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Analysis Of The Determinants Of The Exports Of Pakistan: A Time Series Analysis

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Article Details

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ABSTRACT

Objective: This research aims to quantify the impact of various economic and institutional variables on Pakistan's exports. **Research Gap:** This study has employed institutional quality as the independent variable for the determinant of exports. Over the recent past a few studies have investigated the impact of institutional quality on Pakistan's exports. The other important independent variable used were World Tariff, World GDP, Relative Prices, GDP, Trade Openness and Exchange rate. **Methodology:** The study employed TSD from 1990 to 2024. This study analyzed the data by using the Augmented Dickey-Fuller Test, Granger Causality Test, Autoregressive Distributed Lag Model and Error Correction Model. **The Main Findings:** The results stated Gross Domestic Product, Trade openness, Institutional Quality, World Gross Domestic Products have positive while World Tariffs Rate, Relative Prices and Real Exchange Rate have negative impacts on the Pakistan's exports. **Practical Implications of the Findings:** This study suggests that to increase exports Pakistan needs a stable exchange rate, have strong institutions and open trade policies. This study also suggests to focus on enhancing product competitiveness and leveraging global demand. This study also suggests to stabilize the exchange rate, boost domestic economic growth and production, improve product competitiveness, strengthen institutions, increase trade openness, diversify markets globally, fight for lower tariffs, and maintain consistent export momentum.

INTRODUCTION

Trade flows through the economic system like blood flows through the human body. According to both classical and modern liberal economists (Majeed & Ahmed, 2006), trade is simply the engine of economic growth. It is generally accepted that a nation's export performance is a key factor in breaking the vicious cycle of underdevelopment. A strong export performance is believed to play a vital role in accelerating economic growth.

Exports also facilitate the transfer of capital from developed to developing countries in various forms (Farahane & Heshmati, 2020). Exports generate foreign currency, crucial for imports, debt repayment, and foreign investment. Exports boost GDP, spurring increased production and creating jobs in manufacturing, services, and agriculture. Essentially, exports are a vital engine for economic growth, particularly for leading exporting nations. After the removal of trade barriers in various economies, it has led to a rise in employment opportunities as well as reduced the costs of production when the production is in bulk, which in turn has increased the GDP of the economies, which led to the overall economic growth (Chauhan, 2021).

Exports diversify economies, boosting resilience to shocks. They drive productivity through new tech and management, facilitate knowledge transfer, and open new markets. Increased exports also reduce trade deficits. Exports elevate incomes, improve living standards, and reduce poverty, boosting overall citizen well-being. When export strategies align with comparative advantage, global economies achieve stable growth, raising income and employment, and optimally allocating resources to increase GDP. Essentially, more exports lead to higher GDP and economic development.

Exports are the main determinant of economic growth mentioned by the export-led growth Hypothesis, but there are few arguments here that can logically justify this hypothesis. Mehrara and Firouzjaee (2011) find bidirectional causality, meaning that export growth influences GDP growth, and vice versa, in both the long and short run. This finding supports the Export-Led Growth (ELG) theory, which suggests that focusing on expanding exports can lead to economic growth. Economic growth, driven by factors such as domestic investment, human capital accumulation, and institutional development, can in turn foster a more competitive and diversified export sector (Rodrik, 2007).

SOCIAL AND INSTITUTIONAL DETERMINANTS

In developing countries, better institutions are linked to more trade, driven by either increased productivity or higher per capita income, as noted by Abbas Naqvi et al. (2022) and Acemoglu

(2012). Mushed et al. (2014) consistently show a negative relationship between the exchange rate and exports. Thuy & Thuy (2019) find that exchange rate volatility hurts exports, and Other studies (Serenis & Tsounis, 2014) discover that exchange rate volatility can boost exports. Shingil et al. (2022) suggest that global economic growth boosts exports. In International Trade Theory (Krugman & Obstfeld, 2018), a country's exports are unequivocally negatively impacted by higher world tariff rates. Trade openness promotes economic growth and encourages countries to diversify their exports, reducing their reliance on a few products and enhancing export stability (Lee, 2011).

OBJECTIVES

The following are the objectives of the study to investigate the nexus between the exports and the real exchange rate of Pakistan.

- i. To explore the association between the world tariff rate and exports of Pakistan
- ii. To identify the link between the export and per capita GDP of Pakistan
- iii. To explain the relationship between the exports and the institutional quality of Pakistan
- iv. To investigate the bond between the export trade openness of Pakistan
- v. To explore the tie between the exports and the relative prices of Pakistan
- vi. To identify the interconnection between the exports and would demand of Pakistan

SIGNIFICANCE OF THE STUDY

This study holds significance for policymakers, economists, and students by examining the impact of World GDP, institutional quality, trade openness, GDP, Exchange rate, world tariff rate, and relative prices on Pakistan's export performance. It provides insights into how these variables influenced exports over recent decades, helping students understand export trends and aiding policymakers in designing effective trade and industrial policies to enhance exports and overall economic growth.

LITERATURE REVIEWS

Sheikh Ali et al. (2018) analyzed the effects of foreign debt and foreign aid on Somalia's economic growth from 1970 to 2014. They found that exports had a unidirectional causality toward GDP, meaning exports Granger-caused economic growth, but economic growth did not Granger-cause exports.

Jadoon et al. (2018) investigated the determinants of Pakistan's exports, utilizing time-series annual secondary data from 1990 to 2016. The results suggested that exports were positively related to foreign direct investment (FDI), GDP, employment, and raw materials. In contrast,

exchange rates, external debts, taxes, sanctions, and protectionism had negative effects on exports.

Beverelli et al. (2018) examined the impact of national institutions on international trade and development during the period from 1996 to 2006. Their empirical analysis provided robust evidence that stronger institutions significantly promote trade. Additionally, they found that better institutional quality has a stronger impact on the imports of poorer nations from wealthier countries compared to their exports to wealthy nations.

Gil Pareja et al. (2019) analyzed the impact of corruption on trade. The results revealed a negative effect of corruption on trade, as poor institutional quality, political instability, and a flawed rule of law heightened the uncertainty regarding expected gains from international transactions. This, in turn, discouraged international trade.

Rasheed et al. (2019) studied the relationship between exports and GDP in Pakistan and India. They noted a positive relationship between the two, emphasizing that economic growth often leads to increased exports, particularly in developing economies. The study highlighted that improved economic conditions enable greater production and competitiveness, which in turn boosts exports.

Hussain et al. (2020) investigated the impact of supply-side factors on the export performance of Pakistan at a disaggregated level, using a time-series data set from 1971 to 2014. The results suggested that in the long run, supply-side factors significantly impacted exports. In the short run, domestic demand heavily influenced exports, while production capacity and relative prices had lesser impacts.

Jived et al. (2020) examined the impact of macroeconomic variables on the export competitiveness of Pakistani basmati from 2003 to 2016. The nominal protection coefficient was used as the dependent variable, while Pakistan's exchange rate, trading countries' exchange rates were used as independent variables. The results suggested that exchange rates and other macroeconomic variables affected export competitiveness.

Rehman et al. (2020) examined the relationship between exports and infrastructure quality, taking domestic investment and per capita GDP as control variables. The study found that infrastructure, per capita GDP, and domestic investments had significant and expansionary effects on exports in Pakistan.

Dalang (2020) examined the determinants of Ethiopia's export performance from 1981 to 2018. The study found that per capita GDP positively influenced exports in both the long and short

run. Gross capital formation positively affected exports in the short run. The study concluded that policies aimed at enhancing real per capita GDP and maintaining economic stability would improve Ethiopia's export performance.

Gutiérrez and Martín Machuca (2021) investigated the impact of trade protectionism in the form of tariff barriers on Spanish goods exports. They analyzed data from 1995 to 2019 and found that a 1% increase in tariffs reduced the probability of exporting to a specific market by nearly 0.08 percentage points and decreased exported values by around 1%.

Hou et al. (2021) investigated the impact of institutional quality on trade costs across 133 countries from 1995 to 2014. They found that better institutional quality significantly reduced total trade costs, as well as trade costs for both agricultural and manufactured goods.

Hassan et al. (2022) explored the factors influencing Canada's export performance from 1979 to 2019. The study found that the real effective exchange rate significantly reduced exports in both the long and short run, suggesting that depreciating the Canadian currency boosted exports.

Abbas Naqvi et al. (2022) stated that institutional quality and trade were positively associated in developing countries, as stronger institutions led to trade expansion through productivity growth or per capita income growth.

Jyoti & Bhatt's (2022) study revealed that real exchange rate volatility exerted mixed effects on India's manufacturing exports in both the long run and short run, while world real GDP showed a positive and significant impact on real exports in the long run, indicating that global economic growth could boost India's exports.

Ahmad et al. (2024) explained the effects of financial sector liberalization, foreign assets, domestic businesses, and real interest rates on Singapore's export performance period 1978 to 2023. The study found that financial liberalization and strong domestic businesses positively impacted export performance.

THEORETICAL FRAMEWORK AND ECONOMETRIC METHODOLOGY

THEORETICAL FRAMEWORK

The relationship between a country's exchange rate and its exports can be explained by the Marshall-Lerner Condition, which is part of the broader Elasticities Approach to the Balance of Payments. This condition focuses on the price elasticity of demand for exports. While the effect of exchange rate changes on exports can vary due to factors like price elasticity of supply and demand, market structure, and pricing strategies, a real depreciation generally increases export

competitiveness and volume, assuming other factors remain constant.

The theoretical link between institutional quality and exports is explored through the lens of New Institutional Economics (North, 1990) and transaction cost economics Coase, R. H. (1937). Good institutional quality significantly reduces the three types of trade costs, that is, total trade costs, trade costs of agricultural goods, and trade costs of manufactured goods. Hou et al. (2021).

The theoretical framework is rooted in the principle of price elasticity of demand within international trade theory, as outlined by Krugman & Obstfeld (2018). This framework suggests a direct relationship between relative prices and export attractiveness. When a country's export prices are comparatively lower than those of its competitors, foreign consumers (importers) tend to demand more of those goods. This is based on the assumption that, all other factors being equal (*ceteris paribus*), consumers will prefer more affordable options.

Essentially, lower relative prices make a country's exports more competitive and desirable in the global market. This concept directly links to the idea that a reduction in price can lead to an increase in demand, which, in the context of exports, translates to more foreign buyers being drawn to the country's goods.

ELG (Emery, 1967; Balassa, 1978; Feder, 1982) suggests that an increase in exports drives overall economic growth (GDP) through various channels, including promoting specialization, achieving economies of scale, and stimulating technological advancement. On the other hand, GLE (Jung & Marshall, Helpman, & Krugman, 1985) posits that a robust domestic economy, indicated by a strong GDP, provides the foundation for strong export performance. This indicates a bidirectional relationship where exports and GDP influence each other.

The theoretical link between WGDP and a country's exports is primarily driven by external demand, as articulated by the Gravity Model of International Trade. The Gravity Model (Tinbergen, 1962; Pöyhönen, 1963) posits that trade between two countries is directly proportional to the product of their economic sizes (often measured by GDP) and inversely proportional to the distance between them. World GDP serves as a proxy for the overall size and income level of the global market accessible to the exporting country.

Endogenous Growth Theory (Rivera-Batiz & Romer, 1991) contributes by emphasizing that openness fosters innovation and productivity improvements through increased competition and access to advanced imported intermediate inputs, ultimately strengthening a country's export capabilities and market opportunities.

The theoretical underpinning of the relationship between trade openness and export performance is primarily rooted in Traditional Trade Theory (comparative advantage by David Ricardo in 1817), which posits that reducing barriers directly lowers trade costs and facilitates specialization, leading to increased export activity.

The Theoretical relationship between the world tariff rate and a country's exports is unequivocally negative. Higher tariffs imposed by trading partners reduce the competitiveness of a country's exports, leading to a decrease in the quantity demanded by foreign buyers and consequently lowering the exporting country's export volume and value. Exports are unequivocally negative. Higher tariffs imposed by trading partners reduce the competitiveness of a country's exports, leading to a decrease in the quantity demanded by foreign buyers and consequently lowering the exporting country's export volume and value. (International Trade Theory by Krugman, & Obstfeld, 2018).

VARIABLES OF THE STUDY

In this research study, export is the dependent variable, whereas GDP, institutional quality, world demand, relative prices, and real exchange rate are independent variables.

$$X = f(GDP, IQ, WGDP, RP, WTR, TO, REER)$$

X is the Exports, which is the function of social and institutional determinants.

The Exports (X)= F (Gross Domestic Product, institutional quality, world demand, relative prices, real exchange rate).

TABLE :1: SOCIAL AND INSTITUTIONAL DETERMINANTS OF THE EXPORTS

S. No	Name	Abbrev.	Measurement	Possible sign
01	Real Exchange Rate	RER	\$ value in PKR	Positive
02	GDP	GDP	Million \$	Positive
03	Institutional quality	IQ	WGI	Positive
04	Trade openness	TO	Percentage of GDP	Positive
05	Relative prices	RP	Pak Prices/World Price	Negative
06	World Demand	WD	World GDP	Positive
07	World Tariff Rate	WTR	Average Annual Tariff	Negative

ECONOMETRIC TECHNIQUE AND RESEARCH METHODOLOGY

The analysis was done in two steps; in the first step, this research estimated the exports nexus by using the Granger causality test. The Granger causality test is a statistical hypothesis test for determining whether one time series is useful in forecasting another. In the second step, this study has quantified the social and institutional determinants of exports. In the second step of econometric methodology, this study will employ the Autoregressive Distributed Lag Model (ARDL). For ARDL, the variables should be stationary of mixed order, some should be non-stationary at the level, and others should be stationary at 1st difference, $I(1)$. While the dependent variable should be stationary at level $I(0)$. The existence of ARDL-type co-integration is further verified by using the ARDL bound test. The lag length or order of the ARDL is determined by using various criteria like SBC and AIC. The following ARDL model is employed in this study.

$$Exports = \beta_0 + \beta_1 GDP + \beta_2 WGDP + \beta_3 WTR + \beta_4 ER + \beta_5 IQ + \beta_6 RP + \beta_7 TO + \mu_1$$

DATA SOURCES

This research study used the TSD from 1990 to 2024. EViews 10 was used for the data analysis. The data was retrieved from the State Bank, World Governance Indicators, and World Development Indicators.

DATA ANALYSIS AND INTERPRETATION

This chapter presents an in-depth analysis of the data, accompanied by result tables, discussion, and interpretation of findings in both short-term and long-term contexts, along with diagnostic tests. The chapter is divided into two main sections: the first investigates the relationship direction between exports and their determinants, while the second explores the factors influencing exports.

ADF TEST

TABLE: 4.1 RESULTS OF ADF TESTS

S.NO	Name	ADF	Test	Critical	P-value	Results
01	Exports	Level	-2.128460	-3.557759	0.5123	I(1)
		1 st difference	-5.194233	-3.557759	0.0010	
02	GDP	Level	-0.905306	-3.574244	0.9418	I(1)
		1 st difference	-3.037247	-2.954021	0.0417	
03	Trade openness	Level	-2.128440	-3.548490	0.5123	I(1)
		1 st difference	-5.945538	-3.552973	0.0001	
04	REER	Level	-1.920401	-2.957110	0.3192	I(1)
		1 st difference	-4.256031	-2.957110	0.0022	

05	World GDP	Level	-5.943900	-3.548490	0.0001	<i>I(0)</i>
		1 st difference	-6.622620	-2.957110	0.0000	
06	Relative Prices	Level	-5.702172	-3.548490	0.0002	<i>I(0)</i>
		1 st difference	-10.30832	-2.954021	0.0000	
07	World Tariff Rate	Level	-1.726605	-1.951332	0.0797	<i>I(1)</i>
		1 st difference	-7.397521	-2.954021	0.0000	
08	Institutional quality	Level	-1.884284	-3.562882	0.6384	<i>I(1)</i>
		1 st difference	-5.335853	-3.557759	0.0007	

Source: Author's Own Estimation

The variable of this study are stationary at different levels, some are stationary at level $I(0)$ and some are stationary at first difference $I(1)$. World GDP and Relative Prices were integrated at level $I(0)$. While other variables were non-stationary at the level and stationary at first difference, $I(1)$. The results indicated the use of the Autoregressive Distributed Lag Model.

BOUND TEST

TABLE 4.2 RESULTS OF THE BOUND TEST

Test	Statistics	Level	of	Lower	Upper	Results
Statistics	value	significance		Bound	Bound	
F-Statistics	12.27165	10%		2.22	3.17	ARDL type Co-Integration Exists

Source: Author's own estimation

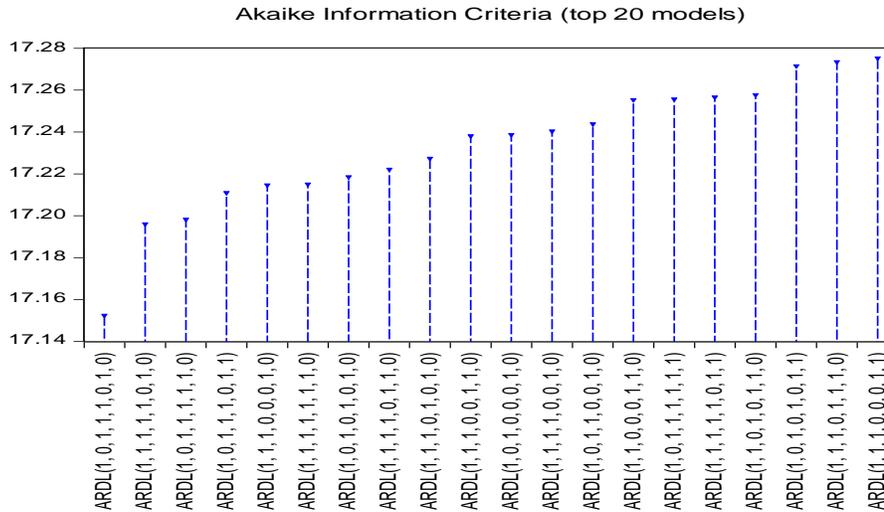
The result of the Bound test has confirmed the existence of ARDL type Co-integration among the variables. The F-calculated was greater than the upper bound. The results have rejected the Null Hypothesis of the non-existence of the ARDL co-integration.

TESTING THE ORDER OF THE ARDL

This study employed the Akaike graphical method to identify the lag order of the ARDL model.

FIG: 4.1 RESULTS OF AIC LAG SELECTION TEST

To identify the optimal order of the ARDL model and how many lags of dependent and independent variables might be used in the model, many criteria could be used, but this study employed the Akaike Information Criteria (AIC).



LONG RUN ANALYSIS OF EXPORTS AND THEIR DETERMINANTS

TABLE: 4.3. RESULTS OF ARDL CO-INTEGRATION

S. No	Variables	Coefficient	P-Value
01	Exports(-1)	0.394916	0.0002
02	WTR	379.5355	0.3657
03	GDP	0.095334	0.0001
04	REER	-19.69140	0.7091
05	REER(-1)	-174.2521	0.0060
07	Relative prices	-3.076614	0.4347
08	RELATIVE PRICES(-1)	-5.991989	0.1257
09	ROL	79.43615	0.0547
10	ROL(-1)	-7551.943	0.0935
11	Trade openness	403.5296	0.0000
12	WORLD GDP	294.6368	0.0586
13	WORLD GDP(-1)	244.7069	0.0639

Source: Author's Own Estimation

Previous exports have a significant positive impact on current exports. A \$1 million rise in past exports leads to a \$0.39 million increase in current exports, a finding consistent with Sunde et al. (2023).

A stronger currency significantly reduces exports. A one-unit REER increase leads to a \$19.69

million decrease in exports as it makes exports more expensive internationally, aligning with basic international trade theory.

The researches including (Rangarajan & Kannan (2017)) and studies by Tomoiaga and Pop Silaghi (2022) and Murshed et al. (2014) consistently shows a negative relationship between the exchange rate and exports, supporting the Marshall-Lerner condition. This means a stronger currency reduces export competitiveness. However, these findings contradict Di Nino et al. (2013) observed a positive effect of exchange rate on export growth, particularly for industrial goods.

A \$1 million increase in GDP leads to a \$0.0953 million increase in exports. This supports the export-led growth hypothesis, with Mehrara and Firouzjaee (2011) confirming a bidirectional causality between export growth and GDP growth.

This supports the ELG theory, where expanding exports drive economic growth. Importantly, this relationship can be bidirectional, as economic growth as noted by Rodrik (2007). Khan and Emirullah (2019) negate the export-led growth hypothesis because they found a negative correlation in their study between GDP and exports.

The coefficient of -3.076614 suggests a negative but statistically insignificant relationship. The relationship between exports and relative prices is based on the principle of competitiveness. Some studies (Zhang & Buongiorno, 2010; Khosa et al., 2015; Thuy & Thuy, 2019) find that exchange rate volatility hurts exports, and Other studies (Serenis & Tsounis, 2014) discover that exchange rate volatility can boost exports.

Strong and reliable institutions (rule of law, low corruption) significantly boost exports, with a coefficient of 79.43615 indicating a positive and statistically significant relationship. This aligns with Abbas Naqvi et al. (2022) and others (Acemoglu, 2012; Acemoglu et al., 2005; Levchenko, 2007) who emphasize that high institutional quality fosters trade by reducing costs and uncertainty, making it a fundamental determinant, while poor institutions hinder it (Araujo et al., 2016).

Trade openness significantly and positively impacts exports, supporting the consensus in research (e.g., Sunde et al., 2023; Rivera-Batiz & Romer, 1991; Krueger, 1997; Hossain & Alauddin, 2005). This aligns with the idea that increased openness leads to higher exports and short-term economic growth. However, this finding contradicts Siddiqui and Iqbal (2010), who found a negative long-run relationship in Pakistan, suggesting that openness might hinder growth if a nation specializes in low-tech goods (Kneller et al., 2008).

World GDP growth strongly and positively impacts a country's exports, with a coefficient of 403.5296, indicating a statistically significant relationship. This aligns with findings by Jyoti and Bhatt (2022), Yusuf & Nasrulddin (2024), and Shingil et al. (2022), suggesting global economic growth boosts exports. However, Sheikh Ali et al. (2018) challenge a bidirectional relationship, proposing a unidirectional causality from exports to GDP.

As per International Trade Theory (Krugman & Obstfeld, 2018), a country's exports are unequivocally negatively impacted by higher world tariff rates. Such tariffs, imposed by trading partners, decrease the competitiveness of exported goods, leading to reduced foreign demand and consequently lower export volume and value.

DIAGNOSTIC TESTS

ECM has a very low R-squared, which states that the model explained about 22 percent of the variation. The Breusch-Pagan-Godfrey p-value was 0.2931, which stated that there was no heteroscedasticity. The Breusch-Godfrey test p-value was 0.4725, which stated that there was no autocorrelation.

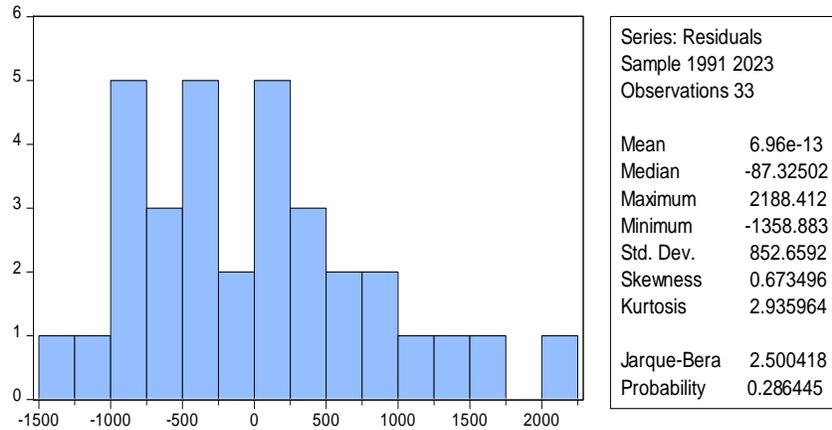
TABLE 4.7 RESULTS DIAGNOSTIC TEST OF LONG RUN

S.No	Test Type	Null Hypothesis	Test Statistics	P-Values	Results
01	R-Squared		0.992573		Best fit
02	F-Test	The model is overall insignificant	195.3166	0.000000	Overall significant
03	Breush-Pagan - Godfrey	No heteroscedasticity	9.925123	0.7000	No hetroscedasticity
04	Breush-Godfrey LM	No autocorrelation	1.287091	0.5254	No autocorrelation

Source: Author's own estimation

JARQUE-BERA TEST OF NORMALITY

FIGURE 3: RESULTS OF JB TEST

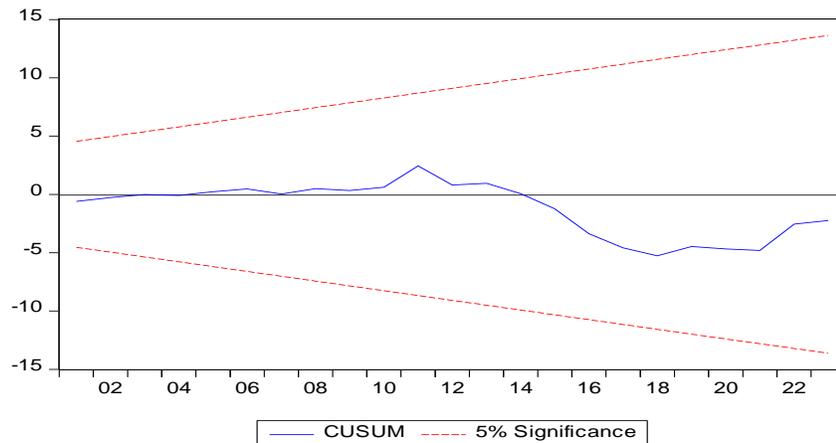


The JB Test was used to check the model specification errors. It followed the χ^2 distribution. The JB statistics p-value was 0.286, which stated that residuals were normally distributed and the model was correctly specified.

CUSUM TEST

The CUSUM test was used to check the stability of the model. The blue line was inside the red lines, and the model was stable.

FIGURE 4.2 CUSUM TEST



SHORT RUN ANALYSIS OF EXPORTS AND THEIR DETERMINANTS

The short-run nexus between Exports and their social and institutional handles was captured through the Error Correction Model.

TABLE 4.5. SHORT RUN COEFFICIENTS

S.No	Variables	Coefficients	p-value	Remarks
01	GDP	0.079279	0.0001	
02	REER	-68.99404	0.2575	
03	RELATIVE_PRICES	1.115150	0.7137	
04	ROL_	-1305.448	0.7438	
05	TRADE_OPENNESS	412.4111	0.0001	
06	WORLD GDPWB	-53.76237	0.6553	
07	WTR	98.07970	0.0897	
08	ECM	-0.546273	0.0342	

Source: Author's Own Estimation

The GDP, Relative prices, Trade openness, and WTR have a direct positive impact on exports, while REER, ROL, and WGDP hurt Exports in the short run.

DIAGNOSTIC TESTS

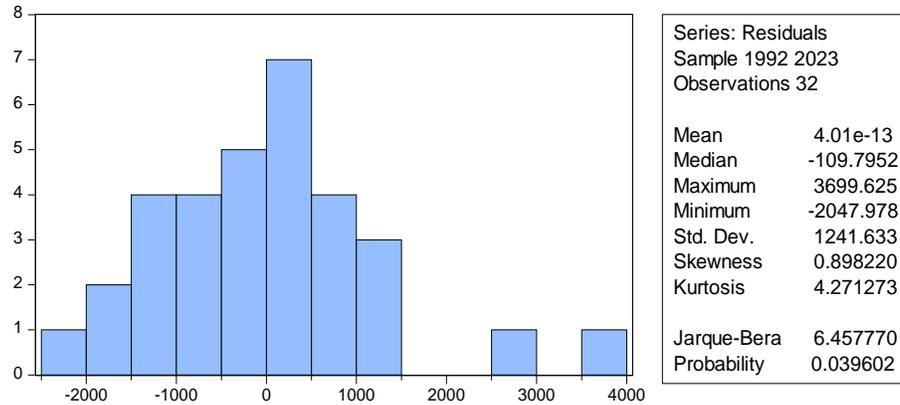
TABLE 4.30. RESULTS OF DIAGNOSTIC TESTS

S.NO	Test Type	Null Hypothesis	Test Statistics	P-Values	Results
01	R-Squared		0.723990	0.0001	Best fit
02	F-Test	The model is overall insignificant	7.541291	0.000063	Overall significant
03	Breush-Pagan Godfrey	No heteroscedasticity	9.615155	0.2931	No heteroscedasticity
04	Breush Godfrey LM	No autocorrelation	1.499503	0.4725	No autocorrelation

Source: Author's own estimation

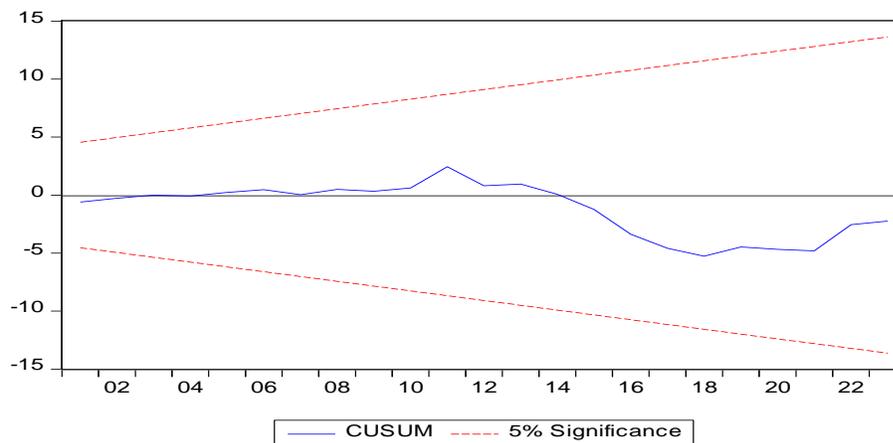
JARQUE-BERA TEST OF NORMALITY

The JB statistics' p-value was 0.039602, which stated that residuals were normally distributed and the model was correctly specified.



CUSUM TEST OF STRUCTURAL STABILITY

FIG: 4.20 CUSUM TEST



CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This study intended to explore the nexus between the Exports and various important economic and institutional determinants. The study employed ARDL technique and Granger causality technique to analyze the data. This study employed the TSD from 1990 to 2024.

According to the quantitative results, this study concluded that in the long run, a 1-unit increase in exchange rate will decrease the exports by \$19.69 million a stronger currency reduces export competitiveness. The short-run relationship is insignificant, and Granger causality confirms a unidirectional causality from REER to exports.

GDP has a significant positive relationship with exports in both the short and long run. A \$1

million increase in GDP is associated with a \$0.0953 million rise in exports. This supports the Export-Led Growth (ELG) theory, which suggests that overall economic growth helps cultivate a more competitive export sector. In the long run, World GDP exhibits a strong, statistically significant positive relationship with a country's exports, as increased global income directly drives higher demand for exports. While World GDP growth doesn't show a significant short-run relationship with exports, Granger causality tests confirm that World GDP growth leads to a positive long-term impact on exports.

Trade openness significantly and positively impacts exports in both the short and long run, indicating that increased trade liberalization boosts exports. Furthermore, institutional quality shows a positive and statistically significant long-run relationship with exports. Strong institutions foster exports by reducing production costs and enhancing a country's comparative advantage. In short-run Analysis, the rule of law does not significantly affect exports. Long-run analysis emphasizes the importance of institutions for export performance.

In the long run, relative prices show a negative but statistically insignificant relationship with exports. In the short run, the impact is positive, but also not statistically significant. The theoretical expectation is that lower relative prices lead to increased exports. The World Tariff Rate has no statistically significant long-run impact on exports, and its short-run effect is positive but insignificant, despite the theoretical expectation of a negative relationship due to increased export prices. Conversely, past export performance significantly and positively influences current exports in the long run.

RECOMMENDATIONS FOR POLICYMAKERS AND ECONOMISTS

Based on these findings, here are specific recommendations for policymakers and economists to enhance Pakistan's export performance. Policymakers must prioritize a stable and competitive real exchange rate (REER) for sustained export growth. While short-term currency depreciation can boost exports, frequent fluctuations create uncertainty. They should implement sound macroeconomic policies to maintain a competitive REER and offer targeted support to export industries if significant currency appreciation occurs to protect their competitiveness.

Govt should Continue to implement policies that foster overall economic growth, as a growing domestic economy provides a stronger base for export expansion. This includes investments in human capital, infrastructure, and domestic industries. Stimulate domestic production and economic activity, as GDP has a direct positive impact on exports in the short run. This can involve policies that encourage industrial output and service sector growth. Focus

on improving the competitiveness of Pakistani products in international markets by reducing production costs and enhancing quality. This aligns with the principle that lower relative prices lead to increased exports. Implement measures to control input costs for exporters and promote efficiency to keep export prices competitive.

Emphasize reforms that strengthen institutional capacity, including ensuring robust property rights, maintaining the rule of law, eliminating corruption, and fostering a responsive bureaucracy. These are critical for reducing transaction costs and promoting trade expansion. Continue to pursue policies that promote trade openness, such as reducing trade barriers, signing favorable trade agreements, and participating in global value chains. The study confirms a strong positive relationship between trade openness and exports. Encourage export diversification to reduce reliance on a few products and markets, making exports more resilient to external shocks.

Continuously monitor global economic trends and detect growing markets. Broaden export markets to capitalize on growth in various regions. Enhancing trade diplomacy will facilitate access to larger and growing global markets, ultimately benefiting from global economic upswings. Participate in bilateral and multilateral trade discussions to promote lower tariffs on Pakistani products internationally. Higher tariffs can erode export competitiveness, making it essential to assess their impact and explore mitigation strategies. The favorable influence of past exports on current exports emphasizes the need for steady export expansion. Strategies should focus on maintaining export growth and capitalizing on previous successes.

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