



## Research Article

## Determinants of Bilateral Trade Between Pakistan and United Arab Emirates

## Article History

Received: October 09, 2022

Revised: December 13, 2022

Accepted: December 25, 2022

Published: December 30, 2022

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## Abstract

Bilateral trade refers to the exchange of goods, services, and investments between two countries. It involves the import and export of goods and services, specifically between two trading partners. In a bilateral trade relationship, each country benefits from the other's resources, capabilities, and market demand. Pakistan and the United Arab Emirates (UAE) have maintained strong trade relations over the years. The UAE is one of Pakistan's largest trading partners in the Middle East region. To analyze the factors affecting bilateral trade between Pakistan and United Arab Emirates, various variables were chosen, and time series data from 1975 to 2022 was used for the study. Information on these indicators was sourced from the World Bank, the Federal Bureau of Statistics in Islamabad, Pakistan, the State Bank of Pakistan, the Pakistan Economic Survey, International Financial Statistics, and the International Monetary Fund. For this purpose, the Pooled OLS model was used to estimate the impact of different factors. A unit increase in the UAE's GDP is associated with an increase of 34.460 in the dependent variable. The significance level of .000 suggests that the GDP of UAE is highly significant in predicting the dependent variable. A unit increase in the population of Pakistan is associated with an increase of 31.677 in the dependent variable. The significance level of .046 is under the .05 threshold, indicating that the population of Pakistan is statistically significant. A unit increase in the population of UAE is associated with an increase of 927.301 in the dependent variable. With a significance level of .046, the population of UAE is also a significant predictor. A unit increase in inflation in Pakistan is associated with a decrease of 35.647 in the dependent variable. At a significance level of .016, inflation in Pakistan is a significant predictor. A unit increase in the exchange rate in UAE is associated with a substantial increase of 2973.807 in the dependent variable. With a significance level of .055, the exchange rate in UAE is close to being statistically significant but falls just outside the commonly used threshold of .05.

Keywords: Determinants, Bilateral trade, Pakistan, United Arab Emirates

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### Introduction

Bilateral trade refers to the exchange of goods, services, and investments between two countries. It involves the import and export of goods and services, specifically between two trading partners. In a bilateral trade relationship, each country benefits from the other's resources, capabilities, and market demand. Bilateral trade agreements are typically established to facilitate and regulate trade between two nations. These agreements can cover various aspects such as tariffs, customs procedures, market access, intellectual property rights, and investment rules. By reducing barriers to trade, such as import duties or quotas, bilateral trade agreements aim to promote economic cooperation, increase market opportunities, and foster mutually beneficial relationships between the involved countries. Bilateral trade agreements can be comprehensive, covering a wide range of sectors, or focused on specific industries or products. They are negotiated and agreed upon by the participating countries to establish mutually agreed-upon terms and conditions for trade, with the goal of

boosting economic growth, job creation, and overall welfare for both nations. Bilateral trade is distinct from multilateral trade, which involves trade between three or more countries and is governed by agreements such as those under the World Trade Organization (WTO). While multilateral trade agreements aim to establish global trade rules and regulations, bilateral trade agreements are more tailored to the specific interests and needs of the participating countries.

A simple rule in trading with other countries is to buy things from places where the prices are low, and sell your own things to places where people will pay the most. This kind of trade has been good for helping economies grow (Afonso, 2001). Trade plays a big role in helping a country's economy get better. It can also change how well a country is doing socially and politically. Both selling to other countries (exporting) and buying from them (importing) are important. Countries that trade a lot usually make more money (Noguer & Siscart, 2005). A country buys materials and goods from other countries to help its own businesses if it doesn't have what it needs. These imports are also needed to give local people the things they want. Selling to other countries is important for making enough money and relying less on other countries for goods. This also lets the country buy more from others. To really help the economy grow quickly, being able to buy and sell a lot with other countries is crucial. Pakistan isn't stuck without access to the sea. Countries that don't have a coast face some economic challenges because they have to rely on neighbors with ports (Lahiri & Masjidi, 2012). This can make trading more expensive for them. For example, Afghanistan doesn't have a coast, so it uses the land of countries like Pakistan and Iran to trade with others. When two countries trade directly with each other, that's called bilateral trade. In this kind of trade, the closer the countries are, the easier it usually is to trade (Fink et al., 2005).

### ***Trade Relation of Pakistan with the United Arab Emirates***

Pakistan and the United Arab Emirates (UAE) have maintained strong trade relations over the years. The UAE is one of Pakistan's largest trading partners in the Middle East region. The trade between the two countries is characterized by a significant volume of imports and exports and substantial investment flows. The trade volume between Pakistan and the UAE has been consistently substantial. In recent years, the trade balance has been in favor of the UAE, with Pakistan importing more goods from the UAE than it exports. Major traded goods include petroleum products, machinery, chemicals, textiles, and agricultural products. Both countries really want to be better friends and work together in many different areas. About 1.4 million people from Pakistan are working in the United Arab Emirates. Pakistan was the first country to recognize the UAE when it became independent officially. Since then, the two countries have been building a good relationship. Now, the UAE is Pakistan's second-biggest trading partner.

### ***Need of the Study***

The United Arab Emirates, Pakistan's second-largest trading partner, was prioritized for analysis in this study. It is important to note that the United Arab Emirates is not primarily an agricultural country, and the products imported into Pakistan from the United Arab Emirates are essentially re-exports. By studying the determinants of bilateral trade between Pakistan and the United Arab Emirates as a trading partner, we can develop policies that cater to the preferences of markets for our trade with the United Arab Emirates.

### ***Objectives of the Study***

Following are the specific objectives of the study.

1. To review the different factors affecting trade
2. To estimate the impact of different factors, trade between Pakistan and United Arab Emirate
3. To suggest policy measures for the promotion of trade between the countries under consideration

### ***Review of Literature***

Different research studies were conducted on Pakistan's trade with other countries to estimate the impact of different factors on trade (Javed & Ghafoor, 2013; Meijers, 2014; Javed et al., 2015; Javed et al., 2016; Ambreen et al., 2017; Javed et al., 2017; Hanif, 2018; Javed et al., 2018; Fatima et al., 2019; Nazeer et al., 2019; Javed et al.,

2020; Ali et al., 2021; Nazir et al., 2022). Shahbaz and Leita0 (2011) looked at Pakistan's internal trade from 1980 to 2006. They used specific factors that were useful for their research. Their findings showed that internal trade goes down when there's a big difference in income between Pakistan and its trading partners. They also found solid evidence that similar demand affects trade positively. They included economic factors in their study and found that it positively impacted internal trade. Their study also highlighted the importance of producing a lot and offering different kinds of products. In the end, their data confirmed that lower transportation costs lead to more trade. Haq et al. (2011) used specific statistical methods to examine the impact of economic growth on food imports from Pakistan. They studied 36 countries that were grouped based on income levels and focused on 29 types of food products imported from Pakistan between 1990 and 2000. The study found that these countries' economic growth did affect their food imports from Pakistan. Especially for countries with lower-middle incomes, they spent even more on food imports from Pakistan as their economy grew. This suggests that these lower-middle-income countries offer good opportunities for Pakistan's food exports.

Suvankulov and Ali (2012) focused on the growing trade relationship between Pakistan and Turkey and used a gravity model to make trade projections from 1996 to 2009. They found that Pakistan's exports to Turkey had soared, largely due to its booming textile industry. On the other hand, Turkey's exports to Pakistan were valuable but fell short of the model's projections. For 2009, the model estimated Turkey would export goods worth \$749.2 million to Pakistan, but the actual number was only \$163.1 million. Despite this, the structure of Turkey's exports to Pakistan was more diverse. About 80% of Pakistan's exports to Turkey were in textiles and cereals, sectors with limited growth prospects due to land and water constraints. The study concluded that a proposed free trade agreement would benefit Turkey more, confirming their initial findings. Overall, the research suggested that while Pakistan had exceeded trade expectations with Turkey, there was still untapped potential, especially on Turkey's end. Ghafoor et al. (2013) delved into the mango export market from Pakistan to the United Arab Emirates. They used data from a random sample of 40 mango exporters, collected through in-depth interviews with a pre-tested questionnaire. Their analysis looked at various factors such as purchase prices, marketing costs, and selling prices to assess the profitability of exporting mangoes to the UAE. The study found that the gross margin per ton of mango was Rs. 31,333, with net export margins of Rs. 11,228 per ton and a percentage margin of 52.3%. Their regression analysis showed that key factors affecting mango exports included the exporter's education level, professional experience, average marketing costs, and possession of an ISO certificate. The study concluded that to secure better prices in the UAE market, Pakistan needs to cut down on marketing costs and focus on quality improvement.

Akhtar et al. (2013) delved into Pakistan's competitive edge in exporting specific horticultural goods. They used a range of comparative advantage and competitive advantage indices in the context of global trade. Their findings showed that Pakistan had gained both comparative and competitive advantages over the study period, marking a notable shift from previously disadvantaged positions. The study highlighted those mandarins maintained a higher revealed comparative advantage compared to other categories throughout the study period. Onions, too, demonstrated comparative advantages, although they fluctuated over time. The research pointed out that Pakistan's competitive strengths in these horticultural products have been on the rise, signaling the potential for increased foreign exchange earnings. The authors emphasized the need for policy initiatives and collaboration among all stakeholders to further bolster Pakistan's comparative and competitive advantages in the horticulture sector. Kang et al. (2009) deeply studied how rice exports are tied to economic growth. They focused on the big hitters in the rice game: Thailand, Vietnam, India, and the U.S. What was their aim? To see how much sway these countries have in the global market and what role economic growth and foreign investments play in that. Market power does matter, and it's not just a one-way street. In fact, it's a two-way relationship between the rice trade and the economies of these major exporters. So, they concluded that the supply of rice on the international stage actually affects market power. And guess what? This market power, in turn, affects economic growth. It's like a circle, each feeding into the other. Their study revealed that the flow of rice and money isn't just a simple cause-and-effect scenario. It's a complex dance, with economic

growth and foreign investments playing their own crucial roles.

Camarero et al. (2010) worked on digging into how the Euro impacts trade, and let me tell you, they left no stone unturned. They pulled together a treasure trove of data, covering 26 countries and spanning a whopping 41 years from 1967 to 2008. And they didn't just stick to the usual variables; they also threw in a set influenced by some critiques from Baldwin and Taglioni (2006). They tackled some real headaches in the data, like its non-stationary nature. Trust me, that's a big deal in the number-crunching world. They used some cutting-edge tests, including panel co-integration tests, to ensure everything was up and up. The Euro's impact on trade is actually smaller than what previous studies had led us to believe. Yep, you heard that right. So, if you think the Euro was this massive game-changer for international trade, well, it's time to recalibrate those assumptions. Tesfaye (2011) made a study on shaping agricultural exports in Sub-Saharan Africa (SSA). His research spotlighted two big players: supply and demand factors. Using a data set that had its fingers on the pulse of 47 SSA countries from 2000 to 2008, he crunched the numbers using fixed effects estimation. On the supply side, factors like real GDP and previous years' agricultural inputs had a positive and pretty darn significant impact on exports. But wait, there's more! On the demand side, the per capita GDP of the U.S.—SSA's main trading buddy—also boosted exports in a big way. Tesfaye also flagged that U.S. import tariffs on SSA agricultural products were like a wet blanket on exports—they had a negative impact. Both supply and demand are key players in the field of SSA's agricultural exports. One doesn't get to steal the limelight; they're both VIPs in this game.

Emam and Salih (2011) worked on Sudanese sheep exports. The timeline? From 2002 to 2007. They designed a nifty questionnaire for primary info to get their hands on the data and scoured reputable sources for secondary tidbits. And their tool of choice for making sense of it all was the Policy Analysis Matrix Technique. According to their number-crunching, Sudanese sheep were pretty darn competitive. Not only that, but the economic gains were even beefier than the financial ones. But wait, there's a twist! These fluffy money-makers were also burdened by a heap of taxes, courtesy of the Sudanese Government. Sudanese sheep are a golden goose in terms of profit and competitiveness, but they're also getting pinched hard by taxes. A classic case of good news and bad news!

Kuncic (2012) worked on bilateral trade but threw a curveball: instead of just looking at institutional quality, he zoomed in on institutional distance. His big "aha" moment? It's not just about how good your institutions are; it's also about how similar they are to your trading partners. He discovered that strong legal frameworks in both the origin and destination countries are a big thumbs up for trade. But hold the phone! What really caught his eye was the role of institutional distance. He found out that if countries are like peas in a pod when it comes to economic institutions, they're more likely to trade with each other. While the quality of legal institutions can put wind in the sails of trade, it's not the deal-breaker in choosing who you trade with. In this instance, it's a case of birds of a feather flock together—or trade together!

Meijers (2014) worked on the relationship between internet use, economic development, and international trade. The study shook up the conventional wisdom that internet use directly boosts economic development. Instead, it uncovered a web of connections. Specifically, countries open to international trade often logged on the most. Internet use amps up trade, and in turn, trade fuels economic growth. The study used simultaneous equations to prove that internet use and trade openness have a significant, positive impact on economic growth. The influence of internet use on international trade was especially pronounced in non-high-income countries compared to their wealthier counterparts. Yet, when it came to the effect of trade on economic growth, the playing field was level for both high-income and non-high-income nations.

Serlenga and Shin (2013) worked on the debate about how the Euro affects trade flows. Steering through recent advances in panel studies, they rolled out a new approach called the cross-sectional dependent panel gravity model. What's cool about this model? It takes into account time-varying variables that could be linked across different sections. They crunched numbers from 1960 to 2008, looking at 91 pairs of countries within 14 EU economies. And here's the headline: The Euro's impact on trade was a modest 3-4%, which is way lower than previous studies suggested. Plus, the Euro played a key role in making EU integration smoother by reducing

uncertainties tied to exchange rates. Countries mulling over whether to jump on the Euro train could likely benefit from the ongoing process of integration. So, it's food for thought for policymakers.

Iqbal (2014) highlighted a major conundrum for Bangladesh: its top trading partner is the European Union (EU), but there are a bunch of hurdles muddying the waters for future export growth. These obstacles range from fishery bans to a shaky economy and even non-tariff barriers—pretty much a full plate of challenges for Bangladesh. The study whipped out some serious number-crunching, examining data from 1980 to 2010. This included everything from exports and imports to real exchange rates and geographic distance. Why? To zero in on what could give Bangladesh's exports to the EU a much-needed shot in the arm. Bangladesh's GDP is positively tied to its trade with the EU. But plot twist—the EU's GDP and the bilateral real exchange rate are throwing a wet blanket on this trade relationship. However, all's not lost; both parties are still pocketing benefits from their trading activities. Iqbal suggests that Bangladesh could amp up its export game by cutting costs, adding some design flair to its products, and diversifying its offerings. That way, they could be in a better position to sidestep the obstacles and trade more successfully with the EU.

## Methodology

Research Methodology encompasses the methods and strategies used for gathering and evaluating information, specifically to validate a hypothesis. Essentially, it's the framework that guides the scientific investigation process. Having the right methodology is crucial to complete a research study effectively. This involves everything from gathering data to recommending policies. Key components include picking relevant variables, sourcing accurate data, setting up the right analytical model, and employing suitable techniques to draw meaningful conclusions.

The research goal was to investigate the factors influencing trade between Pakistan and the United Arab Emirates, as well as imports from the UAE to Pakistan and exports from Pakistan to the United Arab Emirates. The study also uses various methodologies to evaluate the competitiveness and comparative advantages of key agricultural products traded between the two countries. Clearly defining these variables adds scientific rigor to the study. This section of the research outlines the various data sources and analytical techniques employed to enhance the study's clarity and scientific validity.

### ***Data Collection and Sources***

To analyze the factors affecting Pakistan's exports and imports with the United Arab Emirates, various variables were chosen, and time series data from 1975 to 2022 was used for the study. Information on these indicators was sourced from the World Bank, the Federal Bureau of Statistics in Islamabad, Pakistan, the State Bank of Pakistan, the Pakistan Economic Survey, International Financial Statistics, and the International Monetary Fund.

### ***Variables of the Models for Trade with the United Arab Emirates***

For the evaluation, time series data is employed to estimate exports and imports. The variables under consideration include Pakistan's total trade with the United Arab Emirates, total imports from the UAE, total exports to UAE, populations of both nations, Inflation in both countries and the exchange rates of both countries.

#### ***Exports of Pakistan to UAE***

To gauge Pakistan's exports to the United Arab Emirates, the total value of these exports serves as the dependent variable, measured against various independent variables. Time series data, expressed in US dollars in millions, covers the time span from 1975 to 2022.

#### ***Pakistan Imports from the United Arab Emirates***

To assess the volume of imports from the United Arab Emirates to Pakistan, we use the total import value as the dependent variable, with various independent variables. The data, which is collected in time series format, quantifies the value of these imports in millions of U.S. dollars and covers the years from 1975 through 2022.

*GDP of Pakistan*

The yearly GDP figures are dynamic variables, sourced from World Bank statistical records. These GDP values represent the total economic output for each nation and are denominated in U.S. dollars for easy comparison. As GDP serves as an indicator of a country's economic size, it's generally assumed that nations with higher GDPs are more likely to engage in greater trade activities with each other. For the study, the GDP data for Pakistan, measured in billions of U.S. dollars, spans from 1975 to 2022.

*GDP of United Arab Emirates*

The GDP of the United Arab Emirates is a fluctuating variable, represented in billions of U.S. dollars. Data for the UAE's GDP, covering the years 1975 to 2022, is sourced from the World Bank database. Generally, GDP is believed to positively influence trade. The graph showcasing this time series data reveals a non-stationary upward trend. Prior to analysis, it's necessary to stabilize the data series.

*Population of Pakistan*

Statistics regarding Pakistan's population are obtained from the country's annual statistical yearbook. Population figures, which change over time, are generally expected to have a positive relationship with trade volumes. Essentially, larger markets are likely to engage in more expansive trade activities. However, a counterpoint to consider is that a sizable economy can produce a more diverse range of goods, potentially reducing its dependence on imports from abroad.

*Population of United Arab Emirates*

Data concerning the population of the United Arab Emirates, sourced from the World Bank, is expressed in millions of people per year. It's generally believed that a larger population positively influences trade. This variable could impact exports in either a positive or negative way but is largely expected to positively affect imports as well. The dataset spans from 1975 to 2022 and serves as an independent variable in the analysis.

*Inflation in Pakistan*

Consumer price index data, with 2005 as the base year, comes from the International Financial Statistics database managed by the International Monetary Fund. Rising inflation rates within a nation are generally thought to dampen exports while potentially boosting imports. The CPI data for Pakistan, covering the years 1975 to 2022, is utilized in the study.

*Inflation in United Arab Emirates*

Data for the consumer price index, benchmarked to the year 2005, is sourced from the International Financial Statistics provided by the International Monetary Fund. It's commonly believed that rising inflation in a country can adversely affect its exports while potentially encouraging imports. This data set for the United Arab Emirates spans from 1975 to 2022 and is used in the analysis.

*Pakistani Exchange Rate*

In the research, the exchange rate (ER) is a variable that changes over time and is expected to play a crucial role in affecting Pakistan's exports. The exchange rate data, expressed in terms of Pakistani Rupees per US dollar, is obtained from the State Bank of Pakistan and covers the years 1975 through 2022.

***Pooled OLS Regression Model for the Analysis***

For the analysis of the current study underhand to determine the impact of different variables on trade between Pakistan and the United Arab Emirates the following equation was used:

$$\text{Trade} = f(X_1 + X_2 + X_3 + \dots + X_n)$$

And to estimate the impact of different factors on Exports of Pakistan to UAE was used the following:

$$\text{PAKEX} = f(X_1 + X_2 + X_3 + \dots + X_n)$$

For imports of Pakistan, it could be written as:

$$\text{PAKIMP} = f(X_1 + X_2 + X_3 + \dots + X_n)$$

Determinants of Trade between Pakistan and United Arab Emirates

The equation for a Pooled OLS model in this context would look like this:

$$\text{Pakuaetrade} = \beta_0 + \beta_1(\text{Gdppak}) + \beta_2(\text{Gdpuae}) + \beta_3(\text{Poppak}) + \beta_4(\text{Popuae}) + \beta_5(\text{Infapak}) + \beta_6(\text{Infuae}) + \beta_7(\text{Exchpak}) + \beta_8(\text{Exchuae}) + \varepsilon \quad (1)$$

Here's the breakdown of each component:

Pakuaetrade: The dependent variable that represents trade between Pakistan and the UAE.

Gdppak: The independent variable representing Pakistan's GDP.

Gdpuae: The independent variable representing the UAE's GDP.

Poppak: The independent variable representing Pakistan's population.

Popuae: The independent variable representing the UAE's population.

Infapak: The independent variable representing inflation in Pakistan.

Infuae: The independent variable representing inflation in the UAE.

Exchpak: The independent variable representing the exchange rate of Pakistan's currency.

Exchuae: The independent variable representing the exchange rate of the UAE's currency.

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$ : These are the coefficients (parameters) that the Pooled OLS regression model estimates. Each coefficient represents the impact of the corresponding independent variable on the dependent variable while controlling for the other variables.

$\varepsilon$  (epsilon): The error term, which represents the unexplained variation in the dependent variable.

In a Pooled OLS model, all observations from different time periods are pooled together to estimate the coefficients. It assumes that the relationship between the independent variables and the dependent variable is constant over time. Please note that this model does not consider time-series dynamics or individual effects, which may be relevant depending on the nature of your data and research question.

## Results and Discussion

As shown in Table 1, The mean value of imports from the UAE (2.6945E3) is considerably higher than exports to the UAE (7.6720E2), hinting at a trade imbalance. The average GDP of UAE (1.6838E2) is higher than that of Pakistan (1.2187E2), as one might expect given the smaller size but higher per capita income of the UAE. Pakistan has a significantly higher average population (1.4902E2) compared to the UAE (4.3040). Inflation in Pakistan (1.0856E2) is higher on average than in UAE (90.6568), which could affect purchasing power and trade dynamics. Both countries have shown fluctuations in exchange rates, but the deviation is much higher for Pakistan (47.70079) compared to the UAE (0.07278). High standard deviations in imports, exports, and total trade (2933.30825, 674.30626, and 3507.23057, respectively) indicate a lot of volatility in these areas.

Certainly, let's interpret the results of this Pooled OLS regression model, which aims to shed light on various factors affecting trade between Pakistan and the United Arab Emirates (UAE).

R is the multiple correlation coefficient or the multiple R. It represents the correlation between the observed dependent variable and the predicted values by the regression model. In this case, it's approximately 0.991 as shown in Table 2. This indicates a very strong positive linear relationship between the independent variables and the dependent variable.

R-squared is a measure of how well the independent variables explain the variability in the dependent variable. It ranges from 0 to 1, with higher values indicating a better fit. An R-squared of 0.982 means that roughly 98.2% of the variance in the dependent variable can be explained by the independent variables in the model. This suggests a very good fit, as the majority of the variation in the dependent variable is accounted for by the model.

Table 1. Descriptive statistics for trade between Pakistan and United Arab Emirates.

Variables	N	Minimum	Maximum	Mean	Std. Deviation
pakuaetrade	48	137.97	10859.97	3.4617E3	3507.23057
gdppak	48	11.23	376.53	1.2187E2	112.31855
gdpuae	48	14.72	507.53	1.6838E2	153.50394
poppak	48	68.13	235.82	1.4902E2	51.93439
popuae	48	.54	9.44	4.3040	3.25790
infpak	48	10.85	361.62	1.0856E2	100.78288
infuae	48	35.53	157.54	90.6568	43.10160
exchpak	48	9.90	204.87	56.9908	47.70079
exchuae	48	3.67	3.96	3.6965	.07278

Adjusted R Square is a modified version of R-squared that takes into account the number of predictors in the model. It penalizes the inclusion of unnecessary variables. An adjusted R-squared of 0.978 indicates that even after considering the complexity of the model (number of predictors), it still explains about 97.8% of the variance in the dependent variable. This suggests that the model is likely not overfitting and is providing a robust explanation of the data.

Table 2. Determinants of trade between Pakistan and United Arab Emirates.

Variables	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-12139.296	5900.244	-2.057	.046
gdppak	-1.248	5.572	-.224	.824
gdpuae	34.460	3.599	9.574	.000***
poppak	31.677	15.360	2.062	.046***
popuae	927.301	450.136	2.060	.046***
infpak	-35.647	14.127	-2.523	.016***
infuae	-67.284	40.940	-1.643	.108
exchpak	3.787	13.038	.290	.773
exchuae	2973.807	1503.711	1.978	.055**
R			.991a	
R Square			0.982	
Adjusted R Square			0.978	
F			261.124	
Sig.			.000a	

Dependent Variable: pakuaetrade; \*\*\*= significance at 5 percent level of confidence; \*\*= significance at 10 percent level of confidence.

The F-statistic tests the overall significance of the regression model. It assesses whether there is a significant relationship between the independent variables as a group and the dependent variable. In this case, the F-statistic is 261.124, which is quite high. A high F-statistic generally indicates that the model is statistically



significant. Sig. is the p-value associated with the F-statistic. A small p-value (typically below 0.05) suggests that the model is statistically significant. In this case, the p-value is very close to zero (0.0004), which indicates that the model is highly statistically significant.

The provided statistics indicate that the regression model has a very strong fit with the data. It explains a high proportion of the variance in the dependent variable, and the overall model is statistically significant. This suggests that the independent variables in the model are collectively doing a good job of explaining the variability in the dependent variable, and the model is likely reliable for making predictions or drawing conclusions about the relationships between variables.

As shown in Table 2, The GDP of UAE has a significant positive impact on the dependent variable, whereas the GDP of Pakistan doesn't seem to have a significant influence. The population of both countries appears to have a statistically significant positive effect on the dependent variable, but the impact is much more substantial for the UAE. Inflation in Pakistan has a significant negative impact, whereas the effect of inflation in the UAE is not statistically significant. The exchange rate in UAE has nearly reached significance. The GDP and population of the UAE, as well as the population and inflation rate in Pakistan, appear to be key variables influencing the dependent variable in the model. The influence of exchange rates, particularly in the UAE, may also warrant further investigation.

A unit increase in the GDP of UAE is associated with an increase of 34.460 in the dependent variable. The significance level of .000 suggests that the GDP of UAE is highly significant in predicting the dependent variable. A unit increase in the population of Pakistan is associated with an increase of 31.677 in the dependent variable. The significance level of .046 is under the .05 threshold, indicating that the population of Pakistan is statistically significant. A unit increase in the population of UAE is associated with an increase of 927.301 in the dependent variable. With a significance level of .046, the population of UAE is also a significant predictor. A unit increase in inflation in Pakistan is associated with a decrease of 35.647 in the dependent variable. At a significance level of .016, inflation in Pakistan is a significant predictor. A unit increase in the exchange rate in UAE is associated with a substantial increase of 2973.807 in the dependent variable. With a significance level of .055, the exchange rate in UAE is close to being statistically significant but falls just outside the commonly used threshold of .05.

## Conclusions

A unit increase in the GDP of UAE is associated with an increase of 34.460 in the dependent variable. The significance level of .000 suggests that the GDP of UAE is highly significant in predicting the dependent variable. A unit increase in the population of Pakistan is associated with an increase of 31.677 in the dependent variable. The significance level of .046 is under the .05 threshold, indicating that the population of Pakistan is statistically significant. A unit increase in the population of UAE is associated with an increase of 927.301 in the dependent variable. With a significance level of .046, the population of UAE is also a significant predictor. A unit increase in inflation in Pakistan is associated with a decrease of 35.647 in the dependent variable. At a significance level of .016, inflation in Pakistan is a significant predictor. A unit increase in the exchange rate in UAE is associated with a substantial increase of 2973.807 in the dependent variable. With a significance level of .055, the exchange rate in UAE is close to being statistically significant but falls just outside the commonly used threshold of .05.

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