda and Yamamoto to test for causality in the empirical models.

4.0 RESULTS

4.1 Descriptive Statistics

The descriptive statistics considered are mean, median and standard deviations which measured the central tendency of the data. Other summary statistics were minimum, skewness, maximum and kurtosis. Table 1 shows the results.

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Table 1: Descriptive Statistics

	GDP	SSE	PDC	GCS	INFL	TOR	REM	FDI	GNP	POV	WEC	DPR
Mean	3.67E+10	0.543429	26.73353	6.17E+11	11.52	0.5110	18.99	0.7811	847.05	4.2294	0.2058	0.2354
Median	1.74E+10	0.449016	25.80000	5.14E+11	9.31	0.5323	16.49	0.4708	488.76	0.0000	0.0000	0.0000
Maximum	1.10E+11	0.843358	40.20000	1.25E+12	45.98	0.7286	57.79	3.0942	2006.8	36.700	1.000	1.000
Minimum	5.75E+09	0.321491	18.50000	2.46E+11	1.55	0.2723	1.550	0.0047	220.07	0.000	0.0000	0.0000
Std. Dev.	3.28E+10	0.161240	5.853576	2.83E+11	9.08	0.1124	16.47	0.7961	573.16	10.468	0.4104	0.4305
Skewness	0.889666	0.698214	0.636993	0.755503	2.04	-0.2497	0.955	1.4829	0.6961	2.1064	1.4547	1.2481
Kurtosis	2.419689	1.930486	2.727251	2.595233	7.569	2.8788	2.901	4.2439	2.0065	5.6824	3.1161	2.557
Jarque-Bera	4.962277	4.382981	2.404696	3.466546	53.14	0.3741	5.174	14.651	4.1435	35.33	12.012	9.1041
Probability	0.083648	0.111750	0.300488	0.176705	0.000	0.8294	0.075	0.0006	0.1259	0.0000	0.0024	0.0105
Sum	1.25E+12	18.47657	908.9400	2.10E+13	391.37	17.386	645.8	26.556	28799.0	143.80	7.000	8.000
Sum Sq. Dev.	3.54E+22	0.857940	1130.724	2.65E+24	2723.7	0.4163	8949.9	20.91	10841	3615.	5.559	6.118
Obser	34	34	34	34	34	34	34	34	34	34	34	34

Source: Computations from study data

The data for the study variables was collected for period 1988-2021. The data shows that government consumption spending (GCS) had a maximum value of 1.252 trillion Kenyan shillings while foreign direct investment as percent of GDP had the minimum value of 0.0047 as a percentage of GDP. Variables gross domestic product (GDP), secondary school enrollment (SSE), private domestic credit (PDC), government consumption spending (GCS), inflation rate (INFL), remittances per capita (REM), the direct foreign investment as percent of GDP (FDI), gross national product per capita (GNP) and poverty by headcount (POV) are skewed to the left while only trade openness ratio (TOR) is skewed to the left. This shows that the data is positively skewed. The dataset is both high tailed and less tailed therefore the study concluded that the dataset does not follow a normally distribution across the period of study.

On the other hand, inflation rate, foreign direct investment as percent of GDP and poverty by headcount had a kurtosis value more than 3 hence were leptokurtic, gross domestic product, secondary school enrollment, government consumption spending and gross national income per capita had kurtosis value less than 3 hence were platykurtic while trade openness ratio and private domestic credit has a value close to 3 hence were mesokurtic. The dataset is both high picked and less picked therefore the study concluded that the dataset is not normally distributed across the period of study.

4.2 Time Series Test

4.2.1 The Unit Root Test Results

To make sure the results of the analysis were accurate; the Augmented Dickey Fuller test was run on all research variables at level and first difference, at intercept and trend and intercept. Table 2 shows the results for the analysis

Table 2: Unit Root test

Variables			t-Statistics	P-value
			-4.3572	0.0016
GPD growth rate (I0)	Intercept			
	Trend	&		
	Intercept		-4.9891	0.0016
Inflation (I0)	Intercept		-2.9661	0.0487

	Trend	&		
	Intercept		-3.5764	0.0476
Per capita GPD (I1)	Intercept		-4.2423	0.0022
	Trend	&		
	Intercept		-4.2597	0.0103
FDI % of GDP (I0)	Intercept		-4.6992	0.0006
Government Consumption	Trend	&	-4.8247	0.0025
	Intercept			
Spending (I1)	Intercept		-4.3026	0.0019
	Trend	&		
	Intercept		-4.2387	0.0109
Log GNP Per capita (I1)	Intercept		-4.2183	0.0024
	Trend	&		
	Intercept		-4.2609	0.0103
Private Domestic Credit (I1)	Intercept		-6.7754	0.0000
	Trend	&		
	Intercept		-6.6697	0.0000
Remittances per capita (I1)	Intercept		-4.6392	0.0008
	Trend	&		
	Intercept		-4.4878	0.0066
Secondary School Enrollment (I1)	Intercept		-6.2391	0.0000
	Trend	&		
	Intercept		-6.211	0.0001

Trade Openness ratio (I1)	Intercept	-5.8735	0.0000
	Trend & Intercept	-5.9575	0.0001
Poverty (I0)	Intercept	-6.639	0.0000
	Trend & Intercept	-6.7292	0.0000
Income Inequality (I0)	Intercept	-6.6473	0.0000
	Trend & Intercept	-6.9290	0.0000

Source: Computations from study data

The test was carried out 5 percent level of significance where variables whose p-values are less than 0.05 are presumed stationary while those that have a p-value more than 0.05 are resumed none stationary. The results show that foreign direct investment, inflation rate, poverty headcount, income inequality and GDP growth rate were stationary at level and at both 1 percent and 5 percent significance level. However, secondary school enrollment, private domestic credit, government consumption expenditure, trade openness ratio, remittance per capita, GNI per capita, poverty and income inequality were non-stationary therefore were differentiated ones in order to acquire stationary condition hence stationary only after first difference.

4.2.2 Correlation Test

The test was carried Spearman Moment of correlation to ensure that the variables were not highly correlated. The variables of the study were first transformed into natural logs apart from the variables which were in percent and index form such as GDP growth, inflation rate, poverty headcount, foreign direct investment as percent of GDP and inequality index. Table 3 indicates correlation the results

Table 3: Correlation Analysis

GDP rate	INEQ	POV	TOR	PDC	SSE	GDP	REM	GCS	INFL	FDI

	GDP rate	INEQ	POV	TOR	PDC	SSE	GDP	REM	GCS	INFL	FDI
GDP rate	1										
INEQ	-0.647	1									
POV	-0.798	0.122	1								
TOR	0.410	0.143	0.759	1							
PDC	-0.760	0.132	-0.916	-0.884	1						
SSE	0.174	-0.594	-0.420	-0.594	0.288	1					
GDP	0.376	-0.458	0.198	0.549	-0.525	0.216	1				
REM	-0.338	-0.237	-0.358	-0.181	0.446	0.230	-0.017	1			
GCS	0.043	-0.239	-0.440	-0.365	0.172	0.873	0.343	-0.462	1		
INFL	-0.586	0.526	-0.507	-0.010	0.195	0.172	0.225	-0.330	-0.603	0.824	1
FDI	0.286	-0.595	-0.092	0.663	-0.373	0.418	0.442	0.242	-0.055	0.892	-0.717	1

Source: Computations from study data

In accordance with the rule of thumb, correlation coefficients less than or equal to 0.8 imply no chances of high correlation among the variables and were used in the estimation of the study findings as indicated by the study models since spurious results could not be achieved. The analysis was done at a significance level of 5%, and the results show that all of the study variables' correlation coefficients are less than 0.8. The variables were both positively and negatively correlated; however, private domestic credit was found to have a highly correlation with poverty headcount, therefore, the two variables could not be used in the same model but in differently.

4.3 Empirical Analysis

The following three study goals are intended to be attained by the empirical analysis:

4.3.1 Effect of diaspora remittances on gross domestic product in Kenya

This is the study initial goal, and to do it, an autoregressive distributed lag with error correction model was used to measure the impact of remittances on gross domestic product both in the short- and long-term. Table 4 indicates the results.

Table 4: Short-run and Long-run Regression Results

Dependent variable: Gross Domestic Product per capita				
Independent variables	**Coefficients**	**Standard error**	**t**	**P>|t|**
Adjustment Speed				
Log GDP per capita L_1	-0.89634	0.137947	-6.50	0.000
Long-run effects				
Log remittance per capita	0.102256	0.056919	1.80	0.008
Log private domestic credit	0.988088	0.027111	36.45	0.000
Log government consumption spending	0.733360	0.361504	2.03	0.050
Inflation rate	-0.0071	0.002371	-2.99	0.008
Short-run effect				

Log GDP per capita				
L1	0.451202	0.12197	3.70	0.002
L_2	0.522153	0.12872	4.06	0.001
Log remittance per capita				
D1	-0.100557	0.03757	-2.68	0.015
LD	-0.084282	0.03066	-2.75	0.013
L_2D	-0.040423	0.02193	-1.84	0.082
Constant term	-5.4364	0.99366	-5.47	0.000
Log likelihood	45.045	R-Squared		0.8254
Durbin Watson	1.932	Adjusted R-Squared		0.7284
Prob>F	0.0000	F (10, 18)		30.40

 Source: Computations from study data

The results show that the probability of F-statistics is below 0.05 at 5 percent level of significance implying that the model is good to estimate the effect of diaspora remittances on per capita gross domestic product in Kenya. Further, the results show that the magnitude of adjusted R-squared is 0.7284 meaning that about 72.84 percent of the changes in per capita GDP is caused by the changes in per capita diaspora remittances, government consumption spending, private domestic credit availability and inflation rate in the economy. However, only 27.16 percent of the changes are affected by other variables that the study never considered. In the absence of the components the study took into account, GDP per capita will be negative maintaining all other factors constant, according to the value of the constant term, which was negative (-5.4364) and statistically significant at the 5 percent level of significance. The model was adequate, effective, and fit for the study based on the F-statistics value of 30.40 and the p-value of 0.000 that indicated the result was significant at the 5% level of significance. Lastly, the value of Durbin Watson was 1.932 and from the rule of the thumb Durbin Watson value above 1.8 is just good to make a conclusion that there is no serial autocorrelation among the variables hence from the finding it is clear that the variables do not suffer from non-serial autocorrelation among the variables.

The speed of adjustment of gross domestic product per capita was found significant at 5 percent level of significance and negative (-0.89634) implying that previous shocks or errors in improvement of gross domestic product per capita adjust in the current period or during lag one by 89.63 percent.

In long-term, log of remittance per-capita is positive (0.102256) and statistically significant at 5% significance level, this means that an increase in remittance per-capita by 1 percent point gross domestic product per capita increases by 10.23 percent points, this is because remittances in terms of monetary increases total currency in circulation thereby increasing the purchasing power of the consumers hence more production and output hence growth of gross domestic product per capita. The finding confirms Irungu (2016) that found a significant direct connection between remittance per-capita and GDP per capita. The result also agrees with Bett (2013) remittances are the most significant factor that influence economic growth in the county because it facilitates investments, production and consumption in the county. Additionally, the log of private domestic credit was 0.9881 and statistical at the 1% and 5% levels, which means that a 1% point increase in private domestic credit results in a 98.81% gain in gross domestic product per capita. The results support those of Kiio *et al*., (2014), who discovered a significant positive link between private domestic credit and GDP per person, because credit is readily available to households, consumption rises, increasing demand and, ultimately, economic spending. In a similar vein, government consumption spending is statistical and positive at 5%, meaning that for every 1% change in this category, gross domestic output per capita rises by 73.33 percent. This means that a rise in government spending results in an increase in the economy's gross domestic product (GDP) per capita because of the increased demand for products and services, which raises the economy's output and raises GDP per capita. The results support the World Bank's (2016) assertion that higher government spending on consumables promotes economic growth and thereby

increases per capita GDP. A one percentage point increase in the inflation rate results in a 71 percent loss in the gross domestic product (GDP) per person in a country, on the other hand, the inflation rate was negative (-0.0071) and statistically significant at the 5% level of significance. The findings are in line with those of Chami et al (2013), who found that inflation had a short-term significant positive effect on GDP per capita but a long-term negative effect. This is because higher inflation rates reduce the purchasing power of money in the economy, which in turn reduces effective demand and slows economic growth, which ultimately has an impact on GDP per capita.

At a 5% level of significance, the coefficient of log GDP per capita was positive and statistically significant for both periods one and two. There will be a short-term divergence in real GDP per capita as a result of the income mismatch caused by remittances. However,

at the 5% level of significance, the remittances per capita coefficient for periods 1 and 2 is statistically significant and negative. This shows that in the short run, remittances drive the real GDP per capita of the economy to converge towards a constant level of income. The findings corroborate Sebul and Badejo (2015) show that there is a big unfavorable link over the short term and a considerable positive association over the long term. The study also sort to analyze the causality between GDP per capita and remittance received per capita and presented the results in table 5

Table 5: Granger causality Wald test results

Equation	Excluded	Chi2	Df	Prob>Chi2
GDP per-capita	Remittance per-capita	0.2517	2	0.882
GDP per-capita	ALL	0.2517	2	0.882
Remittance per-capita	GDP per-capita	5.3975	2	0.067
Remittance per-capita	ALL	5.3975	2	0.067

Source: Computations from study data

The alternative hypothesis is that remittances cause GDP per capita, while the proposition is that remittance per capita has no influence on gross domestic output per-capita. According to the results, the null hypothesis could not be ruled out at a significance level of 5%, indicating that remittances per capita do not directly contribute to GDP per capita in the economy. This is because remittances are monetary inflows from abroad made by Kenyans who are earning an income from those abroad. Similarly, the findings show that GDP per capita does not cause remittance per capita because of a p-value greater than 0.05 at 5 percent level of significance. Therefore, the study opines that neither remittance per capita nor GDP per capita granger cause the other as per the specified model in the economy.

4.3.2 Effect of diaspora remittance on Gross National Income

The study second goal was to determine the impact of remittances from the diaspora on Kenya's gross domestic product. In order to accomplish this goal, the study used both autoregressive distribution lag (ARDL) and granger causality to assess the validity of the findings and the direction of the relationship between diaspora remittances and Kenya's gross domestic product. The results for ARDL are presented in table 6

Table 6: Effect of diaspora remittance on GNI in Kenya

Dependent variable: Gross National Income per capita

Variables	Coefficients	Std. Error	t-Statistics	Probability
Log GNI per capita: Lag 1	0.74837	0.10338	7.2393	0.0000
Secondary School Enrolment Lag one Lag two	0.54948 0.19795 -0.37241	0.12597 0.13937 0.15413	4.36204 1.42028 -2.41627	0.0014 0.1859 0.0363
Trade openness ratio Lag one Lag two	0.14734 -0.14392 0.09721	0.05383 0.06399 0.07212	2.73735 -2.24906 1.34791	0.0209 0.0483 0.2074
Log government consumption spending	0.04059	0.07212	1.34791	0.2074
Remittance per capita Lag one Lag two	0.71897 0.69076 0.04426	0.06007 0.09058 0.04004	11.9694 7.62564 1.10522	0.0000 0.0000 0.2949
Inflation rate Lag one Lag two	-0.00147 -0.00095 -0.00242	0.00081 0.00093 0.00067	-1.8217 -1.0249 -3.5962	0.0985 0.0320 0.0049
Private domestic credit Lag one	-0.00594 -0.00333	0.00168 0.00158	-3.54079 -2.1078	0.0050 0.0013
Constant term	-2.9150	0.8616	-3.3831	0.0070
F-statistics	38.610			
Adjusted R-squared	0.8696	R-Squared		.8898
Probability (F-statistics)	0.000	Durbin Watson		2.2016

Source: Computations from study data

The study reveals key insights into the dynamics of gross national income (GNI) through the application of the autoregressive distributed lag model. A robust 86.96% of changes in GNI are explained by variations in remittance per capita, trade openness ratio, secondary school enrollment, government consumption spending, inflation rate, and private domestic credit, leaving only 13.04% unaccounted for by the model.

Remittances play a crucial role, as substantiated by previous studies, and are statistically significant in determining GNI per capita. Their influence on GNI increases at a diminishing rate over time, aligning with certain theories but contradicting others. The study's F-statistic value (38.61) at the 5% significance level confirms the model's appropriateness, and a Durbin Watson value of 2.2 rules out serial autocorrelation among the independent variables. The negative constant term coefficient (-2.915) underlines the considerable impact of these variables on GNI, suggesting that without remittances, GNI could be negative.

Lag one GNI per capita coefficient is found to have a direct, significant influence on current GNI, supporting the idea that past GNI levels significantly affect current levels by 74.84%. Secondary school enrollment shows mixed results, positive in lag one but negative in lag two, leading to contradictory findings on its impact on GNI. Trade openness ratio displays varied effects across periods, promoting GNI in some cases but reducing it in others, reflecting the complex dynamics of trade and remittance inflows. Government consumption expenditures show a statistically insignificant positive effect on GNI, contrary to some research.

The coefficient of remittance per capita is found to be significant and positive, meaning an increase in remittances improves GNI but at a decreasing rate, a nuanced finding that aligns with and contradicts different existing studies. Inflation rate and private domestic credit, both significant, negatively affect GNI, with credit's influence possibly being indirect.

The study further established the relationship between the remittances and gross national income by carrying out granger causality test. The results are presented in table 7

Table 7: Granger causality Wald test results

Equation	Excluded	Chi2	Df	Prob>Chi2
Remittance per capita	GNI per capita	23.108	2	0.000 0.000
Remittance per capita	ALL	23.108	2	
GNI per capita	Remittance per capita	0.41469	2	0.813
GNI per capita	ALL	0.41469	2	0.813

Source: Computations from study data

The alternative hypothesis is that GNI per capita does, in fact, cause remittance, contradicting the null hypothesis that it does not. The Wald test analysis shows that the Chi-square value is 23.11 with a probability of 0.000 less than 0.05 at 5 percent statistical level implying that the null hypothesis is rejected while the study fails to reject the alternative hypothesis indicating that gross national income per capita causes remittances in the economy. This is because an improvement in per capita income enables an individual to have enough for consumption, savings and transfer part of income back to domestic country as remittances. Contrary, the study accept the null hypothesis in the second model that remittances does not cause GNI per capita since the p-value is greater 0.05 at 5% significant level. The findings disagree with Bett (2013) that opined that remittance causes GNI per capita.

4.3.3 Effect of diaspora remittance on absolute poverty in Kenya

The study third goal was to look into how remittances from the diaspora affected Kenya's level of absolute poverty. The study used autoregressive distributed lags to accomplish the goal, and table 8 shows the findings.

Table 8: Effect of diaspora remittances on absolute poverty

Dependent variable: Absolute Poverty				
Variables	**Coefficients**	**Std. Error**	**t-Statistics**	**Probability**
Poverty: Lag one	-0.1057	0.05158	-2.0503	0.0063
Secondary School Enrolment	-21.9235	16.595	-1.3211	0.2111
Lag one	-29.7435	21.367	-1.3921	0.1892
Lag two	37.1030	24.693	1.50259	0.1588
Trade openness ratio	-2.2122	9.1137	-0.24273	0.0823
Lag one	9.8413	8.8487	1.1122	0.2878
Lag two	-15.767	9.1394	-1.7252	0.1101
Log government consumption spending	7.3443	6.94956	1.05681	0.3114
Remittance per capita	-0.2398	0.14255	-1.68236	0.0118
Lag one	0.38068	0.15011	2.53600	0.0261
Lag two	-0.2197	0.11488	-1.9124	0.0080

Log GDP per capita Lag one Lag two	118.16 -63.775 -15.441	43.804 39.126 6.6201	2.6975 -1.6300 -2.3324	0.0194 0.1291 0.0379
Private domestic credit Lag one	0.70443 0.30367	0.24668 0.27162	2.85559 1.11799	0.0145 0.0286
Income Inequality	0.58058	0.03242	17.9069	0.0000
Constant term	-67.741	16.5270	-0.40988	0.0068
F-statistics	48.834			
Adjusted R-squared	0.767016	R-Squared		0.787232
Probability (F-statistics)	0.000	Durbin Watson		1.9171

Source: Computations from study data

The study on changes in absolute poverty in Kenya offers a nuanced view of the intricate factors shaping poverty in the region. It reveals that nearly 78.72% of the variations in poverty can be attributed to secondary school enrollment, trade openness, government spending, remittance per capita, GDP per capita, private domestic credit, and income inequality. The statistical significance of these findings indicates that the model is robust and fitting for analysis. The relationship between these factors and poverty is complex. For instance, remittances from the diaspora, a prominent aspect of the study, were found to reduce poverty by between 21.97% and 23.98% in the short term but increase it by 38.07% in one specific lag period. This mixed effect highlights the multifaceted role remittances play in poverty reduction.

Secondary school enrollment, while statistically insignificant, was found to reduce poverty as individuals advance in education. However, the trade openness ratio, a measure of the country's engagement in international trade, was also found insignificant, although it has the potential to reduce poverty depending on the country's production capabilities and resources. Interestingly, government consumption spending, though often aimed at reducing various forms of poverty, was found to increase poverty by 7.34%. This unexpected result points to a possible misdirection in government spending away from income poverty reduction.

GDP per capita presented an even more complex picture, with positive and negative correlations in different periods. While an increase in GDP could lead to a sharp rise in

poverty (by 118.16%) in one period, it might decrease it by up to 63.78% in others. This seemingly contradictory finding likely stems from unequal income distribution across the population. Private domestic credit, usually associated with financial growth, surprisingly increased poverty in this study. A potential explanation is stringent access requirements that hinder people from benefiting from available credit. Finally, income inequality was found to positively correlate with poverty, reinforcing the fact that biased resource allocation and uneven income distribution can drive more individuals into poverty.

The study also analyzed the causality between absolute poverty and remittance received per capita and presented the results in table 9

Table 9: Granger causality test

Null hypothesis	Observation	F-statistics	P-value
Remittance does not granger cause absolute poverty	32	1.5388	0.2329
Absolute poverty does not granger cause remittance	32	0.0317	0.9688

Source: Computations from study data

The results show that p-values of F-statistics for both cases are greater than 0.05 at 5 percent level of significant implying that neither remittance per capita granger cause absolute poverty nor absolute poverty granger cause remittance.

5.0 CONCLUSION AND POLICY IMPLICATIONS

5.1 Conclusion of the Study

The conducted study concludes that remittance per capita, private domestic credit and government consumption spending positive and significantly influence gross domestic product while inflation rate negatively influence gross domestic product at 5 % statistical level in the future date, however, in short-run, GDP per-capita in the previous period positively influence on GDP per-capita during lag one period and remittance per capita has a negative statistical influence on gross domestic product at 5 percent significance level. The speed of adjustment of gross national per capita was direct and statistical at 5 percent significance level. Secondary school enrolment which was a measure of literacy level was statistically significant and positive in the previous period but negative during lag two. Trade openness ratio statistically influence gross national income in previous and lag one periods however, in lag period trade openness negatively influence gross national income per capita.

Further, the study found that remittance per capita has a positive statistical influence on gross national income during lag one period while inflation negatively influence gross national income during lag one and two periods, similarly, private domestic credit was found to have a negative statistical influence on gross national income.

The speed of adjustment for poverty to correct previous period effects in the current period was found statistical but negative at 5 percent significant level. Remittance per capita was found to have a negative statistical influence in the previous and lag two periods but positive influence on absolute poverty in lag one period and positively influence absolute poverty during lag one. Gross domestic product negatively influences absolute poverty but positively influence absolute poverty in the previous period. Lastly, private domestic credit availability has a positive statistical influence on absolute poverty similar to income inequality at 5 percent level of significance.

Lastly, GDP per capita GNI per capita were found to granger cause remittance per capita, however, the study revealed that remittance per capita does not granger cause absolute poverty and absolute poverty does not also granger cause remittance per capita.

5.2 Policy Implications

The study has shown from the findings that remittance per capita has positive influence gross domestic product, gross national income and a negative influence on absolute poverty. Further the findings have also shown that gross domestic product and gross national income granger cause remittances. Thus, appropriate measures should be put in place to ensure steady inflow of financial inflow in the economy. These measures include maintain inflation rate within the range or below two-digit figure, exchange rate should also be regulated due to its high volatility nature.

The government should put measure in place to curb the ever-rising inflation rate in the economy because of its effects in the economy such as reducing the purchasing power of money as well as the value of money. This ultimately reduce the value of capital inflow through remittance hence reducing the growth of the economy via gross domestic product, gross national income and increase in absolute poverty headcount in the economy.

The government and other non-governmental organization should ensure 100 percent transition from primary to secondary. This improves literacy level in the economy and higher education level is associated with better jobs with high salaries both domestically and abroad leading to increase in remittance hence reducing absolute poverty and boosting gross national income.

The government through its monetary regulation authority (CBK) should ensure that private domestic credit is made available by lowering interest rates, minimizing credit access requirements and credit advancement duration to ensure adequate funds for investment thus

promoting growth of gross national income which subsequently cause remittance into the economy. Further, the authority should maintain exchange rates level in the economy to promote trade openness thus ensuring growth of exports vis a vis imports leading to growth of net exports thus ensuring continuous remittances inflow.
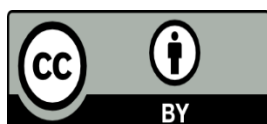
References

Arjola Arapi-Gijni, Judith Mollers & Thomas Herzfield (2020). Measuring dynamic effects of remittances on poverty and inequality. With Evidence from Kosovo, *Eastern European Economics*,58:4283-308, Dol:1080/00128775/720517.

Bett, L. J (2013). *The Effect of Remittances on Economic Growth in Kenya*. An MBA Project Submitted to University of Nairobi.

Chami, R., Fullenkamp, C. & Jahjah, S. (2013). Are immigrant remittance flows a source of capital for development? *IMF Staff Paper*, No. 3/189.

Gazdar, K and Kratou, H, (2012) Institutions financial development and the remittances growth nexus in Africa. *Journal of Economic Literature - American Economic Association*.

Kiio, J. & Soi, N. & Buigut, K. (2014). The impact of worker's remittances on economic growth. With Evidence from Kenya. Journal of economics and sustainable development. Vol: 5. No 26, 2014. *Working paper* ISSN 2222-2855.

Kimenyi, M., Mwega, F., & Ndung'u, N. (2016). Kenya: Economic Growth, Labor Market Dynamics and prospects for a Demographic Dividend. *Africa's Lions*.

Ocharo, K. (2014). Remittances and economic growth in Kenya. *A Phd project submitted to Kenyatta university*.

Pekovic, D. (2017). The effect of remittances on poverty alleviation in transition countries. *Journal of international studies*. DOl: 1454/2071-8330.2017/10-4/2.

Ratha, D. (2017). Workers' remittances: An important and stable source of external development finance, pp. 157-175 in World Bank. (2017). *Global Development Finance, World Bank, Washington*.

Ravallion, M. (1997). Can high-inequality developing countries escape absolute poverty? *Economic Letters*, 56, 51-57.

Ravallion, M., & Chen, S. (1997). What Can New Survey Data Tell Us about Recent Changes in Distribution and Poverty? *The World Bank Economic Review*, 11(2), 357-382.

Sibindi AB (2014) Remittances, financial development and economic growth: empirical evidence from Lesotho. *J Gov Regul* 3(4): 116–124.

World bank (2020) Kenya economic update. Available from https//www.world bank.org/en/country/Kenya/publication/Kenya-economic-update. Released on 8/4/2019 World bank (2020)

World Bank.(2016). World development indicators & global development finance. Available from: http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2016.

World Bank: (2019): world development indicators and global development finances. Available from: https//data catalog. World bank.org/dataset/world-development-indicators. Released on 11/6/2019. World Bank Washington Dc.

World Bank:(2020): migration and development brief 32 reports: covid -19-crisis through a migration lens: An update on migration and remittances: from: https//www.world bank.org/en/news/press: Released on 22/4/2020.