Cointegrating Relationship between Remittances and Economic Growth in Zimbabwe

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ABSTRACT

This study examines the short-run and long-run relationships between remittances and economic growth in Zimbabwe from 1980 to 2022, using the Autoregressive Distributed Lag (ARDL) Bounds testing approach. The results reveal that in the long run, remittances significantly boost economic growth, supporting the remittance-development optimism theory. However, in the short run, remittances are statistically insignificant, contradicting some prior studies. Net Official Development Assistance negatively impacts economic growth in both the long and short run, highlighting issues like political misuse and economic distortions. Gross Fixed Capital Formation positively impacts economic growth in the long run but has a negative short-run effect. Additionally, domestic credit to the private sector shows a significant negative short-run impact on economic growth. These findings emphasize the importance of remittances for Zimbabwe's long-term economic growth and highlight the need for policy reforms to enhance the positive impacts of official development assistance and domestic credit. Improving transparency and accountability in official development assistance use, aligning aid with national priorities, and addressing structural issues have potential of fostering sustainable economic growth.

Keywords: Economic Growth, Remittances, Co-integration, ARDL, Zimbabwe
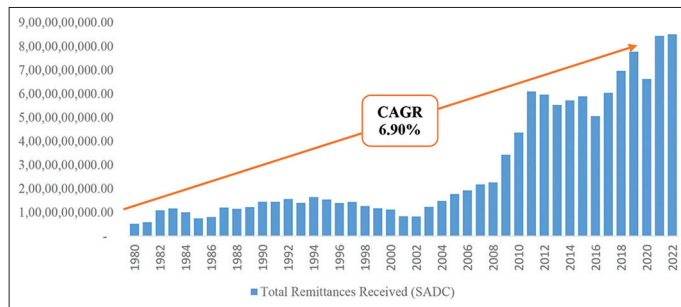**JEL Classifications:** B26, G18, G21

1. INTRODUCTION

Personal remittances from international migrants have become an increasingly vital financial resource for promoting economic growth in developing countries (Islam, 2021). The Global Knowledge Partnership on Migration and Development (2023) reported that worldwide remittances totalled 647 billion US dollars in 2022, significantly exceeding foreign direct investment and official development assistance.

In developing countries, remittances are important because they directly alleviate poverty for recipients, stimulate economic growth by enhancing financial development, increase national savings and improve liquidity through provision of foreign currency (Sutradhar 2020; Francois et al., 2022). Due to the aforementioned reasons remittances have a significant effect on the economies of developing countries. As reported by the Global Knowledge Partnership on Migration and Development (2023), remittance inflows to Sub-Saharan Africa rose by 6.1% in 2022 amounting to 53 billion US Dollars. The primary beneficiaries of these inflows were Nigeria, Ghana, Kenya and Zimbabwe.

2. OVERVIEW OF REMITTANCES IN ZIMBABWE AND SADC

In 2022, the Southern African Development Community (SADC) received $8.5 billion in remittances, reflecting a compounded annual growth rate (CAGR) of 6.90% from 1980 to 2022, as illustrated in Figure 1. This CAGR indicates a consistent average annual growth rate of 6.90% for personal remittances over the 42-year period, underscoring the increasing importance of

Figure 1: Remittances received in SADC (USD)

Source: World Bank 2024 and Authors own computations

Figure 2: Remittance Inflows to SADC countries 2022

Source: worldbank.org, 2024

Table 1: Spread of emigrants

Country of residents	Population	% of Emigrants
South Africa	773,246.00	85.07
Botswana	47,928.00	5.27
United Kingdom	23,166.00	2.55
Other	64,573.00	7.10
Total	908,913.00	100

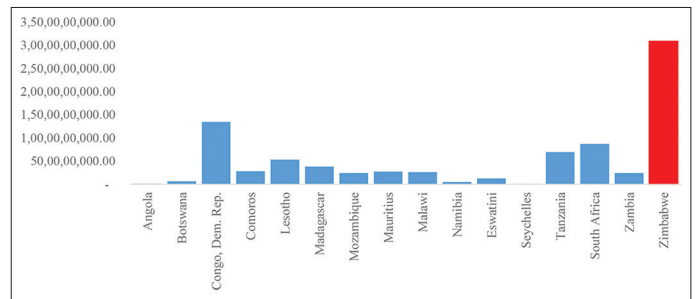Source: Zimbabwe National Statistics Agency, 2023, Page 17

remittances as a source of income for SADC countries. According to the Southern Africa Development Community (SADC, 2016), remittances have significantly improved access to education across the region and contributed to reducing the skills gap. Remittance services that facilitate the allocation of funds for social expenditures, such as school fees, through digital means, have reduced the time, effort, and costs incurred by parents and students in paying these fees. This has had a positive impact on educational access and affordability.

Despite the benefits, the lack of harmonized policies between SADC countries poses significant challenges to facilitating cross-border remittances. The Financial Inclusion Strategy (Southern Africa Development Community, 2016) highlights that each member country has distinct Anti-Money Laundering/Counter Financing of Terrorism (AML/CFT) requirements. These differing regulations complicate the transaction process for customers, potentially pushing remitters to resort to informal channels. The lack of a unified regulatory framework not only hampers the efficiency of remittance services but also increases the risk and cost associated with cross-border transactions.

The largest recipients in monetary terms in 2022 were Zimbabwe with over $3 billion dollars, Democratic Republic of Congo with $1.3 billion dollars, and South Africa with $872 million dollars (Figure 2).

To understand remittance inflows to Zimbabwe, it is important to understand the migration structure in Zimbabwe. Gwatidzo and Mupingashato (2021) noted that in early 2000s, a significant number of Zimbabwean emigrated to South Africa, the United Kingdom, and the United States due to the nation's economic and political instability. This situation was further accelerated by the 2007/08 financial crisis and economic sanctions, which disrupted Zimbabwe's microeconomic fundamentals (Maune and Matanda, 2022). These events led to severe consequences, including high unemployment, hyperinflation, trade deficits, brain drain, collapse of the manufacturing industry, and a lack of confidence in local financial institutions and local currency (Maune and Matanda 2022; Barugahara 2021; Katsinde 2022). Zimbabweans who had migrated away did not sever ties with relative back home but instead supported them through remittances for consumption, investment, education, and medical care purposes (Gwatidzo and Mupingashato, 2021).

The distribution of emigrants from Zimbabwe is presented below

in Table 1. These migration statistics do not capture informal emigrants. South Africa has the largest number of Zimbabwean migrants making up 85% of total migrant, Botswana has 5.3% and the UK 2.6%.

The large number of Zimbabweans living in South Africa have remitted over half a billion dollars to Zimbabwe making up 40% of the diaspora remittances received according to the Reserve Bank of Zimbabwe (2023b), with the UK and US contributing 25% and 11% respectively (Table 2) with the total remittances received in 2022 being 2.8 billion US Dollars.

According to the Reserve Bank of Zimbabwe (2023) remittances remained resilient effectively compensating for the deficits in the current account. This shows how important remittances are to Zimbabwe because they support by reducing financial imbalances.

Through the Zimbabwe Diaspora Policy (2016) the Ministry of Macro-economic Planning and Investment Promotion in Zimbabwe sought to capture the potential of remittances, by promoting formal remittances, encouraging investment and including the diaspora in economic activities, however this has not been the case because a number of Zimbabweans have failed to participate due to corruption and bureaucratic red tape (Zimbabwe Diaspora Nation Building Initiative, 2021). With this background the paper sought to analyse the relationship between remittances and economic growth in Zimbabwe.

The paper consists of six sections. Section 1 provides background of the study. Section 2 gives a general and country-specific overview of remittance trends in Zimbabwe and the SADC. This section also provides the motivation of the study. Section 3 covers a review of related literature. Section 4 outlines the econometric modelling, description of remittances and economic growth. Section 5 presents empirical findings and analysis of results. Section 6 summaries and concludes the main findings of the study. It further details the recommendations, policy implications.

Table 2: Remittances per source country

Country	Total per source country	% Contribution
South Africa	583,375,863.00	40
United Kingdom	361,681,114.00	25
United States of America	158,920,458.00	11
Australia	89,869,266.00	6
Botswana	39,561,360.00	3
Canada	41,342,011.00	3
Ireland	17,157,377.00	1
Germany	11,556,748.00	1
New Zealand	9,463,072.00	1
Malawi	8,840,620.00	1
Other Countries	141,335,373.00	10
Total MTAs	1,463,103,262.00	88
Banking Channels	195,256,636.00	12
Total	1,658,359,898.00	100

Source: Monetary Policy Statement 2023b, Reserve Bank of Zimbabwe

3. LITERATURE REVIEW

The discourse on the impact of remittance on development is marked by three distinct perspectives: Remittance-optimism, remittance-pessimism and remittance-pluralist (De Haas, 2007).

3.1. Remittance-Optimism View
De Haas (2007) noted that early research, such as Kindleberger (1967) and studies from 1973, viewed migration's impact on development optimistically. Kindleberger argued that remittances enhanced economic growth by increasing foreign currency reserves, which were seen as more beneficial than foreign currency from exports due to the lack of associated labour and material costs. This perspective led developing country governments to promote emigration as a development tool. De Haas (2007) and Adenutsi (2010) supported the view that remittances facilitate the transfer of investment capital, encourage technological progress, improve financial inclusion, and increase human capital development. The arguments raised by De Haas (2007), Adenutsi (2010) support the endogenous growth theory, which posits that economic growth is driven by technological progress, physical capital and human capital (Romer, 1994).

3.2. Remittance-Pessimism View
The remittance-development pessimism view counters the optimistic perspective, suggesting that remittances and international migration negatively impact developing countries and do not sustain economic development (De Haas, 2007; Adenutsi, 2010). De Haas (2007) argues that remittances are often spent on "conspicuous consumption and consumptive investment," such as real estate, which lacks productive capacity. This creates temporary livelihood improvements and fosters dependency on remittances, potentially leading to remittance decay, based on the notion that remittances are primarily for debt repayment and altruistic purposes. Nyamazana (2022) supports this view, stating that remittances received in exchange for brain drain, are largely spend on non-productive activities such as building larger houses, hosting feasts, covering funeral and wedding expenses, and paying medical bills, which do not contribute to productive economic growth.

3.3. Remittance-Pluralist Views
Adenutsi (2010) advocates for the pluralistic view of remittances and development. This view acknowledges both the potential benefits and drawbacks of remittances on a particular economy. For example, remittances can contribute positively by increasing investment in education and healthcare, leading to improved living standards. However, they can also have negative consequences, such as fuelling inflation or contributing to brain drain. This nuanced approach provides a much more dynamic understanding of the relationship between migration, remittances, and development.

Abdulai (2023) analysed the impact of remittances on GDP growth in Ghana from 1990 to 2020, finding a long-run relationship between GDP, remittances, FDI, unemployment, inflation, population growth, and official development assistance. Using the ARDL model and the Augmented Dickey-Fuller method for unit root testing, the study concluded that while remittance inflows promoted GDP growth in Ghana.

Conversely, Mlambo and Kapingura (2020) examined the effects of remittances on economic development in selected SADC countries (Zimbabwe, Mozambique, Lesotho, Eswatini, and DRC) from 2005 to 2015. Utilizing a Dynamic model: GMM, Fixed effect, and Random effect models, with GDP as the dependent variable and exchange rate, resource rent, industrial production, and FDI as independent variables, their study found that remittances positively impacted economic growth in these countries.

Klaiqi et al. (2023) examined remittances' impact on economic growth in Western Balkan countries from 2010 to 2021, finding that while remittances positively affected GDP growth, they increased unemployment due to dependency. The study used multiple linear regression, ANOVA, and correlation analysis, with GDP growth rate as the dependent variable, remittances as the main independent variable, and FDI, population, and trade openness as control variables. Yadeta and Hunegnaw (2021) analysed the relationship between remittances and GDP growth in Ethiopia from 1980 to 2015, identifying a positive long-run relationship and a unidirectional causality from economic growth to remittances, using ADF, ECM-ARDL, and the Granger causality test.

Mowlaei (2018) investigated the impact of remittances, FDI, and ODA on economic growth in 26 African countries from 1992 to 2016, concluding that remittances had a more significant impact on economic growth in both the short and long run compared to FDI and ODA. The study employed PMG estimation. Husein (2019) found that foreign aid and remittances positively impacted economic growth in Jordan from 1970 to 2014, using ARDL with GDP per capita growth as the dependent variable and remittances, ODA, exports, savings, human capital, and a structural dummy as independent variables.

Gniniguè and Ali (2021) analysed the role of digitalization in the ECOWAS region from 1980 to 2017, finding that remittances positively affected human capital accumulation, investment, and consumption but not through digitalization. They used a GMM model with GDP per capita as the dependent variable and remittances, trade openness, financial development, and

other variables as controls. Mawutor et al. (2023) studied Ghana from 1980 to 2018, finding a positive short and long-run effect of remittances on economic growth, using ARDL, PP, and ADF models.

Maune and Matanda (2022) assessed the impact of remittances on economic growth in Zimbabwe from 1960 to 2020, identifying both unidirectional and bidirectional causality and a generally positive influence of remittances on economic growth. They employed ARDL and Granger causality models. Tchekoumi and Nya (2023) observed a nonlinear relationship between remittances and economic growth in the CEMAC zone from 1990 to 2018, indicating both positive and negative impacts, using GMM and PSTR models with real GDP growth as the dependent variable and remittances, political stability, and other variables as controls.

4. METHODOLOGY

This study utilised time series data spanning 1980-2022 for Zimbabwe. The data length was selected based on the availability and significance of 1980, the year Zimbabwe gained independence and economic autonomy. All data used in the study were sourced from World Bank indicators and are expressed as a percentage of GDP.

4.1. Unit Root Test
The study utilised the Augmented-Dickey Fuller (Dickey and Fuller, 1979) and Phillips-Perron unit root tests (Phillips and Perron, 1988) to determine the order of integration as recommended by Pesaran et al. (2001). Determining the order of integration is essential to evaluate the stationarity of the series. Yadeta and Henegnaw (2021), highlighted that unit root tests are crucial because the prevent one from regressing non-stationary series on another which can lead to a spurious regression. To examine the unit root tests the null hypothesis of stationarity was put against the alternative hypothesis that the data is stationery.

4.2. ARDL Bounds Testing
To test the existence of a co-integrating relationship between the dependent variable, independent variable and control variables, the ARDL was used (Pesaran et al., 2001). The ARDL is advantageous because it allows the dependent and independent variable to enter the model with lags (Yadeta and Hunegnaw, 2021), it can be used with data that has a mixed order of integration and is efficient with a small sample size (Chiwira, 2023).

Based on Pesaran et al. (2001) the ARDL model can be estimated as follows;

$$\Delta PGDP_{it} = \vartheta_0 + \vartheta_1 PGDP_{i,t-1} + \vartheta_2 PR_{i,t-1}$$
$$+ \vartheta_3 Z_{i,t-1} + \sum_{j=1}^{p} \sigma_{1j} \Delta PGDP_{i,t-j}$$
$$+ \sum_{j=0}^{q_1} \sigma_{2j} \Delta PR_{i,t-j} + \sum_{j=0}^{q_2} \sigma_{3j} \Delta Z_{i,t-j} + \mu_{it} \qquad (1)$$

Where Δ is the first difference operator, ϑ_0 is the intercept term whilst ϑ_0 to ϑ_3 and σ_1 to σ_3 measure the long-run coefficients. The

$p's$ and $q's$ are the optimal lag lengths of the regressor and μ_i represents the error term.

The ARDL long-run coefficients are obtained by estimating equation 1;

$$PGDP = \vartheta_0 + \sum_{J=1}^{P} \vartheta_1 PGDP_{i,t-1} + \sum_{J=0}^{q_1} \vartheta_2 PR_{i,t-1} + \sum_{J=0}^{q_2} \vartheta_3 Z_{i,t-1} + \mu_{it} \qquad (2)$$

The short-run equations can also be obtained by estimating the error correction model as specified below;

$$PGDP = \vartheta_0 + \sum_{J=1}^{P} \vartheta_1 PGDP_{i,t-1} + \sum_{J=0}^{q_1} \vartheta_2 PR_{i,t-1} + \sum_{J=0}^{q_2} \vartheta_3 Z_{i,t-1} + \mu_{it} \qquad (3)$$

Where ϑ is the coefficient of the ECM. Abdulai (2023) explains that the ECM measures the speed of adjustment to long-run equilibrium and is supposed to be significantly negative. After establishing the long-run and short-run dynamics, diagnostic tests will be performed to ensure the model is free from serial correlation, heteroscedasticity, has normally distributed variables, and is stable for policy recommendation.

4.3. Variable Description
The selection of variables was guided by empirical literature. Economic growth as the dependent variable is proxied by GDP per capita (PGDP) annual growth rate (Husein 2019; Mawutor et al., 2023; Gninigue and Ali, 2021; Maune and Matanda, 2022). Mawutor et al. (2023) explained that pass PGDP growth rates influence current economic growth therefore, this allows for ascertaining the long-run effect of PGDP.

Theoretical literature review shows that remittances can affect an economy either positively or negatively. Therefore, remittances are the independent variable and proxied by personal remittances (PR) as a percentage of GDP. This metric consists of personal transfers and employee compensation.

The control variables for this study were financial development proxied by domestic credit to private sector (DCPS), Gross fixed capital formation as a percentage of GDP (GFCF) because it increases consumer spending, cross-border trade and firm capital investment (Mawutor et al., 2023). Foreign direct investment net inflows as a percentage of GDP (FDI) facilitates transfer of technology thereby supporting the endogenous growth theory. Net official development assistance received as a percentage of GNI (ODA), inflation GDP deflator annual percentage (INF), and general government final consumption expenditure as a percentage of GDP (GOVFX) are other control variables considered.

5. EMPIRICAL RESULTS AND ANALYSIS

5.1. ADF and PP Unit Root Tests
The findings presented in Table 3 indicate a mixed order of integration among the variables, specifically I(0) and I(1), for economic growth, remittances and control variables,

Table 3: ADF and PP unit root tests

Variable	Augmented Dickey-Fuller Test				Phillips perron				Stationary or non-stationary
	Levels		First differences		Levels		First differences		
	None	Intercept	None	Intercept	None	Intercept	None	Intercept	
PGDP	0.0001	0.0018	0.0000	0.0000	0.0001	0.0016	0.0000	0.0000	I (0)
PR	0.0001	0.0001	0.0217	0.1158	0.5084	0.6368	0.0000	0.0000	I (1)
FDI	0.0003	0.0002	0.0000	0.0000	0.0004	0.0002	0.0000	0.0000	I (0)
GFCF	0.2642	0.1178	0.0000	0.0000	0.3191	0.1264	0.0000	0.0000	I (1)
GOVFX	0.3317	0.0535	0.0000	0.0000	0.4691	0.0448	0.0000	0.0000	I (1)
INF	0.0000	0.0001	0.0000	0.0008	0.0047	0.0265	0.0000	0.0000	I (0)
ODA	0.0133	0.0024	0.0000	0.0000	0.0222	0.0024	0.0000	0.0000	I (0)
DCPS	0.0907	0.0299	0.0000	0.0001	0.1315	0.0419	0.0000	0.0000	I (1)

Sources: Authors own computations, Eviews 10

thereby justifying the application of the ARDL model. Upon confirmation of the application of the ARDL the next step is test for the long-run co-integration using the ARDL F-Bounds Tests.

5.2. Co-Integration Test Result

The co-integration results on the ARDL are detailed in Table 4. The long-run co-integration bounds tests had an F-statistic of 4.64, exceeding both the lower and the upper bounds at 5% level of significance. Consequently, the null hypothesis of no co-integration is rejected (Pesaran et al., 2001). This indicates evidence of co-integration and a long-run relationship among the variables all variables used in the study.

5.3. ARDL Long-run Results and Short-run Coefficients

Table 5 presents the findings from the ARDL long-run and short-run coefficients. In the long run, remittances are statistically significant at the 5% level, with a coefficient of 1.08. This supports the perspective of remittance-development optimism theorists, who view remittances as a catalyst for economic growth. The findings corroborate the conclusions of Olayungbo and Quadri (2019) and Mawutor et al. (2023), who assert that remittances enhance household income, consumption, and employment opportunities for recipients. However, in the short run, remittances are statistically insignificant, with a coefficient of 0.72 in relation to economic growth. This contradicts the findings of Olayungbo and Quadri (2019) and Mawutor et al. (2023), who found remittances to be statistically significant in the short run in their respective studies. Thus, it can be concluded that, in the long run, remittance inflows are statistically significant and positively impact economic growth in Zimbabwe.

Net official development assistance (ODA) was found to be statistically significant at the 5% level in the long run and at the 1% level in the short run, with coefficients of −2.25 and −1.81, respectively. This indicates that ODA negatively impacts economic growth in Zimbabwe, contradicting Abdulai's (2023) findings, which highlighted a positive and statistically significant effect of ODA on Ghana's economic growth in both the long and short run. Such results are not unusual, as Siavhundu (2020) also found that ODA negatively affected Zimbabwe's economic growth from 1980 to 2016. These adverse effects can be attributed to political misuse of foreign aid, an unfavourable business

Table 4: ARDL bounds test

Critical Values	Dependent variable: PGDP		Decision
F-statistic	4.6439		
Significance	I (0)	I (1)	
10%	1.92	2.89	Co-integration
5%	2.17	3.21	
2.50%	2.43	3.51	
1%	2.73	3.9	

Sources: Authors own computations, Eviews 10

environment, and distortions in domestic savings and tax revenues caused by ODA.

Gross fixed capital formation (GFCF) is statistically insignificant in the short run and negatively impacts economic growth. However, it is statistically significant in the long run. This finding is consistent with the studies of Yadeta and Hunegnaw (2021) and Mawutor et al. (2023), who argued that government investment in physical infrastructure such as buildings, roads, and bridges contributes to economic growth once these projects start generating economic value. This is in line with the McKinnon (1973) and Shaw (1973) theory, which advocates for financial liberalization leading to infrastructure development.

Contrary to the literature, domestic credit to the private sector negatively affects PGDP, with a statistically significant short-run coefficient of −0.43. This finding aligns with Saungweme and Odhiambo (2019), who found that both private and domestic credit negatively impacted Zimbabwe's economy. It is also supported by Moyo and Le Roux (2019), who identified a negative correlation between credit to the private sector and economic growth in SADC countries.

The error correction term (ECT) quantifies the speed of adjustment required for short run disequilibrium to converge to long run equilibrium (Abdulai, 2023; Olayungbo and Quadri 2019). The ECT (CointEq) is expected to have a negative sign, as shown in Table 3, the ECT has a negative sign and is statistically significant at 5%. This indicates a present of a long-run relationship amongst the variables. The ECT of −1.03 indicates a presence of a corrective mechanism trying to bring PGDP back towards its long-run equilibrium with PR and other control variables.

Table 5: Long and short run coefficients

Long run form			Short run form		
Variable	Coefficient	Probability	Variable	Coefficient	Probability
PR	1.076566	0.0266	D (PR)	0.715114	0.1524
FDI	5.49437	0.7089	D (FDI)	3.109683	0.3204
GFCF	2.304811	0.0018	D (GFCF)	−0.189477	0.6425
GOVFX	0.625127	0.3699	D (GOVFX)	0.351083	0.1104
INF	0.028354	0.153	D (INF)	0.000398	0.9427
ODA	−2.251986	0.0132	D (ODA)	−1.814729	0.0001
DCPS	0.518404	0.1468	D (DCPS)	−0.430579	0.0349
C	−45.63795	0.0122	CointEq(−1)*	−1.038738	0

Sources: Authors own computations, Eviews 10

Table 6: Diagnostic test

| Diagnostic test	Breusch–Godfrey serial correlation LM test	Heteroscedasticity test: Breusch-Pagan-Godfrey	Normality test (Jarque–Bera)
F-statistic	0.6283	0.8002	
Probability F	0.5611	0.6625	0.4767
Jarque-Bera			0.7879

Sources: Authors own computations, Eviews 10

5.4. Diagnostic Tests

Table 6 presents the findings from the diagnostic tests. The null hypothesis for the Breusch-Godfrey Serial Correlation LM test is that there is no serial correlation in the residuals. Since the P-value (0.5611) is >5% significance level (0.05), we fail to reject the null hypothesis. There is no evidence of serial correlation in the residuals. Similarly, the null hypothesis for the Breusch-Pagan-Godfrey test is that the residuals have constant variance (homoscedasticity). Since the P-value (0.6625) is >5% significance level (0.05), we fail to reject the null hypothesis. There is no evidence of heteroscedasticity; the residuals appear to have constant variance. Lastly, the null hypothesis for the Jarque-Bera test is that the residuals are normally distributed. Since the P-value (0.4767) is >5% significance level (0.05), we fail to reject the null hypothesis. There is no evidence against the normality of the residuals.

5.5. Stability Test

Figure 3 represents the CUSUM, the blue line represents the cumulative sum of recursive residuals, and the red dashed lines indicate the 5% significance level bounds. The blue CUSUM line remains within the red dashed lines throughout the sample period. This indicates that there are no structural breaks in the regression coefficients over time. Since the CUSUM line does not cross the 5% significance level bounds, it is concluded that the model is stable over the period analysed. Figure 4 shows the CUSUMSQ, the blue CUSUMSQ line stays within the red dashed bounds throughout the sample period. This indicates that there is no evidence of instability in the variance of the regression model over time. Since the CUSUMSQ line does not cross the 5% significance level bounds, it is concluded that the variance of the model's residuals is stable throughout the period analysed.

Figure 3: CUSUM
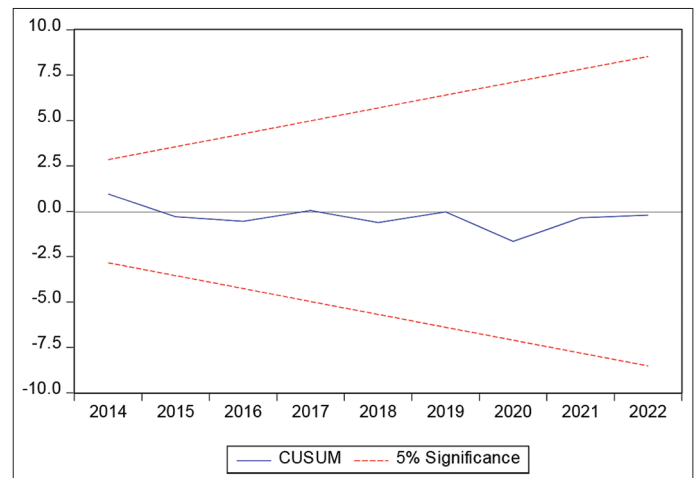
Figure 4: CUSUMSQ
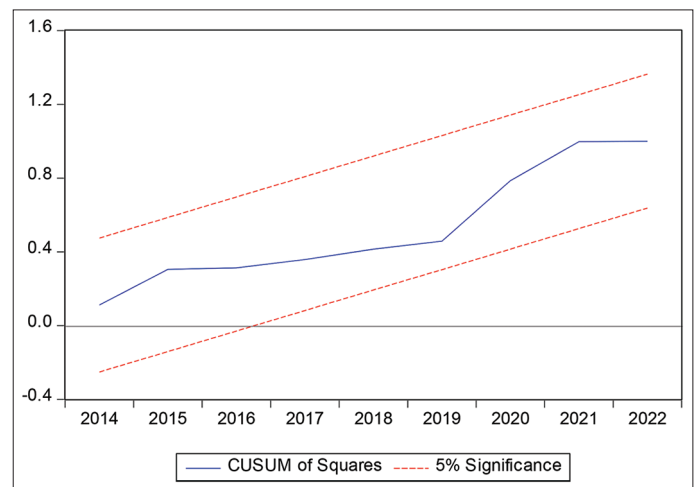
6. CONCLUSION AND POLICY RECOMMENDATIONS

The relationship between remittances and economic growth in Zimbabwe was established, it was noted that remittances have an effect on the economic growth of Zimbabwe in the long-run. This finding is in line with existing empirical literature reviewed above. Particularly interesting is the e negative and significant effect of

official development assistance both in the long-run and short-run in Zimbabwe. The observation that financial development proxied by domestic credit to private sector having a negative and significant effect on economic growth in Zimbabwe is unusual.

In both the long-run and short-run models, Official Development Assistance (ODA) was found to have a statistically significant negative impact on Zimbabwe's economic growth. Although literature generally posits that ODA is beneficial for developing nations, this has not been the case for Zimbabwe. Zardoub and Sboui (2023) suggest that in developing countries, corruption and mismanagement often plague ODA, leading to governance issues as funds are diverted for personal use rather than public benefit. This misappropriation of ODA funds undermines its primary objectives, which include stimulating economic growth and supporting vital sectors such as healthcare, agriculture, and human rights (Crilly and Andersson, 2019). Furthermore, Zardoub and Sboui (2023) argue that the effectiveness of ODA in promoting economic growth is significantly enhanced under favourable political conditions. Zimbabwe's political instability, reflected in a political stability and absence of violence/terrorism estimate of −0.9 in 2022 (World Bank, 2024b), suggests a high likelihood of political violence, riots, and protests. This instability corroborates the findings of Zardoub and Sboui (2023), who emphasize the necessity of political stability for the effective utilization of ODA.

Given the observation that Official Development Assistance (ODA) negatively affects Zimbabwe's economic growth in both the long and short run, the following policy recommendations are suggested to mitigate these effects and enhance the positive effect of aid;

- Implement stringent mechanisms to ensure transparency and accountability in the use of ODA funds. This will reduce the misuse of funds and ensure that aid is directed towards productive and impactful projects. Improved governance can help build donor confidence and ensure funds are utilized effectively

- Ensure that ODA is aligned with Zimbabwe's national development priorities and strategies. This alignment will ensure that aid supports the country's long-term development goals and addresses critical areas such as infrastructure, health, and education, leading to more sustainable economic growth.

- Use ODA to address structural issues such as poor infrastructure, inadequate healthcare, and education systems. By tackling these fundamental issues, ODA can help create an environment conducive to economic growth. Investments in infrastructure, for example, can enhance productivity and attract private investment.

REFERENCES

Abdulai, A.M. (2023), The impact of remittances on economic growth in Ghana: An ARDL bound test approach. Cogent Economics and Finance, 11(2), 2243189.

Adenutsi, D.E. (2010), Do International remittances promote human development in poor countries? Empirical evidence from Sub-Saharan Africa. The International Journal of Applied Economics and Finance, 4(1), 31-45.

Barugahara, F. (2021), Financial inclusion in zimbabwe: Determinants, challenges, and opportunites. International Journal of Financial Research, 12(3), 261-270.

Chiwira, O. (2023), Examining the co-integrating relationship between financial development and economic growth. Research in Business and Social Science, 12(5), 270-285.

Crilly, M., Anderssin, K. (2019), Factors influencing effectiveness of development assistance and humanitarian aid in developing countries: A literature based review. Journal of Economics, 3(1), 32-43.

De Haas, H. (2007), Remittances, Migration and Social Development: A Conceptual Review of Literature. Social Policy and Development Paper Number 34. United Nations Research Institute for Social Development, p1-37.

Dickey, D.A., Fuller, W.A. (1979), Distribution of the estimators for autoregressive time series with a unit root. Journal of the American Statistical Association, 74(366), 427-431.

Francois, J.N., Ahmad, N., Keinsley, A., Nti-Addae, A. (2022), Available from: https://blogs.worldbank.org/peoplemove/remittances-increase-gdp-potential-differential-impacts-across-countries

Global Knowledge Partnership on Migration and Development. (2023), Remittances Remain Resilient But Are Slowing: Migration Development Brief 38. The World Bank Group. International Bank for Reconstruction and Development.

Gniniguè, M., Ali, E. (2021), Migrant remittances and economic growth in ECOWAS countries: Does digitalization matter? The European Journal of Development Research, 34(1), 2527-2542.

Gwatidzo, T., Mupingashato, T. (2021), Remittances, Consumption Patterns and Household Investment: The case of Zimbabwe Advanced Policy-focused Poverty Analysis in Zimbabwe. Zimbabwe Economic Policy Analysis and Research Unit.

Husein, J.G. (2019), Foreign aid, workers' remittances and economic growth in Jordan. International Journal of Social Economics, 46(4), 532-548.

Islam, M.S. (2021), Do personal remittances influence economiv growth in South Asia? A panel analysis. Review of Development Economics, 26(1), 242-258.

Katsinde, T.J. (2022), Effects of sanctions on Zimbabwe (2000-2020). International Journal of Research and Innovation in Social Science, 6(7), 253-259.

Kindleberger, C.P. (1967), Europe's Postwar Growth: The Role of Labour Supply. Cambridge: Harvard University Press.

Klaiqi, S., Maçani, F., Mulaj, L.A. (2020), Remittances are the main indicators of economic growth in the Western Balkans. Journal for International and European Law, Economics and Market Integrations, 10(1), 101-117.

Maune, A., Matanda, E. (2022), The impact of foreign remittances on economic growth: Evidence from Zimbabwe. EuroEconomica, 18(4), 126-146.

Mawutor, J.K., Sogah, E., Christian, F.G., Aboagye, D., Preko, A., Mensah, B.D., Boateng, O.N. (2023), Foreign direct investment, remittances, real exchange rate, imports, and economic growth in Ghana: An ARDL approach. Cogent Economics & Finance, 11(1), 1-27.

McKinnon, R.I. (1973), Money and Capital in Economic Development. Washington, DC: The Brookings Institution.

Ministry of Macro-Economic Planning and Investment Promotion in Zimbabwe. (2016), Zimbabwe Diaspora Policy. Harare: Ministry of Macro-economic planning and Investment Promotion in Zimbabwe. Available from: https://irp.cdn-website.com/ff7b7050/files/uploaded/zimbabwe-diaspora-policy-document-3%20%282%29.pdf

Mlambo, C., Kapingura, F. (2020), Remittances and economic development: Evidence from SADC. Eurasian Journal of Economics

and Finance, 8(4), 261-273.

Mowlaei, M. (2018), The impact of foreign capital inflows on economic growth on selected African countries. African Journal of Economic and Management Studies, 9(4), 523-536.

Moyo, C., Roux, P.L. (2019), Financial development and economic growth in SADC countries: A panel study. African Journal of Economic and Management Studies, 12(1), 71-89.

Nyamazana, M. (2022), Zambia National Remittances Study: Report. Lusaka: International Organization for Migration (IOM).

Olayungbo, D.O., Quadri, A. (2019), Remittances, financial development and economic growth in sub-Saharan African countries: Evidence from a PMG-ARDL approach. Financial Innovation, 5, 9.

Pesaran, M.H., Shin, Y., Smith, R.J. (2001), Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(3), 289-326.

Phillips, P.C., Perron, P. (1988), Testing for a unit root in time series regression. Biometrika, 75(2), 335-346.

Reserve Bank of Zimbabwe. (2023), 2023 Monetary Policy Statement: Sustainig Price Stability and Economic Resilience. Harare: Reserve Bank of Zimbabwe. Available from: https://www.rbz.co.zw/documents/mps/2023/mid-term_monetary_policy_statement_2023.pdf

Reserve Bank of Zimbabwe. (2023b), Mid-term Monetary Policy Statement: Staying the Course to Price Stability. Harare: Reserve Bank of Zimbabwe.

Romer, P.M. (1994), The origins of endogenous growth. Journal of Economic Perspective, 8(1), 3-22.

Saungweme, T., Odhiambo, N. (2019), The Impact of Domestic and Foreign Public Debt on Economic Growth: Empirical Evidence from Zimbabwe. Working Paper 20/2019. UNISA Economic Research. University of South Africa, p1-30.

Shaw, E.S. (1973), Financial Deepening in Economic Development.

Oxford University Press.

Siavhundu, T. (2020), Foreign aid-economic growth nexus: An empirical study of the zimbabwean case. PM World Journal, 9(4), 1-17.

Southern Africa Development Community. (2016), SADC Finacial Inclusion Strategy (2016 to 2021). Available from: https://www.ucm.minfin.gov.ao/cs/groups/public/documents/document/zmlu/otqy/~edisp/minfin942999.pdf

Sutradhar, S.R. (2020), The impact of remittances on economic growth in Bangladesh, India, Pakistan and Sri Lanka. International Journal of Economic Policy Studies, 14, 275-295.

Tchekoumi, L.B., Nya, P.D. (2023), Remittances and economic growth: What lessons for the CEMAC zone? Cogent Economics & Finance, 11(1), 1-14.

World Bank. (2024), Available from: https://data.worldbank.org/indicator/bx.trf.pwkr.cd.dt

World Bank. (2024b), Available from: https://data.worldbank.org/indicator/pv.est?locations=zw

Yadeta, D.B., Hunegnaw, F.B. (2021), Effect of international remittance on economic growth: Empirical evidence from Ethiopia. Journal of International Migration and Integration, 23(1), 383-402.

Zardoub, A., Sboui, F. (2023), Impact of foreign direct investment, remittances and official development assistance on economic growth: Panel data approach. PSU Research Review, 7(2), 73-89.

Zimbabwe Diaspora Nation Building Initiative. (2021), A Review of the Government of Zimbabwes Diaspora Policy Documents. Zimbabwe Diaspora Nation Building Initiative Review. Available from: https://zdnbi.com/wp-content/uploads/2022/10/zdnbi-review-report-2022-final-version-sept-2022-1.pdf

Zimbabwe National Statistics Agency. (2023), 2022 Population and Housing Census: Preliminary Report on Migration. Harare: Zimbabwe National Statistics Agency.