

Strategies to Revitalise Zimbabwe's Trade Balance

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Abstract

Zimbabwe has, for decades, consistently experienced trade deficits, positioning the country as a net importer. The study aims to determine the key factors that drive the trade balance and offer strategies to eliminate the trade deficit. Using data spanning from 1980 to 2023, the study employed an Autoregressive Distributed Lag (ARDL) model to examine the macroeconomic determinants of trade balance in Zimbabwe. The findings reveal strong evidence of a stable long-run relationship between trade balance, foreign direct investment, economic growth, trade openness and the 2008 world financial crisis. Specifically, the findings revealed that foreign direct investment improves the trade balance in both the short run and long run. On the other hand, trade openness was found to harm the trade balance in both the short and long run. In addition, the results show that the post-2008 financial crisis worsened the trade balance for Zimbabwe. The study also found that Gross Domestic Product (GDP) growth does not influence the trade balance in both the short run and long run. Therefore, the study recommends a multifaceted strategy to revitalise Zimbabwe's trade balance. First, the policies need to prioritise attracting high-quality, export-oriented FDI through strengthening investment climate reforms, resolving regulatory bottlenecks and promoting public-private partnerships. Second, there is a need for the country to mitigate the negative effects of and pursue strategic import management, such as support for domestic substitution industries and enhance export market diversification. Lastly, the country should strengthen its resilience to external shocks through macro-stabilisation buffers, deepening regional trade integration under AFTCA. Collectively, the strategies help to reduce the chronic trade deficit and foster a more competitive export-driven economy.

Keywords: Export Promotion; Value Addition; External Sector Performance, Global Financial Crisis, International Trade Policy

Introduction

International trade has historically been shown to be a growth-promoting strategy for development and poverty alleviation (Nyange & Jonas, 2024). The trade balance, a central component of the balance of payments, serves as a critical indicator of a nation's overall economic well-being (Nyange & Jonas, 2024). It is a crucial sign of a country's ability to compete in the world economy, so anything that has an uneven effect on imports and exports has the potential to affect the balance of trade. Fluctuations in the trade balance are a major concern in developing countries with chronic trade deficits (Keho, 2021). Christianto and Bowo (2021) note that the economy is negatively affected by the declining trade balance.

Therefore, it is imperative to examine the factors that drive the trade balance for creating an appropriate trade-led growth strategy (Keho, 2021).

Zimbabwe's export basket remains heavily concentrated in mineral commodities, reflecting heavy dependence on extractive industries (Afreximbank, 2025). Key exports include natural pearls, precious stones, tobacco products, nickel, salt, sulphur, earths, stone and ores, ash and slag. These products collectively accounted for more than 80 per cent of exports in 2024, underscoring the structural limitations of the country's export base. Key export destinations include South Africa, the United Arab Emirates and China, together representing 73 % of Zimbabwe's total exports as of 2024. On the import side, the country relies heavily on fuels and oils, machinery and mechanical appliances, vehicles, electrical equipment and cereals, constituting more than 50 per cent of total imports (Afreximbank, 2025). Major import sources include China, Zambia and Mozambique, among other countries, indicating deep integration within the regional trade ecosystem.

Despite Zimbabwe's rich resource base, the country remains reliant on imports, especially fuel, machinery and cereals, which results in a persistent trade imbalance. Thus, the country has, over the years, been characterised by trade deficits, hence it is considered a net importer. The country's reliance on imports, especially of capital goods and fuel, underscores its structural vulnerabilities in energy supply and industrial capacity. Figure 1 presents the monthly trade deficits between January 2023 and November 2025.

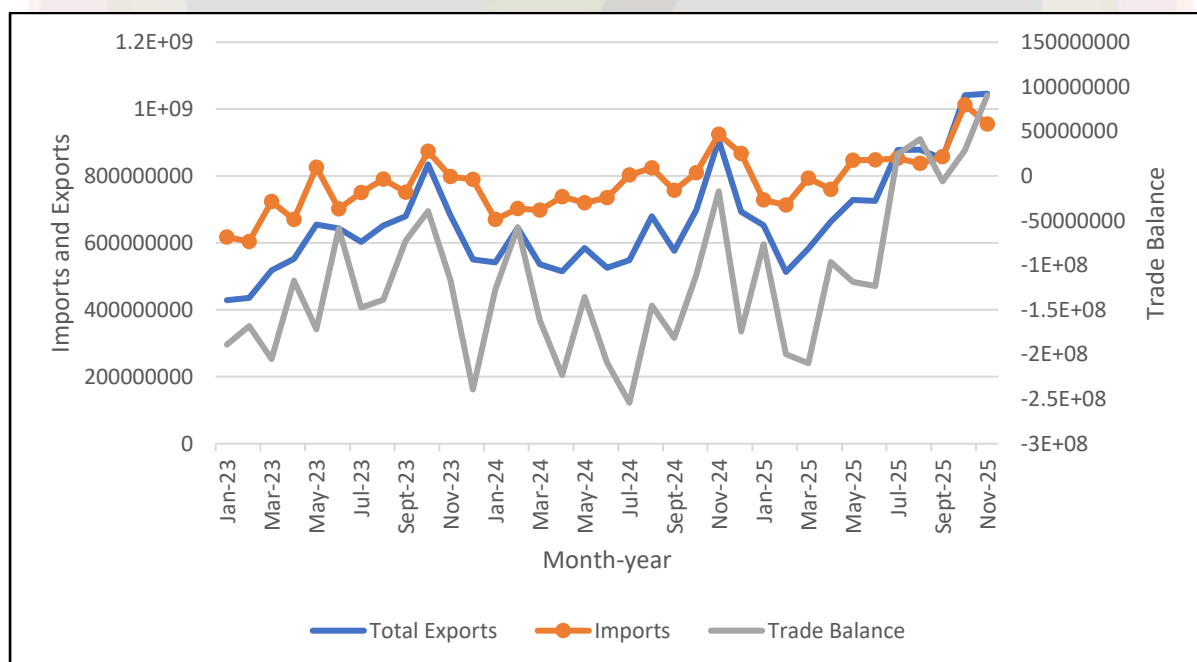


Figure 1: Total Exports, Imports and Trade Balance (Jan 2023- Nov) 2025 (US\$)

Source: ZimStat (2025)

The year 2023 ran a full-year trade deficit of US\$1.664 billion, with export value of US\$7.237 billion and import value of US\$9.01 billion. Thus, every month of 2023 was in deficit. In 2024, the deficit widened to US\$1.796 billion and all months recorded deficits (ZimStat, 2025). The country's trade deficit widened by 6 per cent to approximately US\$2.1 billion in 2024, which was probably largely driven by huge import bills and lower export earnings (Afreximbank, 2025). Continuous trade deficits in 2023 to 2024 reflect imports outpacing exports, though.

According to ZimStat (2025), the trade balance position improved with a cumulative deficit narrowing to US\$644.90 million in 2025. However, the country is still a net importer as imports are still larger than exports. Such a huge import dependence exposes Zimbabwe to external shocks such as global price fluctuations and supply chain disruptions, which can undermine economic stability. Reducing this reliance is critical for enhancing long-term resilience from key trading partners. Therefore, the study seeks to determine key factors influencing the trade deficit and suggest strategies to revitalise Zimbabwe's trade balance.

Theoretically, three approaches explain the fluctuations of a country's trade balance, including the Absorption Approach, the Monetarist Approach and the Elasticity Approach (Keho, 2021). The Absorption approach argues that the trade balance of a country improves only if total output exceeds total domestic spending. As a result, with a currency devaluation, the trade balance improves only if the gap between output and expenditure increases. The Monetarist approach posits that the balance of payments is essentially a monetary phenomenon and explains its position by the interaction between the demand and supply of money (Keho, 2021). Thus, an excess demand (supply) for foreign goods requires more demand (supply) of the stock of money (Mundell, 1971). If the demand for money is greater than the supply, it means that excess demand for money will be satisfied by inflows of money from abroad, hence an improvement in the balance of trade. On the other hand, if money supply is greater than demand for money, excess supply will be eliminated by money outflows abroad and worsen the balance of payment. The Elasticity approach is directly related to the effect of the exchange rate on the trade balance. The Elasticity approach shows that real devaluation of domestic currency has a favourable effect on the balance of trade if the sum of price elasticities of exports and imports is greater than one (Lerner, 1944; Keho, 2021). Exchange rate depreciation makes domestic goods and services cheaper for the trading partners and hence increases exports of goods and services. Thus, as imports become relatively more expensive, the quantity of imports decreases and hence an improvement in the balance of trade. Nevertheless, exports and imports may not react at the initial period to real devaluation. Thus, after a depreciation of the exchange rate, the balance of trade may worsen initially and progressively improve, giving a J-curve effect (Keho, 2021).

The growing body of literature has investigated the determinants of trade balance in different country contexts employing different methodologies. Key macroeconomic factors have been investigated as to whether they have an impact on the trade balance. Many of the studies were mainly focused on testing the Marshall-Lerner and the J-curve effect, examining the nexus between trade balance and the exchange rate. However, there is lack of conclusive evidence as to the key determinants of trade balance as they found mixed findings. For instance, Keho (2021) found a negative relationship between trade balance and domestic and foreign income, whilst real effective exchange rate depreciation improves the trade balance in the long-term. In a related study focusing on Sub-Saharan Africa, Abille & Meçik (2023) found that high domestic income widens the trade deficit, while foreign income narrows it. In addition, the study found that trade openness helps performance and evidence of the J-curve effect was mixed. Extending the analysis beyond income effects, a study by Nyange and Jonas (2024) found that money supply is a key determinant of trade balance in the short run. In the long run, the study revealed that foreign direct investment, exchange rate movements, carbon dioxide emissions and government expenditure positively influence the trade balance.

Covering Indonesia, Malaysia, the Philippines, Singapore and Thailand, Purnamasari, Zuhroh & Kurniawati (2022) revealed that interest rates and imports negatively influence the trade balance, while GDP and exchange rate positively improve the trade balance, highlighting the

importance of macroeconomic stability and exchange rate management. Contrasting findings were found by Lê (2023)'s study on Vietnam's trade with RCEP countries, which shows that foreign direct investment inflows and geographical proximity positively influence the trade balance, while high GDP and trade openness had a negative impact on the trade balance. The findings by Lê (2023) contrast with the findings by Abille & Meçik (2023), who revealed that trade openness improves the trade balance.

Empirical literature also stresses that asymmetric trade barriers and Non-Tariff Measures (NTMs) help explain persistent bilateral imbalances, even when macro saving-investment gaps are unchanged. A study by Cuñat & Zymek (2024) revealed that pairwise asymmetric frictions account for much of the observed variation in bilateral imbalances across 40 countries. Consistent with this finding, Felbermayr & Teti (2023) found that only one in four deep RTAs truly reduces NTMs and gains a larger in services, implying that deep commitments are necessary to ease behind-the-border costs that distort bilateral trade balances. Doan, Kim & Ghodsi (2023), show that divergences in sanitary and phytosanitary (SPS) rules can even reduce traded goods quality, subtly altering bilateral flows and prices in ways that impede rebalancing.

Collectively, the findings from various studies underscore that determinants of trade balance are multifaceted, varying according to the macroeconomic environment, structural characteristics of individual countries and methodological choices by researchers. Despite vast empirical studies, there is an absence of convergence in results. This highlights the need for country-specific empirical investigations, especially for economies like Zimbabwe that experienced unique structural and macroeconomic dynamics.

Despite extensive global and regional empirical evidence, there is a clear gap for Zimbabwe, which this study seeks to fill. First, most of the studies focus on regional panels, which mask country-specific features. However, Zimbabwe's unique economic structure characterised by recurring currency reforms, high imports and episodes of high inflation, means that panel findings cannot be directly transplanted. Second, the existing body of literature does not capture Zimbabwe's post 2020 economic reforms, currency adjustments and shifts in external sector performance, which leaves the country under-represented in recent literature. Thus, to add to the existing body of literature, the study investigates the key determinants of trade balance in Zimbabwe. Specifically, the study integrates both macroeconomic factors and structural determinants. This contribution not only adds to the body of regional literature but also delivers policy-relevant strategies for Zimbabwe's trade management strategy.

Research Methodology

Based on the order integration of the variables, the study chose the Autoregressive Distributed Lag (ARDL) model. The ARDL model combines the long-run and short-run relationships hile including the error correction terms, which capture the cointegration dynamics of the model.

Model specification

$$\Delta BD_t = \alpha_0 + \sum_{(i=1)}^{p_1} [\alpha_i \Delta BD_{(t-i)}] + \sum_{(j=0)}^{(q_1)} [\beta_j \Delta GDPG_{(t-j)}] + \sum_{(k=0)}^{(q_2)} [\gamma_k \Delta TO_{(t-k)}] + \sum_{(l=0)}^{(q_3)} [\delta_l \Delta FDI_{(t-l)}] + \sum_{(m=0)}^{(q_4)} [\phi_m \Delta GEXP_{(t-m)}] + \sum_{(n=0)}^{(q_5)} [\theta_n \Delta [DUM_DOL]_{(t-n)}] + \lambda_1 BD_{(t-1)} + \lambda_2 GDPG_{(t-1)} + \lambda_3 TO_{(t-1)} + \lambda_4 FDI_{(t-1)} + \lambda_5 GEXP_{(t-1)} + \lambda_6 [DUM_DOL]_{(t-1)} + \epsilon_t \dots \dots \dots (1)$$

Where, BD is the trade balance (dependent variable, GDPG is GDP growth, TO is the trade openness, FDI is foreign direct investment, GEXP is the government expenditure, DUMMY is the dollarisation dummy, Δ is the first-difference operator, λ_i represent the long-run coefficients, α_0 is the intercept term, $\alpha, \beta, \gamma, \delta, \phi$, represent the short-run coefficients, t denotes time and q and p are lag lengths.

Definition of variables

The dependent variable of the study is the trade balance. According to Mankiw (2006), the trade balance is the difference between the exports and the imports of goods and services of a country over time. GDP growth (GDPG) is the annual per cent growth rate of GDP computed at market prices (Krugman, Obstfeld & Melitz, 2018). The GDP aggregates are based on 2015 constant prices expressed in US dollars. GDP growth is expected to have a negative effect on the trade balance. Trade openness (TO) is defined by Salvatore (2014) as exports plus imports as a percentage of GDP and it represents the removal of trade restrictions. The effect of trade openness on trade balance is ambiguous. Foreign direct investment (FDI) includes the net investment inflows made to acquire a lasting interest in a country foreign to the investor and it is expressed as a percentage of GDP. FDI is expected to have a positive effect on GDP growth. Government expenditure (GEXP) refers to all current expenditures by the government on goods and services and it is expressed as a percentage of GDP. GEXP is expected to harm GDP growth. The dummy variable DUM captures the effect of the 2008 world financial crisis, with 1 capturing the beginning of the crisis going forward and 0 otherwise. The post-2008 financial crisis period is aligned with the official introduction of the multi-currency regime in Zimbabwe thus indirectly showing the effect of the multicurrency on trade balance.

Pre-estimations tests

All the variables were tested for the unit root to ensure that they are integrated of order zero or one, that is either $I(0)$ or $I(1)$. The Augmented Dickey Fuller (ADF) test was used for the unit root test. The correlation matrix was used to check the presence of perfect or near multicollinearity. In addition, the Akaike Information Criterion (AIC) was used in determining the optimal lag lengths.

Diagnostic tests

Diagnostic tests were conducted on the model to ensure that the estimates are unbiased. The Jacque-Bera (JB) test was used to test for normality, the Breusch-Godfrey Lagrange Multiplier (LM) test was used to determine the presence of autocorrelation, the White Test was used to check for heteroscedasticity and the Ramsey RESET test was used to check the model specification. The goodness of fit of the model was tested using the R-squared. Cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) were used to test the model stability.

ARDL estimation procedure

The estimations were done using the ARDL model developed by Pesaran, Shin & Smith (2001). This model was later modified to accommodate smaller samples ranging between 30 and 80 observations. This model offers several advantages over other traditional approaches to

cointegration since it applies to small samples. The model applicable in a situation where the variables have mixed order of integration, that is, either I (0), I (1) or both. Equation (1) was estimated and the ARDL bounds test for cointegration was used to determine the long-run relationship. The study tested the null hypothesis that there is no long-run equilibrium relationship against the alternative hypothesis that there is a long-run equilibrium relationship among the variables. The F-statistic from the bounds test was compared to the F-critical values at 1%, 5% and 10% level of significance of the lower and the upper bound. After determining the presence of cointegration, it was necessary to estimate both the long-run and short-run models combined in equation (1). After estimating the long-run equation, an Error Correction Model (ECM) was estimated as follows.

$$\Delta BD_t = \alpha_0 + \sum_{i=1}^p [\alpha_i \Delta BD_{(t-i)}] + \sum_{j=0}^{(q_1)} [\beta_j \Delta GDPG_{(t-j)}] + \sum_{k=0}^{(q_2)} [\gamma_k \Delta TO_{(t-k)}] + \sum_{l=0}^{(q_3)} [\delta_l \Delta FDI_{(t-l)}] + \sum_{m=0}^{(q_4)} [\phi_m \Delta GEXP_{(t-m)}] + \sum_{n=0}^{(q_5)} [\theta_n \Delta [DUM_DOL]_{(t-n)}] + \aleph [ECT]_{(t-1)} + \varepsilon_t \dots \dots \dots (2)$$

In equation (2), ECT is an error correction term where the coefficient \aleph measures the speed of adjustment of variables towards a long-run equilibrium. \aleph is expected to be negative and statistically significant, indicating any deviation from the long run will be removed in each period.

Results and discussion

Pre-estimation tests

Table 1 presents the summary of descriptive statistics for all variables used in the study. The results show predominantly non-normal distributions with notable skewness. Both government spending and the trade balance have negative skew with leptokurtic and platykurtic kurtosis, respectively, suggesting left-tailed distributions with flat, sharp peaks. The most extreme outlier is foreign direct investment, which has a highly peaked, heavy-tailed distribution with strong positive skewness and leptokurtosis. The Jarque-Bera test rejects normalcy for FDI, trade balance and government spending at standard significance levels. Trade openness and GDP growth, on the other hand, have substantial variance and comparatively symmetric distributions, suggesting dispersion without appreciable directional bias.

Table 1: Descriptive statistics

	TB	GDPG	TOPEN	FDI
Mean	-6.450188	2.367323	62.16827	0.964651
Median	-4.289369	2.366663	60.21747	0.797538
Maximum	3.894500	21.45206	109.5216	6.940053
Minimum	-26.58794	-17.66895	35.91686	-0.452540
Std. Dev.	7.984523	8.058791	16.50025	1.229057
Skewness	-0.974794	-0.235745	0.575642	2.657727
Kurtosis	3.163441	3.391861	2.818053	13.64801
Jarque-Bera	7.017275	0.689072	2.490690	259.6626
Probability	0.029938	0.708549	0.287842	0.000000
Observations	44	44	44	44

Table 2 presents the results of the unit root test using the ADF test. The results show that GDPG, FDI and GEXP were stationary in levels while TOPEN was stationary after first difference.

Table 2: Unit root test

Variable	p-value (levels)	p-value (1 st differences)	Order of integration
TB	0.4517	0.0000	I(1)
GDPG	0.0132	-	I (0)
TOPEN	0.4368	0.0000	I (1)
FDI	0.0014	-	I (0)

Table 3 shows the results of the multicollinearity test. All the absolute values of the coefficients are less than 0.8 showing no evidence of perfect multicollinearity.

Table 3: Multicollinearity test

Correlation	TB	GDPG	TOPEN	FDI
TB	1.000000			
GDPG	-0.143057	1.000000		
TOPEN	-0.454189	-0.205089	1.000000	
FDI	-0.332381	0.085623	0.447197	1.000000

Table 4 shows the results of the bounds test for cointegration. The F-statistic (2.8474) is greater than the upper-bound I (1) critical values at all levels. Therefore, the null hypothesis of no cointegration is rejected and the study concludes that there is cointegration between trade balance (TB) and its determinants (GDPG, TO, FDI). The presence of cointegration implies that both the long-run and short-run models can be estimated and interpreted.

Table 4: ARDL Bounds Test

		Critical Values	
F-Statistic	Significance	Lower Bound I (0)	Upper Bound I (1)
	10 per cent	2.45	3.52
2.8474*	5 per cent	2.86	4.01
	1 per cent	3.74	5.06

* denotes rejection of H_0 at 10% level

Post-estimation tests

Table 5 shows the diagnostic tests conducted on the estimated model. The p-value of the Jacque-Bera test shows that the residuals are normally distributed. The p-value of the Breusch Godfrey LM Test shows that there is no serial correlation in the model. The p-value of the Glejser test shows that there is no heteroscedasticity in the model. The p-value of the Ramsey RESET test shows that the model is correctly specified.

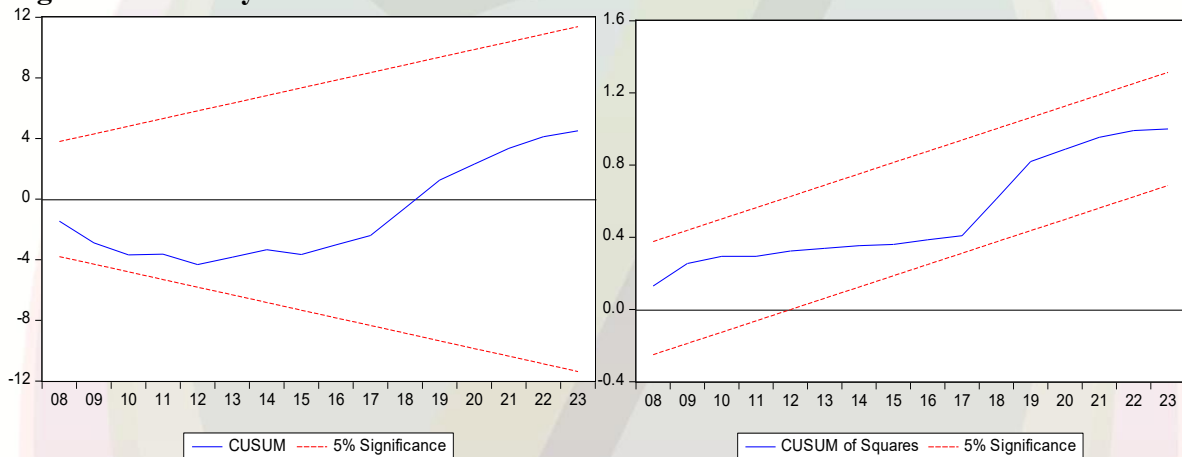
Table 5: Post-estimation diagnostic tests

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Test	p-value
Jacque-Bera	0.267724
Breusch-Godfrey LM	0.2708
Glejser	0.6641

Figure 1 gives the stability tests. The CUSUM and CUSUMSQ fall within the boundaries for the sample period, hence the model is stable.

Figure 1: Stability tests



ARDL estimation results

Short-run coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FDI)	0.991192	0.534374	1.854865	0.0726
D(GDPG)	0.022854	0.080292	0.284641	0.7777
D(TOPEN)	-0.148878	0.044733	-3.328165	0.0022
D(DUM)	2.444783	3.525500	0.693457	0.4929
D(DUM(-1))	-9.161800	4.556730	-2.010609	0.0526
CointEq(-1)	-0.300208	0.099267	-3.024260	0.0048
Long-run coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	6.605838	3.213988	2.055340	0.0478
GDPG	0.076128	0.275644	0.276184	0.7841
TOPEN	-0.495918	0.187127	-2.650159	0.0123
DUM	-14.420728	4.674684	-3.084856	0.0041
C	23.924358	10.209674	2.343303	0.0253
Sample (adjusted):	1982-2023			
R-squared	0.870465			
Adjusted R-squared	0.839062			
F-statistic	27.71963			
Prob(F-statistic)	0.000000			

From Table 4, the Bounds Test for cointegration indicates the presence of cointegration; the ARDL model was estimated with the results presented in Table 6. The results show both the short-run and long-run coefficients in the reparametrised form of an ECM. The model demonstrates strong explanatory power with an R-squared of approximately 87% and an adjusted R-Squared of approximately 83.9%, confirming the robustness of the model after adjusting for degrees of freedom. The joint significance of the regressors is shown by the p value of 0.0000; thus, the whole model is statistically significant.

The coefficient of the ECM is negative and statistically significant at the 1% level ($p = 0.0048$), which satisfies the theoretical expectation. Therefore, there is a stable long-run relationship between the variables in the model. The ECM coefficient implies that approximately 30% of any deviations from the equilibrium in Zimbabwe's trade balance is corrected within one year, thus the speed of adjustment is 30%. This shows that despite the eventual correction of the disequilibria; it persists for some time before the full convergence to the long-run equilibrium. This suggests the structural rigidities, foreign exchange constraints, lags in exports and imports and macroeconomic policy adjustments in Zimbabwe. Furthermore, this relatively slow adjustment speed resonates with the absorption approach which argues that trade balance improves only when output growth exceeds domestic absorption. In Zimbabwe, this means that policy shocks take time to improve the trade balance due to a persistent excess domestic expenditure over output, which is driven by the high consumption of imported goods such as food, machinery and fuel. This is in line with Keho (2021), who notes that developing economies are characterised by structural rigidities and weak productive capacity, hence delaying the rebalancing process. This implies that in Zimbabwe, short-term macroeconomic adjustments alone are insufficient; there is a need for structural reforms to accelerate adjustment and restore the long-run equilibrium in trade balance.

The long-run coefficients show that FDI has a positive coefficient statistically significant at 5% ($p=0.0478$), showing a negative effect on the trade balance ($p=0.0478$). This shows that a one-unit increase in FDI increases the trade balance by 6.6058 units, holding other things constant. This aligns with the findings of Nyange & Jonas (2024), who found that FDI improves trade balance in the long run through the expansion of exports spillovers from productive economic activities. This implies that, Zimbabwe is likely to be directing FDI towards tradable sectors, hence boosting the export capacity. This contrasts with concerns of some developing nations where FDI drives import-intensive production. The Zimbabwean case shows that FDI is driving the export earnings, thereby supporting the role of capital inflows in enhancing trade. This shows the importance of investment-led export growth as a strategy in revitalising the trade balance in Zimbabwe.

In the long run, GDP has a positive and statistically insignificant coefficient ($p=0.7841$), which suggests that having a sustained economic growth in Zimbabwe does not significantly influence trade balance over time. This suggests an import-biased structure of Zimbabwe's growth where growth of income comes with increased demand for imported goods and intermediate inputs. This aligns with the findings of Abile & Meçik (2023), who found that in Sub-Saharan Africa, increased domestic income tends to widen trade deficits due to high import demand. This reflects the import-biased growth in Zimbabwe, where high levels of income stimulate imports of fuel, consumer products and capital goods instead of domestic production for export. From this finding, the assumption that economic growth alone can correct trade imbalances is challenged while indicating the need for strategies that explicitly link income growth to export diversification.

Trade openness has a negative coefficient which is statistically significant at 5% ($p=0.0123$) in the long-run, which shows a negative long-run effect on trade balance. This means that a unit increase in trade openness reduced the trade balance by 0.4959, holding other things constant. This means that increasing trade openness worsens the trade balance of Zimbabwe in the long run. This supports the findings of Lê (2023), who argued that trade openness can widen the trade deficit in economies with weak industrial bases. The result of this study shows that Zimbabwe appears to have higher imports without a compensating expansion in exports, especially with a narrow export base, which is denominated by primary commodities. In contrast, Abille and Meçik (2023) reported a positive role of trade openness in improving the trade balance.

The coefficient of the dummy variable is negative and statistically significant at 1% in the long-run ($p=0.0041$), which shows that the period posts the 2008 financial crisis worsened the trade balance for Zimbabwe. On average, post-2008 financial crisis, Zimbabwean trade balance reduced by 14.4207 units. This shows the lasting impact of macroeconomic instability on Zimbabwe's trade performance. The post-global financial crisis period coincides with the heightened domestic challenges, including a shortage of foreign currency and limited access to international credit markets. This aligns with the findings of Keho (2021), who highlighted that external shocks worsen trade deficits. The magnitude of the effect of the global financial crisis shows that the deterioration of the trade balance in Zimbabwe was not transitory but structural, which shows the need for long-term policy interventions rather than cyclical adjustments.

In the short-run component of the model in Table 6, FDI has a positive coefficient that is statistically significant at 10% ($p=0.0726$), showing a positive effect on trade balance. This means that a one-unit increase in FDI will increase the trade balance by 0.9911 percentage points, holding other things constant. This suggests that capital flows provide the immediate relief to the trade deficit, possibly through increased export revenue, increased availability of foreign currency and reduced pressure of balance of payments. This finding complements the Monetarist Approach, which puts emphasis on the role of capital flows in improving trade balances. However, the magnitude of the effect is smaller compared to the long run, which implies that the full impact of FDI materialises gradually through the translation of investments into export capacity; thus, there is a need for increased investment and reinvestment strategies.

Economic growth has a statistically insignificant coefficient ($p= 0.7777$), which is the same as the results from the long run. This shows that short-term fluctuations in economic activity do not immediately translate to improved trade balance. Since economic growth does not improve trade balance in the long run as well, this suggests that Zimbabwe's growth episodes are not sufficiently export-driven, which is consistent with the findings of Keho (2021). Thus, there is a need for export promotion strategies rather than relying on economic growth alone in revitalising the trade balance.

The coefficient of trade openness is negative and statistically significant at 1%. Therefore, a one unit increase in trade openness will reduce the trade balance by 0.1489, holding other things constant. This implies that increasing trade openness immediately worsens the trade balance, meaning that the country is importing more than it is exporting. This is in line with the J-curve hypothesis, which argues that imports adjust more quickly than exports when the economy opens to trade or when there is a relative price change. In contrast to the eventual trade balance improvement predicted by the J-curve, the Zimbabwean case shows a persistent deterioration that suggests that export elasticities may be weak. This strengthens the need for enhancing export

responsiveness.

The coefficient of the dummy shows that the contemporaneous dummy is insignificant in the short run, while its lagged value is negative and statistically significant at 10%. This means that during the period post-2008 financial crisis, on average, the trade balance will be reduced by 9.1618 but with a delay rather than instantaneously. This means that the negative macroeconomic shock effects on the trade balance are not instantaneous, but they materialise with lags. This further strengthens the argument that Zimbabwe's trade balance is more structural and shaped by long-standing vulnerabilities rather than temporary shocks.

Conclusion and recommendations

This study examined the key macroeconomic determinants of Zimbabwe's trade balance using the ARDL modelling framework, using annual time series data from 19820 to 2023. The findings showed strong evidence of a stable long-run relationship between trade balance, foreign direct investment, economic growth, trade openness and the 2008 world financial crisis. The existence of cointegration between the variables, together with a statistically significant error correction term, indicates that Zimbabwe's trade balance adjusts to long-run equilibrium after short-run deviations from shocks, albeit at a moderate speed.

Importantly, the study found that FDI plays a significant role in improving the trade balance in Zimbabwe both in the short-run and long-run, reflecting the need for policies that attract investments which are export-oriented while adding value domestically. Economic growth was found to be insignificant in explaining the trade balance, which suggests that Zimbabwe's economic growth remains import-biased; thus, policies to improve economic growth should be aligned with export diversification and value addition. Trade study found that trade openness worsens trade balance both in the short-run and long-run, hence trade liberalisation should be complemented by measures that aim to strengthen competitiveness and reduce dependence on imports. In addition, the persistent negative impact of the post-2008 global financial crisis reflects the importance of macroeconomic stability and trade policies, which are resilient to external shocks.

Overall, to revitalise the trade balance in Zimbabwe, there is a need for a strategic shift towards investment-led export growth. This also requires selective trade openness, which is supported by industrial policy. Furthermore, there is a need for measures that strengthen the domestic productive capacity. This approach would help in reducing the structural trade deficits while enhancing the sustainability of Zimbabwe's trade performance in the long run.

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