

# Influence of Real Effective Exchange Rate on Nominal Export Earnings and Nominal Import Payments: Insights from Bangladesh

Mohammad Sawad Bin Shahid<sup>1</sup>  
Rowshon Akter<sup>2</sup>

## *Abstract*

*This study explores the influence of the Real Effective Exchange Rate (REER) on Bangladesh's trade flows, explicitly focusing on nominal export earnings and import payments. Using a decade of monthly data from July 2010 to March 2020, the research employs the Johansen cointegration and Vector Error Correction Model (VECM); the analysis reveals a significant long-term equilibrium relationship between REER and export earnings but not with import payments. REER appreciation enhances export competitiveness in the short and long run, while import payments remain unaffected due to import substitution policies. Diagnostic tests validate the model's reliability, confirming no serial correlation or heteroscedasticity. The findings emphasize stabilizing REER, adopting REER-led strategies, and promoting export-oriented policies to reduce the trade deficit. Policymakers should utilize REER adjustments to boost competitiveness and productivity. Future research could include variables like industrial production and GDP to understand Bangladesh's trade dynamics comprehensively.*

**Keywords:** Real Effective Exchange Rate (REER), Trade Balance, Export Competitiveness, Import Substitution, Exchange Rate Policy

**JEL Classification:** F31, F14, E60

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<sup>1</sup> Additional Director, Bangladesh Bank Training Academy, e-mail: mohammad.shahid@bb.org.bd

<sup>2</sup> Associate Professor, Information Science & Library Management Department, University of Dhaka, e-mail: rowshon@du.ac.bd

Views expressed in the article are authors' own and do not necessarily reflect the views of the institutions in which they work.

## 1. Introduction

The Real Effective Exchange Rate (REER) is a crucial determinant of trade competitiveness, influencing export earnings, trade balance, and long-term economic growth. Unlike the Real Exchange Rate (RER), REER incorporates fluctuations in both nominal exchange rates (NER) and relative price levels across trading partners, making it a more comprehensive measure of external competitiveness (Santoya & Soutar, 2011). A higher REER indicates currency appreciation, potentially reducing export competitiveness, while a lower REER supports exports by making them more affordable to foreign buyers. Empirical studies on the REER-trade relationship yield mixed findings. Sattar & Shareef (2019) highlight that Bangladesh's exports remained sluggish between FY2012 and FY2017 due to a 45% REER appreciation, constraining competitiveness. Aziz (2012) finds that REER devaluation improves the trade balance, while Hassan et al. (2016) reveal a long-run negative impact of REER appreciation on real export earnings but no short-term effect. Conversely, Younus & Chowdhury (2014) report an insignificant relationship between REER and trade performance, emphasizing the complexity of this nexus.

Bangladesh's export sector is highly concentrated, with ready-made garments (RMG) accounting for 85.4% of total exports (World's Top Exports, 2021). Export prices are heavily influenced by exchange rate fluctuations, as evident from industry reports by the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), which indicate that price competition with China, Vietnam, and India forces local exporters to accept lower rates to sustain business operations. Despite its dominance, Bangladesh's RMG sector adds less than 30%, relying heavily on imported raw materials (Hassan & Tufte, 2010).

While previous studies explore REER impacts on real exports, there is limited research on its effect on nominal export earnings and nominal import payments in Bangladesh. To bridge this gap, this study examines the influence of REER fluctuations on nominal trade flows using updated REER calculations (base year 2015-16), a broader currency basket (15 trading partners), and a sample period (2010:6–2020:3). The key objective is to assess how REER changes impact both nominal export earnings across sectors, particularly RMG, and nominal import payments.

## 2. Historical Evaluation of Bangladesh's Exchange Rate Policy

Since gaining independence in 1971, Bangladesh has pursued export-oriented and import-substitution trade policies to strengthen its economic foundation. In the early years, the Bangladeshi Taka (BDT) was pegged to the British pound sterling, reflecting the country's efforts to stabilize its nascent economy. However, stringent foreign exchange controls were implemented to prevent capital flight and maintain external balance (Younus & Chowdhury, 2014). A secondary market emerged due to high foreign currency demand, causing significant BDT depreciation-37% in May 1975-and subsequent devaluation to

address balance of payment deficits.

In the late 1970s, market liberalization aimed to promote growth through export credit facilities, tariff reductions, and exchange rate convertibility (Aziz, 2012; BB Report, 1981). From 1972 to 2002, the BDT was undervalued about 130 times, with the USD replacing the pound sterling as the dominant trade currency. By 1985, the REER index guided exchange rate adjustments. On May 31, 2003, Bangladesh adopted a managed floating exchange rate system to enhance export competitiveness. The central bank reported notable REER appreciation, 17.29% from FY2012–FY2014 and 27.77% between FY2006–FY2014 (BB Annual Report, 2013–14).

Despite challenges, Bangladesh's exchange rate policies aim to sustain trade competitiveness, attract remittances, stabilize prices, and maintain external account viability (BB Financial Sector Review, 2006). Bangladesh Bank oversees these policies but requires coordination with the Ministry of Finance, reflecting limited central bank autonomy (Islam, 2003). Over time, these strategies have significantly shaped Bangladesh's trade balance and export and import trends.

### 3. Critical Review of Theoretical and Empirical Literature

The relationship between exchange rates and trade has been widely examined through two main theoretical perspectives: the elasticities approach (Robinson, 1947; Metzler, 1948) and the absorption approach (Alexander, 1952; Johnson, 1967). The elasticities approach suggests that currency depreciation enhances the trade balance if demand elasticities for exports and imports are sufficiently high. In contrast, the absorption approach argues that depreciation shifts expenditure toward domestic goods, improving the trade balance. Exchange rates are a crucial relative price in international trade, influencing export competitiveness and import affordability (Chinn, 2005; Dornbusch, 1976). However, the effects of exchange rate fluctuations differ across economies based on structural factors and policy frameworks (Hassan et al., 2016).

Empirical studies offer mixed evidence regarding the impact of exchange rates on trade. Some studies, such as Thapa (2002) and Andersson & Styf (2010), find that currency depreciation stimulates exports, while Abeyasinghe & Yeok (1998) argue that high import content in exports can offset this effect. Similarly, Nabli & Marie-Ange (2002) and Alam (2010) report no significant impact of exchange rate overvaluation on export performance in Middle Eastern and North African countries and Bangladesh, respectively. Khan et al. (2019) note that Bangladesh's export basket, heavily reliant on import-dependent manufactured goods, is less responsive to exchange rate shifts.

The Real Exchange Rate (RER) is a key measure of trade competitiveness, as it reflects inflation-adjusted exchange rate movements. Research by Goldfajn & Valdes (1999) and Chinn (2000) highlights that RER misalignment can distort trade flows, with overvaluation

reducing export competitiveness and undervaluation boosting exports but raising import costs. Younus & Chowdhury (2014) find that RER significantly affects Bangladesh's exports, imports, and trade balance in the short and long run, while Alam (2010) reports no substantial link between RER and export earnings in Bangladesh.

The Real Effective Exchange Rate (REER), which adjusts the exchange rate for trade-weighted inflation differentials, provides a more comprehensive indicator of competitiveness. Studies by Fidan (2006) and Guechari (2012) suggest that REER influences trade more in the long run than in the short run. Hassan et al. (2016) find that REER appreciation negatively affects Bangladesh's exports over time, while Aziz (2012) shows that REER devaluation improves the trade balance. However, Younus & Chowdhury (2014) and Bahmani-Oskooee & Payesteh (1993) report no significant relationship between REER and the trade balance in Bangladesh.

The Marshall-Lerner condition states that currency depreciation improves the trade balance if the sum of export and import demand elasticities exceeds one. Andersson & Styf (2010) confirm this condition, showing that depreciation increases exports while reducing imports. However, Bhattarai & Armah (2005) and Perera (2009) find no substantial effect of exchange rate changes on the trade balance in Ghana and Sri Lanka, respectively. In Bangladesh, Ali & Kamal (2012) argue that currency appreciation makes exports more expensive and imports cheaper, worsening the trade balance.

Despite extensive research on REER, few studies have explored its effects on nominal export earnings and nominal import payments, particularly in Bangladesh. This study aims to fill this gap by analyzing the influence of REER fluctuations on these variables, using updated data (2010–2020) and a 15-country currency basket. The findings seek to provide policymakers with insights to enhance trade competitiveness and ensure macroeconomic stability.

## 4. Conceptual and Theoretical Framework

### 4.1 Dependent Variable: Export Earnings (XP)

Export earnings are crucial for economic growth in both developing and industrialized nations. While industrialized countries focus on high-value goods, developing economies leverage low-cost labor and export raw materials or primary products (Hasanov & Samadova, 2014). In developing economies, the demand for exports is influenced by external factors such as foreign income and relative export prices. This relationship can be expressed as:

$$XP_d = f(Y_f, P_x/P_m) \quad (1)$$

The equation highlights that higher foreign income ( $Y_f$ ) typically increases ( $XP_d$ ) demand

for exports, while relative price changes ( $P_x/P_m$ ) affect competitiveness in the global market.

## 4.2 Dependent Variable: Import Payments (IM)

Global trade patterns often favor imports due to lower production costs abroad, allowing consumers to access more affordable goods, especially when domestic production is less efficient. Import demand is shaped by factors such as relative prices and real income, and can be represented as:

$$IM_d = f(P_m/P_x, Y) \quad (2)$$

This equation suggests that ( $P_m/P_x$ ) higher relative import prices and increased ( $Y$ ) income levels typically lead to higher ( $IM_d$ ) import demand.

## 4.3 Independent Variable: REER

The REER is a crucial indicator of trade competitiveness, derived by adjusting the Nominal Effective Exchange Rate (NEER) for inflation differences among trading partners (Hossain & Ahmed, 2009). Unlike NEER, which tracks exchange rate fluctuations, REER reflects the real purchasing power of the domestic currency, making it a vital tool for central banks, including Bangladesh Bank, to assess currency competitiveness and monitor price-level changes across countries (Turner & Van'tdack, 1993). Formulas:

$$NEER = \prod_{i=1}^n (E_i)^{w_i} \quad (3)$$

Where:  $\prod$  is variables' product,  $E_i$  is Nominal exchange rate country  $i$ ,  $w_i$  is weight of country  $i$ 's trade in the overall trade balance and  $n$  is Number of trading partners

$$REER = (NEER) \frac{P_{base}}{P_{foreign}} \quad (4)$$

Where,  $P_{base}$  is the price level of the domestic country and  $P_{foreign}$  is Weighted average price level (CPI) of foreign countries.

### 4.3.1 Application in Bangladesh

Bangladesh Bank (BB) monitors the exchange rate using NEER and REER indices, computed daily and monthly against 15 major trading partners, including the Euro. A rise in the REER indicates home currency appreciation, which can hurt export competitiveness, while a decline signals currency devaluation, boosting export potential. BB also acknowledges that REER overvaluation negatively affects the trade balance by making exports more expensive and imports cheaper (Soutar & Santoya, 2011).

### 4.3.2 Bangladesh's Trade Context

In Bangladesh, NEER and REER trends reflect currency fluctuations. REER overvaluation

reduces competitiveness, whereas undervaluation may benefit exports. Other factors, such as labor productivity and national income, also impact competitiveness (Annual Report, 2019).

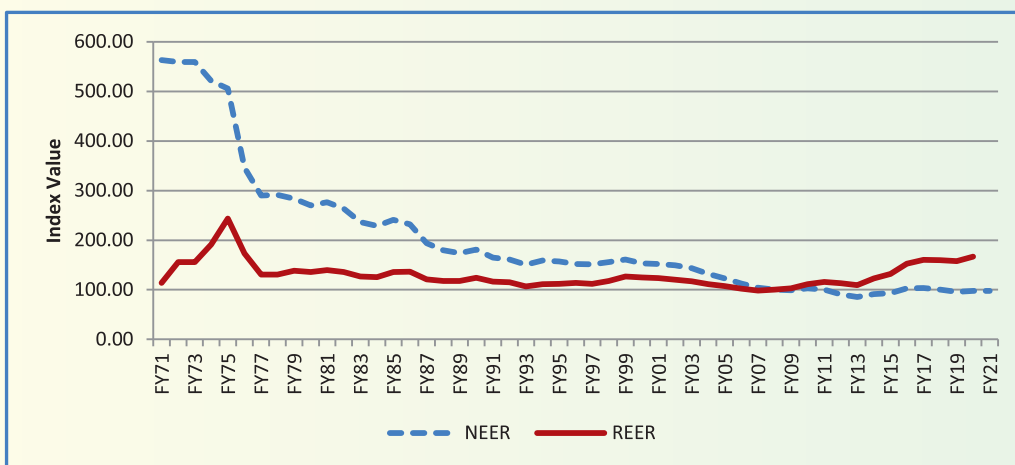
### 4.3.3 History of the REER Basket Group

The REER basket currently includes 15 currencies, with 10 currencies used since 2010. Prior to that, 8 currencies were included, and Hossain and Ahmed (2009) recommended simplifying the basket to four key currencies—Japanese Yen, US Dollar, Euro, and UK Pound Sterling—reflecting Bangladesh's dollar-dominated trade for easier monitoring by Bangladesh Bank (BB).

BB computes trade weights using data from Bangladesh's top 15 trading partners: Eurozone, China, India, UK, Japan, Singapore, Hong Kong, Canada, Australia, Korea, Malaysia, Turkey, Indonesia, Brazil, and the USA. According to BB's 2014 Policy Note, 10 major trading partners account for 80% of Bangladesh's global trade. Of these, 8 partners contribute about 60%, while Canada, Malaysia, and Korea account for roughly 12%.

This study uses BB's REER indices, calculated from NER and CPI data, based on the 15-currency basket. The trend of NEER and REER in Bangladesh from July 2010 to March 2020 is shown in the figure.

**Figure 1: Yearly REER and NEER Data Trend (1972-2021) in Bangladesh**



Source: Bruegel Database, 2021

When  $REER > 100$ , the Bangladeshi Taka (BDT) is "overvalued" and expected to depreciate. Conversely, when  $REER < 100$ , the BDT is "undervalued" and expected to appreciate.

### 4.3.4 Equations used by Bangladesh Bank

$$NEER = \frac{ERI_{BDT}}{\prod_{i=1}^{15} (ERI_{PC})^{w_i}} \times 100 \quad (5)$$

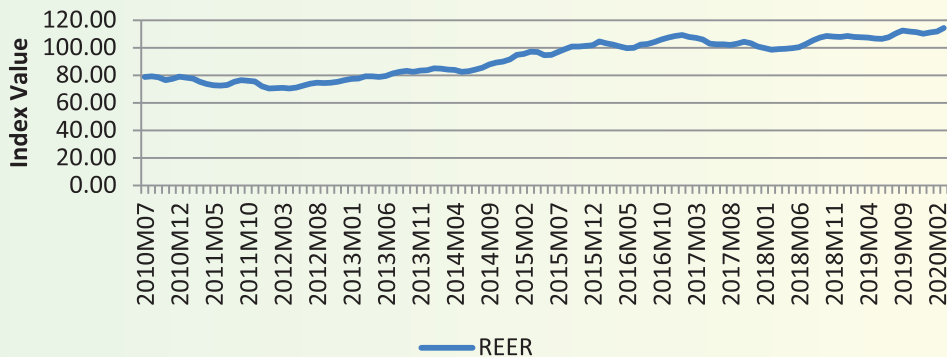
Where,  $\sum_{i=1}^{15} w_i = 1$  and  $ERI = \frac{ER_c}{ER_b} \times 100$

Here, ER = bilateral NER (the value of BDT against USD),  $c$  = current,  $b$  = base period, while BD means Bangladesh (Annual Report, 2019).

$$REER = NEER \times \frac{CPI_{BD}}{\prod_{i=1}^{15} (CPI_{PC})^{w_i}} \quad (6)$$

Where,  $ERI$  is bilateral nominal exchange rate index,  $CPI$  is consumer price index,  $PC$  is partner country,  $w_i$  is trade weight (partner country's share in Bangladesh's trade).

**Figure 2: Monthly trend of REER from 2010:7-2020:3 of Bangladesh**



Source: Monetary Policy Department, Bangladesh Bank, 2021

## 5. Methodology

This study employs an econometric approach to examine the short- and long-run relationship between the Real Effective Exchange Rate (REER) and nominal export earnings and nominal import payments in Bangladesh. The empirical analysis was conducted using EViews software, incorporating multiple statistical techniques to ensure robustness. Monthly data from July 2010 to March 2020 (base year: 2015-16) were sourced from the Monetary Policy Department of Bangladesh Bank and the Monthly Economic Trends reports. All variables were log-transformed and seasonally adjusted.

The analysis used the Unit Root Test for stationarity, the Johansen Cointegration Test for long-run relationships, and the Vector Error Correction Model (VECM) for short-run

dynamics. Diagnostic tests ensured model robustness. Since NEER and REER data are not publicly available, they were obtained from Bangladesh Bank under special permission. The study follows a CPI-based REER approach, using a 15-country currency basket, aligning with global methodologies (Chinn, 2005; Darvas, 2012). This methodological framework ensures a rigorous analysis of REER's impact on Bangladesh's nominal export earnings and import payments, contributing to the broader understanding of exchange rate policy implications.

### 5.1 Model Variables

The Johansen (1988) cointegration test is employed to examine the relationship between macroeconomic variables. The key variables are as follows:

$$\begin{aligned} \ln\_REER &= \text{log of REER} \\ \ln\_NXP &= \text{log of Nominal Export Earnings} \\ \ln\_NIM &= \text{log of Nominal Import Payments} \end{aligned}$$

### 5.2 Model Specification

The empirical model for exports and REER is specified as  $NXP=f(REER)$  and the empirical model for imports and REER is specified as  $NIM=f(REER)$ . Where,  $NXP$  = Nominal Exports Earning,  $NIM$  = Nominal Import Payments and  $REER$  = Real Effective Exchange Rate

Balassa (1978) and Tyler (1981) argued that exports of developing countries are largely supply-determined. Theory suggests that export demand is highly price elastic and driven by excess domestic supply. For small economies, exports are mainly influenced by demand and relative export prices. Thus, exports can be modeled as a decreasing function of the REER.

Transforming variables into logarithmic form to allow elasticity interpretation, the export regression model is expressed as:

$$\ln\_NXP = \beta_0 + \beta_1 \ln\_REER + \epsilon_t \quad (7)$$

Where,  $\beta_0$  = Constant,  $\beta_1$  = Coefficient of REER, and  $\epsilon_t$  = Residuals with zero mean and constant variance.

If  $\beta_1 > 1$ , exports are price-elastic; if  $\beta_1 < 1$ , exports are price-inelastic.  $A\beta_1 = 0$  implies export insensitivity to REER. The log-log model is widely used in international trade analysis due to its statistical advantages, particularly in mitigating heteroskedasticity (Hossain, 2011). Transforming variables into logarithmic form enables the interpretation of coefficients as elasticities (Narayan, 2006). The regression model for REER and NIM is expressed as:

$$\ln\_NIM = \beta_0 + \beta_1 \ln\_REER + \epsilon_t \quad (8)$$

Here,  $\beta_0$  is the constant,  $\beta_1$  is the REER coefficient, and  $\epsilon_t$  represents residuals with zero mean and constant variance.

Bangladesh's export sector depends significantly on imported machinery, making currency devaluation or overvaluation influential on domestic import prices and foreign export prices (ADB, 2007). An increase (decrease) in REER reflects an appreciation (depreciation) of the BDT, leading to cheaper imports and potentially higher demand for foreign goods. If  $\beta_1 > 1$ , imports are price-elastic, whereas if  $\beta_1 < 1$ , imports are price-inelastic (Hassan, 2016).

### 5.3 Empirical Results and Diagnostic Tests

#### 5.3.1 Unit Root Test

This is essential for assessing the stationarity of time-series data, ensuring the validity of results and avoiding spurious findings (Alam, 2009). The tests of Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) are commonly used for checking stationarity. The ADF test, introduced by Dickey and Fuller (1979, 1981), is performed using the regression:

$$\Delta Y_t = \beta_1 Y_{t-1} + \alpha_i \sum \Delta Y_{t-i} + \epsilon_t \quad (9)$$

Where  $\epsilon_t$  is a white noise error term and  $\Delta Y_{t-1} = Y_{t-1} - Y_{t-2}$  represents the lagged difference. Hypothesis:

$H_0: \beta_1 = 0$  (unit root exists, non-stationary series)

$H_1: \beta_1 < 0$  (no unit root, stationary series)

Using the Schwarz Criterion (SC) and Akaike Info Criterion (AIC) with automatic lag selection in E-Views, the ADF test was performed.

**Table 1: Augmented Dickey-Fuller Test**

Variables	Level		First Difference		Order of Integration
	C	C & T	C	C & T	
<i>ln_REER</i>	-0.152 (0.940)	-2.522 (0.317)	-6.444 (0.000)*	-6.470 (0.000)*	I(1)
<i>Ln_NIM</i>	-1.766 (0.396)	-2.931 (0.158)	-13.378 (0.000)*	-13.367 (0.000)*	I(1)
<i>ln_NXP</i>	-2.054 (0.264)	-2.054 (0.042)	-14.619 (0.000)*	-14.650 (0.000)*	I(1)

**Notes:** C= Intercept, T= trend. P values are in the parentheses. \*Significant at 1% and 5% levels.

The results show that all variables are non-stationary at the level but become stationary at first differences, classified as I(1). This justifies the use of cointegration analysis (Jongwanich, 2009) to explore long-run relationships. Given that all variables are integrated at order I(1), the Johansen (1988) cointegration method is employed to analyze their relationships.

## 5.4 Cointegration test

This is used to identify long-run relationships between groups of variables. In this study, cointegration is tested to determine whether a stable long-term relationship exists between the Real Effective Exchange Rate (REER) and nominal exports/imports, as the series are I(1) and non-stationary at levels.

### 5.4.1 Methods of Cointegration Testing

The cointegration test identifies long-run relationships between groups of variables. This study employs the Johansen (1988) and Johansen & Juselius (1990) tests, utilizing two key statistics: the Trace Statistic ( $\lambda_{trace}$ ), which tests the null hypothesis that the number of cointegrating vectors is less than or equal to  $r$ , and the Maximum Eigenvalue Statistic ( $\lambda_{max}$ ), which tests the null hypothesis that the number of cointegrating vectors is  $r$  against the alternative of  $r + 1$ . The null hypothesis ( $H_0$ ) of no cointegration is rejected if the test statistics exceed the critical values at the 5% significance level. If the results differ, priority is given to  $\lambda_{max}$  (Asari et al., 2011). The test statistics are calculated as:

$$\lambda_{trace}(r) = -T \sum_{i=r+1}^g \ln(1 - \hat{\lambda}_i) \quad (10)$$

$$\lambda_{max}(r, r + 1) = -T * \ln(1 - \lambda_{r+1}) \quad (11)$$

Where  $T$  represents the sample size,  $r$  denotes the number of cointegrating vectors and  $\lambda_i$  explains the eigenvalues. The results of both test statistics are summarized in Table 2:

**Table 2: Cointegration Test Results of Johansen**

Hypothesis	Trace Statistic	5% Critical Value	Conclusion	Max Eigenvalue Statistic	5% Critical Value	Conclusion
<i>Model 1: ln NXP &amp; ln REER</i>						
$r=0^*r=0^*$	35.038	25.872	One cointegration relation	29.031	19.387	One cointegration relation
$r \leq 1$	6.007	12.518		6.007	12.518	
<i>Model 2: ln NIM &amp; ln REER</i>						
$r=0^*r=0^*$	9.65	15.494	No cointegration relation	9.601	14.265	No cointegration relation
$r \leq 1$	0.049	3.841		0.049	3.841	

**Notes:** *r* represents cointegrating relations and \* denotes rejection of  $H_0$  at 5%.

In Model 1, both Trace and Max Eigenvalue tests indicate one cointegrating equation, confirming a long-term relationship between REER and export earnings in Bangladesh. The long-run equation is:

$$NXP = 1.04 * REER + 3.16 \quad (0.111) \quad (12)$$

This indicates a 1% appreciation (depreciation) in REER results in a 1.04% decrease (increase) in nominal export earnings, consistent with economic theory.

In Model 2, both tests fail to reject  $H_0$ , indicating no evidence of a long-term relationship between REER and import payments in Bangladesh. These findings confirm the significance of REER in influencing export earnings while showing no similar relationship with import payments. This highlights the asymmetrical effects of REER on different macroeconomic variables in Bangladesh.

### 5.5 Vector Error Correction Model (VECM)

The VECM is applied when cointegration exists among variables, offering insights into the speed of adjustment toward long-term equilibrium and avoiding spurious regression (Engle & Granger, 1987). It captures short-term dynamics while maintaining long-term equilibrium relationships (Hasan et al., 2015).

Since  $\ln(NXP)$  and  $\ln(REER)$  are cointegrated, the VECM is employed using the following form:

$$\Delta \ln\_NXP = \beta_0 + \sum_{j=1}^m \beta_{1j} \Delta \ln\_REER_{t-j} + \alpha ECT_{t-1} + \varepsilon_t \quad (13)$$

Where  $\Delta$  denotes the first-difference operator,  $\varepsilon_t$  is the error term, and  $ECT_{t-1}$  represents the lagged error correction term.

**Table 3: Vector Error Correction Estimates**

Regressors	$D(\ln\_NEX)$	$D(\ln\_REER)$
Constant	-0.368 (0.114)	-0.027 (0.014)
$D(\ln\_NXP(-1))$	-0.75 (0.12)	-0.010 (0.014)
$D(\ln\_REER(-1))$	-0.219 (0.78)	0.48 (0.09)
ECT	-0.37* (0.113)	0.03 (0.014)
Adjusted $R^2$	0.604	0.206

Note: \* significant at 5%, and standard errors in parentheses

The ECT for  $D(\ln(NXP))$  is -0.37, significant and negative, indicating 37% of disequilibrium is corrected monthly. This confirms a long-run relationship between REER and NXP.

In the short run, the WALD test shows causality, as the null hypothesis ( $C(5)=C(6)=C(7)=0$ ) is rejected (p-value > 0.95). This implies REER appreciation (depreciation) increases (decreases) nominal export earnings in both the short and long run.

The model is well-fitted with an adjusted  $R^2$  of 62%, and the prob (F-statistics) is below 5%, confirming the model's validity.

The findings reinforce the importance of REER as a policy variable in managing Bangladesh's export competitiveness.

## 5.6 Diagnostic Tests of the Models

Diagnostic tests for the Error-Correction Model (ECM) assessed serial correlation, heteroskedasticity, and normality. The 1st model passed all tests: no serial correlation (p-value > 5%), no heteroskedasticity (p-value > 5%), and normally distributed residuals (p-value = 0.38). The 2nd model also showed no serial correlation and normal residuals but exhibited heteroskedasticity (p-value < 5%), requiring adjustments like variable transformation or robust standard errors. While the 1st model is statistically sound, the 2nd model needs corrections for reliable inferences.

## 6. Conclusions

This study examines the impact of the Real Effective Exchange Rate (REER) on Bangladesh's nominal export earnings and import payments, a crucial aspect of trade

competitiveness and economic sustainability. Using monthly data from July 2010 to March 2020 and employing Johansen cointegration, and VECM, the study finds:

1. *Long-run Relationship:* A significant long-run equilibrium exists between REER and nominal export earnings. The error correction term indicates a gradual but stable adjustment mechanism, confirming that REER fluctuations influence export earnings over time.
2. *No Direct Impact on Imports:* The study finds no significant relationship between REER and nominal import payments, suggesting that Bangladesh's import structure is influenced more by government policies (e.g., tariff measures, import substitution strategies) rather than exchange rate movements.

These findings have critical policy implications for Bangladesh's trade and exchange rate management:

1. *Maintaining a Competitive REER:* A moderate and stable appreciation of REER may benefit exporters by ensuring cost-competitiveness in global markets. However, excessive appreciation could erode export competitiveness, requiring careful monitoring and periodic adjustments in exchange rate policy. Simplify the REER basket by focusing on key currencies like USD, GBP, EUR, and JPY to ensure stability and competitiveness.
2. *Export-Oriented Industrialization:* Since export earnings respond to REER movements in the long run, policies should focus on modernizing industrial production, reducing input costs, and incentivizing high-value exports to sustain competitiveness.
3. *Managing Import Costs & Productivity:* While REER has no direct impact on imports, strategic tariff reductions on essential industrial inputs (e.g., machinery, raw materials) can enhance productivity, ensuring that import policies support long-term trade balance stability.
4. *Strategic Trade Expansion:* Diversifying export markets through trade agreements, trade facilitation measures, and foreign direct investment (FDI) incentives can reduce dependence on a few trading partners and mitigate external shocks.
5. *Workforce Development:* Address workforce challenges by ensuring fair wages, developing local expertise, and reducing dependency on foreign labor. Prevent talent and asset drain by creating local opportunities and incentivizing remittance contributions.

The results underscore the importance of a balanced exchange rate policy that supports export growth without causing excessive import cost pressures. Future policies should emphasize maintaining REER stability, fostering export diversification, and ensuring

sustainable trade practices to enhance Bangladesh's long-term trade performance. Strategic adjustments in tariff barriers, exchange rate policies, and workforce development are essential to address trade deficits and promote exports, ensuring Bangladesh remains competitive in the global market.

By addressing the gap in existing literature, this study provides valuable insights into the relationship between REER and nominal export earnings and import payments, offering a foundation for future research and policy development.

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