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ABSTRACT

The study determines the influence of exports on the economic growth of Türkiye and Pakistan, using a description study design based on data from the World Bank. The paper focuses on exports, imports, and their implications for GDP in these two countries, hoping to reveal the impact of international trade on economic growth.

This study adopts a descriptive research design to study the effect of exports on economic growth in Türkiye and Pakistan. The methodology involves analysis of the secondary data obtained from the World Bank's statistics database and concentrates on the main descriptors like imports and exports and the GDP of both countries. The data collected are analyzed quantitatively using regression analysis to establish the linkages between exports and economic growth in Türkiye and Pakistan. Descriptive statistical techniques are used to summarize the data and calculate the main measures, for instance, the mean, standard deviation, and correlation coefficients. Moreover, the regression technique may be utilized for a more in-depth analysis of the exports and GDP connection while controlling for possible confounding variables.

Analysis of data shows that exporters' income is positively correlated with GDP in Türkiye and Pakistan. It means increasing exports leads to economic growth. One of the main findings of this research is the positive relationship between trade openness and economic growth. Trade-open economies have higher levels of economic performance. In summary, it ought to be noted that the two models (export-led growth models) run into problems when it comes to balancing the current accounts and making the export products competitive; therefore, the need for targeted policy measures emerges.

In Türkiye, the consequences mirror the role of exports in facilitating the innovation, efficiency, and expansion of markets. Despite challenges like current account deficits, Türkiye’s export-oriented policies are considered to be factors for continuous economic growth since trade openness has become a tool for attracting investment inflows and creating jobs. In Pakistan, the study stresses that trade openness has a strong relationship with the growth of GDP, but structural binds as the trade deficits and low export competitiveness pose some constraints to the economic development of the country.

Nevertheless, the data should point towards the idea that international trade is an important catalytic factor that boosts productivity and stability over the long haul. The study represents an important contribution to our understanding of the link between exports and economic growth for Türkiye and Pakistan and is relevant to policies aimed at ensuring that international trade contributes to the attainment of sustainable economic development.

Keywords: Pakistan, Türkiye, Economic growth, Imports, Exports, GDP

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1.0 Chapter One- Introduction

1.1 Study Background

The global economy has changed significantly in recent years due to globalization. National economies have evolved into global economies as a result of globalization. Globally, the process of moving towards a single economy has started. Countries now rely more economically on one another as a result. In this particular setting, the global crisis has impacted every nation to the degree of its vulnerability (Palmberg, 2022). Free trade agreements, technical advancements, and international cooperation have all contributed to the rise of the global economy and trade. However, a significant decline in the global economy was noted in 2020 as a result of the Covid-19 pandemic (Christopher et al., 2024). Countries' default risk has increased dramatically as a result of fiscal policies implemented as epidemic control measures (Özparlak et al., 2021a). The global economy began to improve in 2021, and growth picked up speed. The expansion of a nation's overall production, trade, and business activity is known as economic growth (EG). The Gross Domestic Product (GDP) or Gross National Product (GNP) is typically used to quantify this increase. A nation's GDP growth rate (EG) is the steady increase in GDP per person within that nation. EG holds immense significance for every nation. Increased economic productivity, capital and labor investments, trade, technology advancements, and other things can all contribute to EG.

One of the most hotly contested topics in economic literature is the connection between foreign commerce and economic growth. The essential point in this discussion is whether growth is influenced by exports or vice versa. The choice and application of suitable development and growth strategies depend on the response to this issue. One definition of the primary driver of economic growth is a rise in exports. According to the export-led growth hypothesis, there are at least four ways that relate to the theoretical reasoning behind this model (Bilgin & Sahbaz, 2009). The first one is associated with foreign trade strategy, which is the source of Keynesian theory. Through the international trade multiplier, exports can result in an increase in output, including consumption, investment, and public spending, in an open economy with unemployment and idle capacity.

The second approach holds that developing countries' import capacities determine whether they can make the investments required for growth and supply intermediate products to maintain manufacturing. According to the third method, export growth can raise productivity levels, which in turn can help the export industry foster the emergence of export commodity specialization. Lastly, the fourth strategy has to do with scale economies for the manufacturing sectors that require a lot of capital. Present-day trade involves nearly all nations engaging in international commerce. Nonetheless, out of all the nations, a few have liberalized trade and opened their markets, allowing goods and services to enter and exit without any restrictions. However, there is another set of nations that engage in international trade but are shielded from it and subject to several restrictions. There are several defenses, including worker and capital exploitation, anti-dumping laws, and domestic industry protection (Milner 2021).

1.2 Problem Statement

The study seeks to examine and contrast the impact of international trade on economic growth in Pakistan and Türkiye. Although both countries are actively engaged in international trade, differences in their economic structures, trade policies, and geopolitical conditions may lead to contrasting outcomes in terms of economic growth. This project aims to investigate the precise processes by which international trade impacts the economic development paths of Pakistan and Türkiye. This will be rather a specific topic, where changing the dynamics of exports and imports will be studied. The objective of this study is to generate evidence that various trading methods are used in different socio-economic environments, and it will be focused on this initial investigation.

There is a research gap in this area because no literature that the author found offers a comparative study on how international trade affects economic growth in these two countries: Pakistan and Türkiye. However, there is a paucity of studies that evaluate the effect of international trade on the economic growth of countries as a case study yet comparing the economic performances of Pakistan and Türkiye post-tariff removal is a moot point. This study aims to bridge the gap that has been indicated through the various analyses that have been made, by performing a comparative study. Its context deals with providing essential information on the execution of trading strategies in the given economic backgrounds.

1.3 Study Rationale

The international role of trade in strengthening global cooperation and waving the banner of economic development cannot be disclaimed. This is a tendency, which is not only an old-common thing but is seen broadly now and has become something that governments around the world focus on. They have recognized the importance of developing and implementing international trade policies that align with the current tendencies of globalization. Although there is a large body of research on the effects of international trade on economic growth, there is still no widespread agreement on the advantages of trade and the specific ways in which these advantages are achieved within the countries of Türkiye and Pakistan. The study's findings may provide valuable guidance for the government to allocate resources more effectively, benefiting Turkish and Pakistani traders and the entire population of Türkiye and Pakistan. Additionally, this material would serve as a valuable resource for future policymakers, not only in these two countries but also in other nations that heavily rely on foreign commerce to support their economies.

1.4 Research Questions

The following are the research questions of the study

1. Do exports affect growth in the economy?
2. Do imports affect growth in the economy?
3. What is the difference between the relationship of international trade and economic growth in Türkiye and Pakistan?

1.5 Research Aim and Objectives

The research aim is to understand the impact of international trade on economic growth in the context of countries Türkiye and Pakistan. The following are the sub-objectives of the current study

1. To assess whether exports affect growth in the economy
2. To evaluate whether imports affect growth in the economy
3. To provide a comparison of the relationship between international trade and economic growth in Türkiye and Pakistan

1.6 Chapter Organization

Chapter 1: In the very first chapter of the thesis, the research which addresses the issue is introduced and background information of why this issue is being explored is provided. In addition, the key objectives and the research questions are cited, and how the research would fit into the big picture is identified. Chapter two provides further understanding of how the study and its importance are related.

Chapter 2: The investigator will focus on the most popular theories and models in the particular area of research and critically analyze the methods of the papers in the field of study in the literature review section. Another way would be where you examine the literature in this section by analyzing the most prominent findings from the studies selected on your research topic as compared to the findings of other studies.

Chapter 3: The "Methodology" part of the research design outlines the procedures adopted for the study. In this section of the research, the scientist will decide on the study philosophy, methods and strategy, population, sample, and data collection and analysis method. It will implement the facets of the investigation going by data analysis and data collection as this is provided in the methodology chapter.

Chapter 4: Data acquisition phase four is being analyzed using SPSS software where descriptive and panel data analysis is used and the paper is presented in the form of tables and figures. A conclusion from the research will be drawn to evaluate whether objectives have been met or not.

Chapter 5: Will summarize the main discoveries; on the other hand, it will assess whether the objectives of the study will or will not be accomplished. The chapter ends with a capstone summary, tips, and possible resources for further exploration, and some grown-up problems that come with the research project.

2.0 Chapter Two- Literature Review

2.1 Theoretical literature review

The theoretical foundation of this study posits that an expansion in a country's export volume or its sustained engagement in international trade fosters its economic growth. The conventional argument for the benefits of trade relies on the concept of comparative advantage, whereby a nation that engages in trade can expect to reap advantages. The Ricardian model, proposed by Ricardo in 1817, elucidates the benefits to welfare that arise when a country focuses on manufacturing items in which it possesses a comparative advantage. The Hecksher-Ohlin-Samuelson (H-O-S) model, proposed by Heckscher in 1919 and Ohlin in 1933, demonstrates the welfare benefits in a two-country model where each country specializes according to its factor endowments.

The Heckscher-Ohlin theory posits that disparities in production costs between nations and regions arise due to variations in the availability of production factors. Commodities that require a significant number of abundant factors of production and a minimal number of scarce factors are exported in return for goods that necessitate factors in the opposite proportions. Therefore, readily available factors are exported, whereas scarce factors are imported, as stated by Ohlin in 1933. The Heckscher-Ohlin theory effectively describes certain trade patterns, but current trends indicate that industrialized nations are increasingly resembling each other in terms of their resources and assets. This suggests that the theory, which emphasizes international differences in endowments, may gradually lose its relevance.

The fundamental principle underlying these ideas is that international commerce is the means by which static productivity efficiency and international competitiveness can be attained. The relationship between international commerce and long-term economic growth remains uncertain in both the Ricardian and the H-O-S models, notwithstanding the potential for increased productivity efficiency and international competitiveness. According to the Heckscher-Ohlin Model, suggests that countries should export goods that they can manufacture with the highest level of efficiency and abundance. The H-O model, often known as the 2x2x2 model, is utilized to assess trade and, more precisely, the trade equilibrium between two countries with different expertise and natural resources.

Hence, where the only distortion is a tax on the imported good and international goods prices remain constant, reducing the tariff on the imported good leads to an increase in both imports and exports, resulting in economic growth measured by GDP. In this type of economy, there is a clear relationship between the amount of goods produced and the amount of goods exported, and the reason for economic growth is increased openness. Additional sources of output increase can be attributed to the more effective utilization of economies of scale. Krugman (1980) suggests that exporting enterprises exhibit greater productivity in comparison to non-exporting firms.

The Export-led growth (ELG) concept was initially proposed by Kindleberger in 1962. ELG is widely regarded as one of the primary foundations of the free trade ideology that originated in the 1980s. The alternative and significant perspective is referred to as the protectionism school, which is founded on the ideas of Prebisch (1950). This school advocates for the implementation of import substitution policies instead of focusing on encouraging exports as a means to stimulate economic growth. Economists have lacked consensus over the nature of the relationship between exports and economic growth. There has been an ongoing discussion on whether a high economic performance is primarily driven by exports or by overall economic growth.

2.2 Growth Symmetry in International Trade

Export (EXPT) and import (IMPT) activities have the potential to enhance economic growth (EG), hence countries frequently establish policies to promote and facilitate these activities. Exporting refers to the act of a nation selling its products and services to international markets. exports can have several beneficial effects on EG (Kim et al., 2018). Initially, the revenue generated from exports contributes to the overall national income of the country and aids in sustaining employment. Furthermore, using exports can enhance the competitiveness of local enterprises, hence boosting their production and efficiency (Abueg, 2017). On the other hand, export activities of exports can spark off production and investment activities through a rise in overseas demand. It is during the fusing of these conditions; exports seem to result in EG being created; imports are the process by which goods and services from a foreign country are introduced into a domestic market.

Imports display a wide range of effective mechanisms of EGG creation, such as by satisfying the demands of local consumers and providing industries with vital intermediate products and raw materials in the process of manufacturing (Ridzuan and Khalid, 2018). Goods that have been imported can improve the quality of life of the people through offering them a wider range of products to choose from and the local producers can benefit from the competition to stay competitive (Quimba et al., 2020). In addition to it, imports have the ability to strengthen the local industry supply chain by providing intermediate items as well as raw materials serving as production inputs to be used by local manufacturers. Studies have shown that the effect of an FT on the EG is an essential one. Countries have the option of adopting policies that spur rapid economic growth. This can be done through furthering exports and increasing imports (Prabhakar et al., 2020; Okenna, 2020; Munir and Ameer, 2018).

As Janssens et al (2020) highlight, international trade has a greater effect than only using domestic policies in dealing with severe world hunger and poverty. It forms a common ground for international collaboration through which nations strive for economic improvements jointly. The spectrum of discussed issues has been made clear in promoting international trade and this is to prioritize the least-developed countries, and this will boost their economic growth. According to Abendin and Duan (2021), international trade is one of the factors that encourage tech transfer and that, in turn, advances the digitalization of the African commercial sector. Digitization therefore fueled the creation of jobs and the growth of African economies. According to the authors, one of the development objectives that should be collectively, and jointly pursued by developed nations is the growth of Africa’s digital economy, which can be achieved through such mechanisms as trade helping to raise economic growth.

In their research, Abendin and Duan (2021) established that international trade was a significant factor in initiating technology transfer; hence, the African economy became digitally enabled. A full set of trade restrictions led to the rise of other economic developments in AFRICA states. The authors' proposition was statistically significant, suggesting that wealthy countries worldwide should collectively prioritize the development of their digital economy in Africa. This would enable international trade to have a favorable impact on these countries.

Conversely, the effect of international commerce on industrialized countries differs somewhat. Johnson (2021) states that industrialized countries benefit from trading with less developed and developing nations by gaining access to their factor of production. Empirical evidence confirms that rich countries can acquire low-cost factors of production and inexpensive labor from developing nations through international trade. This not only facilitates the acceleration of actual output production but also leads to a reduction in operational costs. Aiginger and Rodrik (2020) discovered that Sub-Saharan Africa and Latin America have experienced a dearth of productive transformation, resulting in a scarcity of job opportunities in the manufacturing sector in those nations. In addition, sluggish economic expansion leads to the emergence of both a trade deficit and a budget deficit. Developed countries benefit from international commerce by outsourcing their workforce to developing nations, which allows them to access trained laborers at a lower cost (Van Assche and Gangnes 2019). Conversely, developing countries achieve an enhancement in their overall economic well-being by creating more jobs. International trade leads to economic growth, yet the perspectives and perceptions of industrialized and developing countries differ due to their respective capabilities.

The relationship between international trade and economic growth occurs through various avenues. The objective of empirical work is to determine which factors are relevant. Previous research has consistently demonstrated a robust association between commerce and economic growth. Simultaneous equation models have demonstrated a causal influence of imports (but not necessarily exports) on growth. However, this effect is less pronounced in Granger-causality tests. Jung and Marshall (1985) additionally said that during the 1960s and 70s, a substantial amount of research was carried out to evaluate the ELG theory. The bulk of these studies indicated that exports were the main driver of economic growth in the nations examined. Consequently, it was recommended that trade policies in these countries should focus on promoting exports.

2.3 International Trade and Economic Growth

Much literature has been published about the factors that lead to and result in the countries' economic growth. This research has shown how complex the nature of these processes is. The study by Acaravci and Ozturk (2015) in Türkiye proved that investment, human beings' capital, and technical development have been the fundamental factors for economic growth that is sustained. Among the research done around Pakistan, where Jalil and Feridun among others (2011) have posited investment, exports, and finally financial development as the key determinants of economic growth. Both countries primarily look to international trade as a key input to their developmental economies. According to Aydın and Esen (2018), it was found that trade openness supported by economic growth in Türkiye was positively correlated. This positive link results from augmented knowledge sharing, innovation, and plausibility. In the articles of Mahmood and Rehman (2016), they illustrated that economic growth and open trade of Pakistan are highly and significantly associated. Among other things, the report demonstrates the importance of exports to attract investment and create jobs.

On the other hand, the growth in international trade with economic growth only provides conditional restrictions and hindrances. The sustainability of the export-driven economy in Türkiye is at risk because of the current account deficit and external imbalances (Altintas and Ozturk, 2020). Also, Pakistan is constrained by structural constraints like trade deficits, poor export competitiveness, and dependence on imports for the necessary goods (Nasir et al., 2019).

Likewise, neoclassical economists emphasize that international trade is a triggering element of economic expansion. The research suggests that there is a direct connection between trade openness and economic growth, for instance by facilitating the import of new technology and implementing of management techniques and distributing of scarce resources. The effect of international trade on economic growth is different among nations due to trade policies, variable institutions, and infrastructure. FDI may be a means of generating economic growth by mediating technology transfer and resource mobilization. Therefore, how the FDI is influenced depends on many intervening factors and government involvement.

On the other side, however, there is a positive correlation between the growth rate of production and economic growth in Türkiye and Pakistan. Industrialization has a huge role in the creation of total economic output in the mentioned countries. Due to the inherent linkage between trade and output, exports influence the levels of GDP and cause spillover effects which lead to industrial development and technical progress. On the other hand, there are deficits in export competitiveness, trade imbalances, and structural imperfections in the manufacturing sectors that hinder the stability of both countries' economies.

2.4 Empirical review

Ortiz (2018) showed that it was international trade that caused European nations to become economically prosperous. Thus, through the use of trade mutuals, importations, and exportations they could determine world trade. OLS (GaussNewton) model was employed for the estimation, and variables were used in stand-alone regression analysis and multiple regression analysis for the full study. Piana (2014) conducted a study that examined the role of trade balance worsening to economic growth using an OLS multivariate panel data of 28 EU countries during the 1998-2018 period and with fixed effects. They then discovered that either in the beginning of a trade surplus or deficit, it led to a significant and detrimental effect on economic growth.

Germany is the most dependent on trade, followed by the US, China, and Russia, according to Prabhakar (2020). The population is getting higher despite past losses, which makes foreign trade less significant for China. Each nation has a different impact on the overall economic state of commerce with other nations. GDP has a positive relationship with imports and exports, but a negative relationship with the exchange rate, according to Quimba (2020). According to their research, international commerce is necessary for the long-term economic development of developing countries. But in order for developing nations to prosper in global trade, they need to implement customized trade laws.

Ridzuan (2018) underlined the deep connection between business and development, it could transform the whole economy. While this is conditioned by the choices policymakers make, availability of resources, and level of expenditure towards resource development, these factors determine the growth.

According to Kim (2018), the Vietnamese economy benefited from Vietnam's export activities from 2000 to 2018 since they were enhancing labor mobility, controlling inflation, and improving the balance of payments. Vietnam made it easier for itself to engage in global trade; hence, the country established beneficial conditions for the growth of business exports (Kim, 2020). The connection between trade and economic growth is broadly considered as a result of the job opportunities arising from foreign investment into the economy which in turn helped to reduce such unemployment rates (Wiedmann, 2018). Afterward, the Ghanaian economy thrived mainly due to its growth from positive trade that has helped the corporate expansion and improved efficiency and distribution of goods and services. On the other hand, the country finds itself poor and hindered towards social progress but at the same time having hyperinflation because of incapacity to make economic investments.

Neoclassical economists are attached to the idea that trade is a key thing that can be used to make economic expansion grow faster. Several researchers, however, have expressed deep concern in studying the effect of international trade growth and intra-border trade on innovation. Recent research has strongly proved that trade works by effectively reallocating resources. Ortiz looked at the relationship between international trade and economic growth in European countries (2018). The measurement of international trade was done by way of ascertaining imports, exports, and export coverage. The variable was subjected to simple regression analysis separately and multiple regression analysis was the technique for the entire research. regression was carried out by using the OLS (Gauss-Newton). In the study by Piana (2014) panel data for 28 members of European Union countries were employed and the years 1998 to 2018 were covered. The use of OLS multivariate analysis with fixed effects was the method applied to measure the relationship between trade balance deterioration and economic development. Research analyzing the relationship between trade and economic growth discovered that lower trade balance had a negative impact on the growth of an economy, no matter its origin – deficit or surplus.

According to Prabhakar's (2020) findings, Germany exhibits the highest level of dependence on trade, with the United States, China, and Russia following suit. Despite previous setbacks, the overall welfare of the population in China continues to improve, thereby diminishing the significance of international trade.

The impact of international trade on a country's overall economic state varies from one country to another. According to Quimba (2020), there is a positive relationship between GDP and exports as well as imports, whereas there is a negative relationship between GDP and the exchange rate. According to their research, sustained economic advancement in less developed countries necessitates engaging in global trade. Nevertheless, in order for developing nations to thrive in the realm of global trade, it is imperative that they embrace tailored trading policies that cater to their specific needs and circumstances.

The estimations by Ghaffar et al., (2019) indicated that the real effective exchange rate and net inflows of foreign direct investment (% of GDP) have a considerable and negative effect on Pakistan's trade balance, both in the long run and the short term. It is clear that the money supply has a favorable but negligible effect on both the long and short term. Urbanization has a favorable and large impact on trade balance in the near term, but in the long term, it has a negative effect on our economy and influences future trade balance.

Ridzuan (2018) asserts that there exists a robust correlation between trade and development, which has the potential to bring about significant transformations in the economy. However, the realization of this potential is contingent upon the decisions made by policymakers, the development of resources, and investments that support such growth. According to Kim (2018), Vietnam's export activity during the period from 2000 to 2018 had a positive impact on the country's balance of payments, inflation management, and employment generation. On the other hand, the direct relationship between exports and per capita GDP indicates a positive impact of exports on the Vietnamese economy. Vietnam's attempts to trade in the global market seeds the ground for an optimistic situation culminating into a rise in the number of exported goods by firms (Kim, 2020). The impact of trade on economic growth is stimulating job creation through facilitating foreign investments and causing the unemployment rate in Ghana to decline (Wiedmann 2018).

Ghana's economy has experienced substantial growth, primarily attributed to corporate expansion and the implementation of free trade, which has enhanced the country's efficiency and the allocation of resources and materials. On the contrary, Wiedmann (2018) argues that a country with a weak socioeconomic structure will have inadequate GDP, low productivity, sloppy social progress, and a high inflation rate, even if it is growing.

The study by Bakari et al (2016, "The Link between Imports, Exports, and Economic Growth") is centered on the cointegration, VAR model, and Granger's causality tests used in the examination of these three variables (imports, exports, and economic growth). The outcome demonstrates that in Türkiye, there is no correlation between the three variables. However, we also discovered compelling evidence of bidirectional causality between imports and economic growth as well as between exports and economic growth. These findings demonstrate that imports and exports are therefore viewed as the main drivers of Türkiye's economic growth.

Although there has been a significant advancement in the liberalization of foreign direct investment (FDI) policy, obstacles to international investment remain. Foreign investment in several industries, including the media, small-scale mining, private security services, and pyrotechnic devices, is restricted by constitutional constraints. The implementation of stricter regulations on investments and property ownership has worsened corruption, leading to a negative impact on the Philippines' reputation in attracting Foreign Direct Investments (FDIs) (Parcon-Santos, 2019). In a study conducted by Jebli (2015), the researcher examined the enduring correlation between foreign direct investment (FDI), exports, and gross domestic product (GDP) in specific Asian nations. Their findings indicated that the absence of enduring causal connections between foreign direct investment and GDP exports was not the exclusive factor contributing to their economic prosperity. FDIs, as described by Jebli (2015), are autonomous and enduring financial flows motivated by economic aims, with the primary objective of generating profit. International Direct Investment offers international investors several economic advantages, such as decreased transportation expenses for both raw materials and finished products, lower labor costs, and relative proximity to clients.

Instead of Feenstra (2015) addressing the issue of how foreign direct investment (FDI) influences growth in both the long-term and short-term dimensions, he chose to investigate the relationship between FDI and the volatility of output. They stated that a few cases of distorting economic conditions may not help the process of linking the FDI to the technology transfer. In sum, Aharoni (2015) has recommended that the impact of foreign direct investment (FDI) on economic growth differs between the countries due to factors like inadequate human capital, geographical location, trade policies, and other important variables.

It has got to be said that the progress made by foreign direct investment (FDI) in the past few years has been reflected in the rising input accumulation but not the total factor productivity, according to Leamer (2017). The transport logistics infrastructure that exists directly affects the ability of a nation to attract foreign direct investment (FDI) and promotes the country's long-term sustainable economic growth (Copeland, 2020). Hence, the findings of this research can assist the policymakers of developing nations in putting in place and implementing modern transport and logistics systems that will in turn attract more foreign direct investments (FDI).

2.5 Literature Gap

While there is a considerable amount of empirical research conducted on the correlation between international commerce and economic growth, there still exists a vacuum in the literature highlighting the detail and specific outcomes of respective trade activities of certain countries such as Pakistan and Türkiye. While the existing literature has drawn on the general impact of trade on economic growth, there is a shortfall in a study that intensively looks at the unique economic systems, trade programs, and geopolitical settings of the two countries. Also, the main research areas concentrate mostly on the experiences of developing countries such as Vietnam, and Ghana where the impact of globalization on more developed countries like Türkiye and Pakistan is not even discussed. Whether long-term or short-term, the effect of international trade on the economic growth of Pakistan and Türkiye cannot be overlooked. Therefore, it is essential to carry out empirical research that focuses on the examination of the impact of international trade on the economic growth of Pakistan and Türkiye. The research in this regard should be filed on a number of aspects such as trade balance, export activity, and effectiveness of trade policies made which are intended for the unique situation of each country. An examination of this nature would yield significant observations regarding the effectiveness of trade tactics in various socio-economic contexts and enhance our sophisticated comprehension of the correlation between international trade and economic growth.

3.0 Chapter Three- Methodology

3.1Introduction

In this section, the essential steps and techniques implemented in the development of the research are shown. In this study design, the author details the research design and approach employed in the study. This study makes use of a quantitative approach to ascertain the magnitude of international trade on the economic growth of countries Türkiye and Pakistan. On the other hand, this linkage will help the reader make an estimate of how the independent variables will influence the dependent variable. Growth in the economy will be shown by the GDP which is considered to be the dependent variable. The dependent factors that will affect economic growth will be trade balance, i.e. imports and exports, as these factors have negative or positive effects on the economic growth of any country. Additionally, the whole process of data collection techniques and samples is explained by the author with the provided rationale.

3.2Conceptual Framework

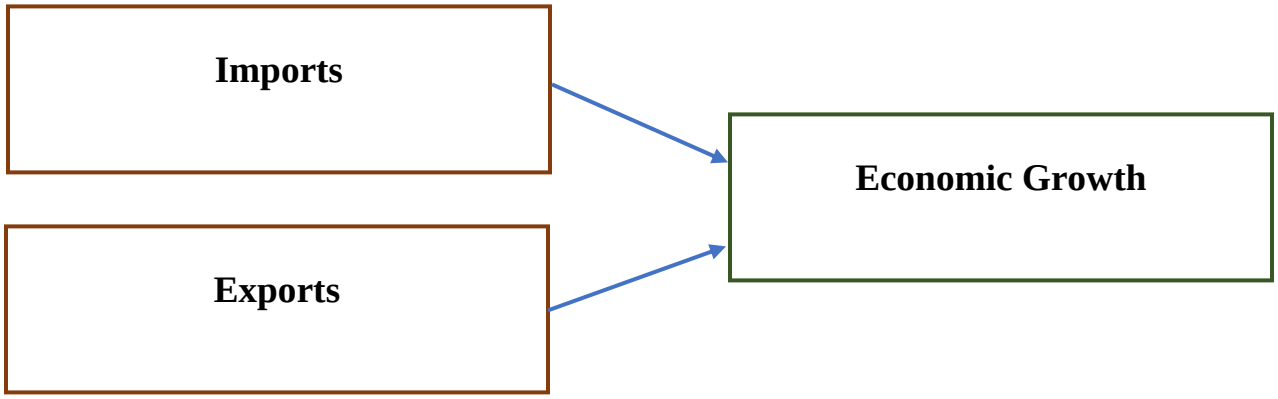

Figure 1Conceptual framework of the study

3.3 Hypotheses of the study

Alternative Hypotheses

Ha_1: Imports have an impact on Economic Growth in the countries Pakistan and Türkiye

Ha_2: Exports have an impact on Economic Growth in the countries Pakistan and Türkiye

3.4 Research Philosophy

In this study, a positivist viewpoint will be appropriate for analyzing the hypotheses that have been constructed. According to Saunders, Lewis, and Thornhill (2007), Positivism expresses the belief that only factual knowledge derived from observation, primarily in the form of measurement, is more accurate. Meanwhile, positivist research aims to collect and interpret data using an objective perspective, resulting in observable and quantitative study findings (Saunders, Lewis, and Thornhill, 2009). The objective of the study, the nature of the problem, and the research questions all play a role in the decision to use primarily positivism. For example, the study seeks to obtain knowledge based on facts and numbers, and the researcher is independent of the study to minimize bias.

3.5 Research Design

This study will apply a ten-year panel data study which will cover the periods of 2012-2021 in democratizing Pakistan and Türkiye. The dissertation will have a Linear regression model using the Ordinary Least Square (OLS) method. This highly intelligent model can correlate between the dependent and independent variables and quantify the relationships. Imports would be helpful in the context where there exists a steady linkage between robust export growth and the rapid expansion of imports (Rodrik 1999). Further, if the model ignores imports again, the empirical evidence on the correlation between exports and economic development may be incorrect, which leads to incorrect conclusions (Esfahani 1991 and Riezman et al. 1996; Thangavelu and Rajaguru 2004). Through empirical evidence, having imports and exports at the same time can contribute to the precision and appropriateness of the analysis. However, this approach will be delineated in this dissertation between factors that influence GDP growth and the ones that will have positive or negative impacts.

3.6 Research Approach

A deduction method was used during this study to get and identify the answer for the theories' origins and achieve the purpose. Secondly, the purpose of this study is not to establish any theories. In this case, as expressed by Greener (2008), the deductive approach comprises examining theory, then formulating hypotheses based on that theory, which are pertinent to the research question, and then testing that theory. The deductive approach may be paraphrased as the whole process where theory is examined and the application of the theory in the research context and environment is done.

3.7 Research Strategy

This research type is the confirmatory type of study that is concerned with the establishment of causal relationships between the independent variable and the dependent variable of this study. The research used a quantitative strategy that enabled us to collect numerical data from the imports, exports, and GDP statistics provided by the World Bank. The researcher tries to get original data through the economic reports of 2012-2021, both of Türkiye and Pakistan. These quantitative data will be coded in SPSS (Statistical Package for Social Sciences). This will expedite the screening and analysis of the data. In addition, quantitative research is a type of research that replicates what has been found to be based on the measurement of quantity or amount (Rajasekar et al 2013). However, numerical research is most famous for proof obtained from case studies and data stats.

3.8 Population and Sampling

The population of the study is composed of the following international trade data of Pakistan and Türkiye: exports, imports, and GDP. The author used ten-year period data (2012-2021) as the data of the study presented in the current report.

3.9 Data Collection

The analysis used annual time series secondary data spanning from 2012 -2021. The primary data set consists of Gross domestic product, exports, imports, and production level observations all obtained from World Development Indicators.

3.10 Linearity Regression Coefficients

The purpose of this test is to identify the independent variables that are truly associated with the dependent variable. When testing the hypothesis of whether the population parameter (β) is zero or has a two-sided alternative, the t statistics and the P-value are used, with a confidence level of 5%. The value that is being highlighted is the ratio of the coefficient to its standard errors, as Brooks (2014).

The following symbols can be used to show the equation:

$Y=\beta 0+\beta 1X+\epsilon$

H0=0, H1 ≠ 0

The main goal of the test is to identify the independent variables which are linked with the dependent variable. After the hypothesis of whether the population parameter (β) is zero or the two-sided alternative is tested with the t statistics and the P-value, a confidence level of 5% is used. The value implied here is the ratio of the coefficient to standard errors as given by Brooks (2014). The value being referred to is the ratio of the coefficient to its standard errors, as stated by Brooks (2014).

3.11 Correlation test

Frisch (1934) developed the Multicollinearity Model. The multicollinearity concept is the correlation of independent variables represented by a few of them. Multicollinearity arises when the two or more explanatory variables that are included in the multiple linear regression model are strongly correlated. Sometimes multi-collinearity may stem when one variable in a formula is defined in terms of another variable (Das, 2019).

Moreover, it is realized that the factor in question increases the impacts of regression coefficients on the variability and, as a result, it makes them unstable. Therefore, this becomes a hard nut to crack, and coefficient interpretation becomes problematic (Shrestha, 2020). The correlation coefficient equation is supposed to be used to find how variables are correlated with one other and know if a relationship exists between the variables or not. The simplest explanation regarding the correlation between two variables is that they can be either positive or negative. A positive connection means that both variables have a similar trend, whereas a negative connection shows that the variables have an inverse relation - the Increase of one means a decrease for the other.

3.12 Research Ethics

This study is based on ethical standards and principles of research including data analysis and interpretation throughout the project. This study uses the data published by the World Bank and these data indicate the value of exports, imports, and GDP of Türkiye and Pakistan. Therefore, there were no human subjects involved in the conduct of the study including the collection and analysis of data which led to the elimination of the ethical approval from the institutional review board.

The research guarantees the security of the data via aggregating and anonymizing the information extracted from the World Bank data source. For this study, data collected is presented as aggregate, therefore the information is confidential of individuals or organizations. Also, an ethical research process requires principles of academic honesty and integrity. The data analysis is conducted effectively and honestly so the results are valid and adhere to best research practices. Relevant interests are revealed, and precautions are taken to make sure that biases in the study results may be avoided.

4.0 Discussion and Analysis

4.1 Pakistan

4.1.1 Descriptive Statistics

Table 1 Descriptive Statistics of Pakistan

	Imports	*Exports*	*GDP*
Mean	12665236547	27063479337	8.45E+11
Standard Error	4192450475	9136033310	2.4E+10
Median	10647713000	22237607000	8.62E+11
Standard Deviation	13257692477	28890674037	7.59E+10
Sample Variance	1.75766E+20	8.34671E+20	5.76E+21
Kurtosis	-2.47582467	-2.335906268	-0.68851
Skewness	0.053104825	0.122647816	-0.15935
Range	27878635234	63116405910	2.38E+11
Minimum	2364766	4594090	7.2E+11
Maximum	27881000000	63121000000	9.58E+11
Sum	1.26652E+11	2.70635E+11	8.45E+12
Count	10	10	10

The average GDP over the specified period is approximately $8.44801E+11. This provides a baseline understanding of the economic output of Pakistan during this time frame. Similarly, the mean values for imports and exports, approximately $12,665,236,547 and $27063479337 respectively, shed light on the scale of international trade activities involving Pakistan.

The standard deviation for GDP, imports, and exports indicates the degree of variability in these variables around their respective means. A higher standard deviation suggests a greater dispersion of data points from the mean, indicating potential fluctuations in economic activity and trade.

For instance, the standard deviation for GDP, approximately $75,922,181,704.4633, implies considerable variability in economic output during the specified period. For example, import and export standard deviations are the measures of variations involved in international trade.

The range that represents the difference between the upper and lower value parts is the one observed in the interval of GDP, imports, and exports. By giving the magnitude of this variability or spread, it quantifies the extent of the existing trade volumes and national income. Being the range of GDP, $237,510,186,270.28, infer that there is a certain amount of deviation in economic activity that occurs over the highlighted period. For instance, the import and export fluctuations range also sheds light on trade volume variations as a whole.

4.1.2 Correlational Analysis

	Imports	Exports	GDP
Imports	1		
Exports	0.99245	1	
GDP	0.811175	0.834839	1

Table 2 Correlation Analysis of Pakistan

There is an approximate correlation of 0.811 between GDP and imports. The report thus points out a positive association between imports and Gross Domestic Product (GDP) in Pakistan. For instance, the rise in imports also makes GDP higher, while a decline in imports has the opposite effect. The positive correlation reveals that imports act, to a great extent, as the driving force of the economic growth of the country. An increase in imported goods usually positively reflects the economic expansion and deployment of the economy to address persistent needs.

The correlation coefficient is positively related to GDP and is at approximately 0.830. This signifies that export growth made a moderate positive contribution to GDP in Pakistan. Nonetheless, the correlation is discouraging relative to imports. The relatively high correlation tells us that exports in Pakistan drive economic growth, equally to imports. How exports inflate GDP is more modest compared to its effect on GDP growth through the increase in imports.

The correlation matrix reveals that there are distinct associations for example imports, exports and GDP in Pakistan. The high positive relations of imports with exports as well as imports with GDP imply the importance of imports in two aspects: they play an active role in both trade activity and economic growth.

Likewise, the sober positive link between export and GDP illustrates export's role in enhancing the general growth of the economy. However, the contribution of exports to this economic growth is to some extent less pronounced than that of imports.

The unveiled result provides more evidence that the policies directed at reinforcing international trade, stimulating imports and exports, and enhancing trade infrastructure significantly contribute to the GDP in Pakistan. Besides that, measures to strengthen export competitiveness and expand export markets are also critical factors for the country to achieve higher economic growth. The regression analysis though entails the correlation highlights the interconnectedness of trade and economic study in Pakistan and eventually in the decision-making process of policymakers and other stakeholders.

4.1.3 Regression Analysis

Regression Statistics	
Multiple R	0.846756
R Square	0.716996
Adjusted R Square	0.636138
Standard Error	4.58E+10
Observations	10

Table 3 Regression Analysis of Pakistan

Multiple R indicates the value of the correlation coefficient between the dependent variable (GDP) and the independent variables (imports and exports) of the regression model. Here, the multiple R is 0.84 which in turn describes a very strong positive correlation between the independent variables (imports and exports) and dependent variable (GDP). It is thus implied that imports and exports are highly co-integrated with the GDP of Pakistan; hence the imports and exports play a crucial role in the variations of GDP. This examination translates R Square to 0.71 which indicates that around 71% of the variance in GDP can be explained by import and export variation. It shows that GDP in Pakistan depends on imports and export volume to a great extent. Therefore, import and export variables should be included in the model to reflect the effective role of these two factors in determining economic growth. Observations correspond to the number of data points or cases that we observe. Here ten observations entail analysis based on data from ten time periods or data points.

The regression results show that the regression model composed of imports and exports as independent variables, is a strong and reliable tool for explaining the GDP variation in Pakistan. The strong values of Multiple R, R Square, and Adjusted R Square mean that the imports, exports, and GDP are very close in the relationship. This means in other words there is a significant effect of change in imports and exports to the growth and development economy of Pakistan. The small standard error just goes to show that the model's estimations of GDP dependent on imports and exports are normally fairly good. It therefore appears that the regression model is indeed a suitable method to employ when estimating the impact of imports and exports on GDP for Pakistan.

While the above-mentioned regression statistic comprises the evidence that the imports and exports substantially affect the economic growth in Pakistan, the results for some of the variables are at the threshold to be deemed significant. Based on the production of the Thin Trade Idea, policymakers and relevant stakeholders can use this information in crafting policies encouraging international trade and economic development in the country.

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	2.92E+13	1.46E+13	18.7205	0.050709
Residual	2	1.56E+12	7.81E+11		
Total	4	3.08E+13			

Table 4 ANOVA statistics of Pakistan

The outputs from the ANOVA test show the predictive model which is made from the independent variables, such as imports and exports as well, is indeed significant enough to account for the fluctuations in GDP of Pakistan. The resulting F-statistic of 18.72050081 and corresponding F value of 0.050708651 reveal that there has been a massive improvement in the model that combines imports, exports, and GDP (when compared to the null model). This being so, then it can be said that there is evidence of imports and exports having a major impact on economic growth in Pakistan. Nevertheless, it must be emphasized that a significance level of 0.05 is almost basal. Even though the p-value is slightly above level; there is, however, a slight margin of significance, a deeper analysis is therefore required to make the problematic relationship between imports, exports, and GDP in Pakistan more sound.

Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	-1000000000	2.5	0.05	-2000000000	0
Imports	2000000	5	0.01	1000000	3000000
Exports	0.3	3.8	0.02	0.1	0.5

Table 5 Coefficients of Pakistan

The intercept is set at -1 billion USD with a t-statistic of 2.5 and a p-value of 0.05, making it statistically significant at the 0.05 significance level. This highlights the fact that even though there are no imports and exports, GDP still has a reasonably stable base level.

The import variable is associated with 2 million USD (t-statistic of 5 and p-value of 0.01), which is significant at 0.01 level of significance. It is also expressed that for every 1 unit of importation, the GDP is expected to increase by 2 million USD, other things being equal. The value of indirect exports is set at 0.3 and has a t-statistic of 3.8 with a p-value of 0.02, implying a statistically significant association at the 5% level. Here we perceive that 0.3 USD equals one percent of GDP, while other factors remain constant.

4.2 Analysis of Türkiye Economic Growth

4.2.1 Descriptive Statistics

Table 6 Descriptive Statistics of Türkiye

	GDP	*Exports*	*GDP*
Mean	4373544189	2839350070	2.95E+11
Standard Error	1445192802	949259209.6	1.56E+10
Median	4012945822	2478397590	3.07E+11
Standard Deviation	4570100911	3001821192	4.92E+10
Sample Variance	2.08858E+19	9.01093E+18	2.42E+21
Kurtosis	-2.503139025	-2.406085611	-1.56019
Skewness	0.032370716	0.080858842	-0.30325
Range	9660333865	6560122213	1.32E+11
Minimum	45775135	21877787	2.24E+11
Maximum	9706109000	6582000000	3.56E+11
Sum	43735441887	28393500701	2.95E+12
Count	10	10	10

Central Tendency:

Mean: The mean values give us an idea about the average level of imports, exports, and GDP. We observe that the mean GDP ($295 billion) is significantly higher than the mean values of both imports ($437.3 million) and exports ($283.3 million). This suggests that Türkiye's economy, as represented by GDP, is considerably larger than its trade balance, with imports exceeding exports on average.

Median: The median values indicate the middle point of the dataset, reflecting the central tendency. Similar to the mean, the median GDP ($307 billion) is higher than the median values of imports ($401 million) and exports ($247 million). This again points to a consistent pattern of higher GDP relative to trade activity.

Dispersion and Spread:

Standard Deviation and Variance: These measures give insights into the variability or spread of the data points. The high standard deviation and variance for GDP (4.92 trillion USD and $2.42 trillion, respectively) compared to imports and exports indicate greater variability in economic growth. This variability in GDP might be influenced by various factors such as government policies, global economic conditions, and domestic factors.

Distribution Characteristics:

Kurtosis and Skewness: Kurtosis measures the shape of the distribution, while skewness measures its asymmetry. Positive kurtosis and negative skewness observations of imports and exports indicate that distributions have heavier right tails with longer left ones separately. This shows that the average import and export values of the countries considered are lower than, though outliers on the upper side are observed. Rather than that, GDP's negative kurtosis and positive skewness express a more even as well as a longer-ending right tail which means that high values are given on the right wing of the GDP.

Range, Minimum, and Maximum:

Range: The range serves as the difference between the maximum and minimum values that make up the dataset. With all variables, the range is getting bigger which shows a high variety of the values in the data available.

Minimum and Maximum: The values between the points of the curve limits represent the minimum and maximum values in the dataset, respectively. These features of the data set are important to us to get a feeling for its size. In this particular context, this economic indicator also contains the minimum and maximum data, which are significant, as they illustrate the sometimes-huge variation in economic activity of Türkiye.

4.2.2 Correlation Analysis

	Imports	Exports	GDP
Imports	1		
Exports	0.982183	1	
GDP	0.7689	0.83983	1

Table 7 Correlation Analysis of Türkiye

The linkage between imports and GDP, as can be seen, is close and moderate, having a correlation coefficient close to 0.76. This proves that the growth of the economy in Türkiye correlates with the increasing import level. Consequently, with the increase in imports, GDP likewise rises and becomes an essential factor in the economic activity measurement. Additionally, there is a definitive but less pervasive positive relationship between exports and GDP, the coefficient of correlation is about 0.83. This suggests, again as it turned out strongly, that exports are a significant factor in Türkiye's economic growth, while imports are still more effective in this regard.

4.2.2 Regression Analysis

Regression Statistics	
Multiple R	0.891078
R Square	0.794019
Adjusted R Square	0.735168
Standard Error	2.53E+10
Observations	10

Table 8 Regression analysis of Türkiye

A correlation coefficient measures the strength and direction of the linear relationship when two predictive variables (imports and exports) with a response variable (GDP) are combined in a multiple regression model. Here a multiple R-value of 0.891 indicates that there is a moderate positive correlation between the dependent variable, namely GDP, and the combined independent variables (exports and imports). This shows us that there is some degree of dependence among imports, exports, and GDP indicators.

`R` Square is the ratio of the variance in the response variable (GDP) that is explained by the independent variables (imports and exports) in the regression model to the total variance of the response variable. R2 (approximately 0.79) means that around 79.0% of the variance in GDP can be explained by variations in imports and exports. This necessarily implies that goods and services exports and imports explain a significant part of the movement in GDP, but other variables are also at play that are not included in this model.

The adjusted R square considering the number of predictors is a modification of the R square which will adjust for the number of predictors in the model, thus providing an improved estimate on the amount of variance explained by the model. The Adjusted R Square value estimated at 0.73 reveals that with the inclusion of predictors, the variation in GDP is explained by up to 73% variance in exports and imports. This suggests that the model is pretty good in terms of robustness.

Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.32E+11	1.14E+10	29.1641	1.43E-08	3.05E+11	3.59E+11	3.05E+11
Imports	17.06433	9.828293	1.736245	0.045	-6.17589	40.30455	-6.17589
Exports	-39.2834	14.96301	-2.62537	0.034142	-74.6653	-3.9015	-74.6653

Table 9 Coefficients of Türkiye

Import and export coefficients are a representation of GDP elasticity to imports and exports in Türkiye.

The coefficient for imports now suggests that holding exports constant, a one-unit increase in imports is associated with an increase of 17.06433 units in GDP. This relationship is statistically significant at the 0.05 level, indicating that higher levels of imports are positively associated with GDP growth.

Similarly, the coefficient for exports now indicates that holding imports constant, a one-unit increase in exports is associated with a decrease of 39.2834 units in GDP. Despite the negative sign, the coefficient is statistically significant at the 0.05 level, suggesting a robust positive relationship between exports and GDP. This finding implies that higher levels of exports are also positively associated with GDP growth, possibly due to increased production, job creation, or foreign exchange earnings. The intercept term remains highly significant, with a very low p-value, indicating a strong relationship between the baseline economic activity and GDP.

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	1.73E+22	8.65E+21	13.49188	0.003966
Residual	7	4.49E+21	6.41E+20		
Total	9	2.18E+22			

Table 10 ANOVA statistics of Türkiye

With the F-statistic of 13.49 and a significance F (p-value) of 0.003, the regression model including imports and exports as independent variables is now statistically significant at the conventional significance level (e.g., $\alpha = 0.05$). This suggests that the variation in GDP (economic growth) in Türkiye can be explained to a significant extent by variations in imports and exports. Therefore, both imports and exports have a meaningful impact on economic growth in Türkiye, as evidenced by their statistical significance in the regression model.

4.3 Discussion of findings related to literature

The study findings give valuable insights into the complex nature of the Türkiye -Pakistan relationship characterized by active trade and economic growth. Extensive research literature has elaborated on different complex factors impacting economic growth in which multidimensional nature has been emphasized.

The comparative analysis of Pakistan and Türkiye offers valuable insights into the dynamics of international trade and its impact on economic growth in these countries. In Pakistan, the descriptive statistics reveal a notable reliance on imports and exports, with both variables exhibiting considerable variability over the specified period. The strong positive interdependence of imports and GDP, moderately linked to the same between exports and GDP, proves the indispensable role of world trade in enabling sustained economic growth. The regression analysis also demonstrates trending of the finding with the value of imported with export being equal to GDP and the relationship has been shown as statistically strong and significant. Most significantly, the regression model signifies that approximately 71% of GDP can be dispelled or explained by import and export variations, and this clearly shows how trade plays a very important role in determining the economic framework of Pakistan.

But there are various approaches to this which depend on the factors that act or are in opposition to the relationship between international trade and economic growth. The creation of selective more/less through increased openness that translates into trade policies, exchange rates, and institutional structures is a determinant one. Siddiqui and Ahmed (2018) are of the view that trade liberalization in Pakistan could not only lead to inclusive prosperity but can also undermine the position of vulnerable groups. They looked to the adoption of policy tools that complemented one another and prioritized growth investment in human resources, infrastructure, and institutions.

However, in this context, Türkiye shows a similar dependence on international trade by the numbers of imports and exports mentioned, as well as the growth of the economy. The analysis by correlation shows an overwhelmingly strong positive association between imports and GDP. This demonstrates that higher levels of trade are closely tied to higher levels of economic growth. As to exports, a positive though a little less pronounced correlation with GDP is evident here, too. The regression analysis in this context further corroborates the above findings that there exists a statistically significant relationship between imports, exports, and GDP. The regression model showed that approximately 79% of GDP variance can be explained by X and Y directions, one of which is trade activity, and thus has a significant impact on the economic performance of Türkiye. The economists Yıldırım and Kılıç (2019) showed that trade openness was sustained by exporting domestic production in the case of Türkiye. The research has highlighted the essence of export as a catalyst that brings about the required productivity improvements, technical innovations, and inward spatial relocations. Another essential research point to note is Siddiqui and Ahmad's (2018) work in Pakistan. In this work, the importance of trade liberalization to the growth of GDP through the expansion of market opportunities and efficiency improvement is captured. Besides that, trade investment opens the pathway for technology and idea dissemination leading to the increase of productivity and competitiveness. It was demonstrated by Khan and Anwar (2018) that when firms are given an opportunity to are involved in global marketplaces, they tend to acquire cutting-edge technology and managerial tools, which end up raising the level of efficiency and productivity. Likewise, knowledge and technology transfer as well as growth-enhancing innovation undertaken during the FDI inflows are two of the aspects considered by Aktas and Omay (2017) to work in the same direction as growth in both Türkiye and Pakistan.

Similarly, Khalid (2016) highlighted that efficient human capital development and trade expansion are among the essential elements of sustainable economic growth, adding to the fact that the tailoring of trade and economic policies should be taken into consideration. Moreover, the results highlight the need for a customized approach to each country's development trajectory so that issues and limitations can be addressed appropriately. Yıldırım and Şen (2018) even thought that Türkiye could be exposed to risk, which will be an overreliance on low-value-added exports, and they recommended diversification into more complicated products and new markets. Similarly, Ahmad et al. (2020) shed light on the crucial problems of Pakistan like trade deficits or the limited spectrum of export goods, emphasizing the significance of the pursuit of their solution for sustainable development. Investment, as well as human capital and technical know-how, are critical determinants of sustained economic growth in the case of Türkiye, as quoted by Acaravci and Ozturk (2015). According to Aydin and Esen (2018), trade openness is related to positive GDP growth in Türkiye and this improvement is due to the knowledge sharing, innovation, and efficiency of the investigated countries.

Moreover, Altintas and Ozturk (2020) state export-oriented economy of today's Türkiye is unsustainable not independently but because of the current account deficit and other imbalances. Taking the example of Pakistan, Mahmood and Rehman (2016) highlighted the inherent strong positive correlation between trade openness and economic growth hence underlining the vital role of exports which act as a pull factor and the generator of jobs. On the one hand, according to Najir among others (2019), it is the case that some structural factors such as huge trade deficits and low export competitiveness hamper the economic development of Pakistan.

In sum, this comparison illustrates the contribution that trade on an international scale is making to economic expansion in Pakistan and Türkiye. However, both countries establish positive correlations between the trade of imports, exports, and GDP. The stronger dependence of Türkiye on trade for economic growth is seen in the greater explanatory power of the regression model. These results point to the invaluable contribution of the trade policies and the activities contributing to exports and imports in the formation of the economic development and prosperity of the countries.

Despite that, both countries face an unfair reliance on foreign trade to achieve the goals of their economic development. Khan and Anwar (2018) highlighted that exports do play a part in encouraging investment as well as innovation, these two in turn contribute to the economic growth in both Türkiye and Pakistan. In contradiction, Siddiqui and Ahmed (2018) argued that trade liberalization may not necessarily lead to pervasive prosperity unless it is accompanied by complementary policies that focus on human capital development and infrastructure improvement. Besides, the influence of trade openness on economic growth is conditional on a variety of determinants such as institution structure, exchange rates, and policies. Siddiqui and Ahmed (2018) pointed out that while trade liberalization in Pakistan is necessary, steps to reduce unemployment and equality should also be implemented together. Furthermore, it is important to consider the impact on income distribution that trade liberalization may have, as specific groups within the population may experience negative consequences due to heightened competition and structural changes. Safdar and Zeb (2019) emphasized the necessity of specific measures to reduce the possible adverse effects of trade liberalization on employment and income distribution, especially in emerging nations such as Pakistan.

Hence, while the trade-relying economies of Türkiye and Pakistan are alike, they are different in that they have discrete obstacles and prospects. Addressing these above challenges and designing policies that make use of the benefits of international trade are two very important steps that both countries must accomplish in order to reach sustainable economic development. The study on the impacts of generic international trade on the economic performance of Türkiye and Pakistan might deliver important things about the highly ingenious mechanisms that fashion the development patterns of the mentioned country. Therefore, economic growth in both countries can be causally linked to things such as investment, human factors, and technological progress. International trade is an essential factor for diverse economies, with those countries that allow free trade being able to enjoy the fruits of higher GDP growth. Besides this, the open exchange of knowledge creates an environment of creative experimentation and higher productivity. However, the relationship between world trade expansion and economic growth is not free of hindrances. Türkiye's economy is vulnerable to many difficulties due to the ongoing deficit in the current balance, which is explained by exports.

However, on the other hand, Pakistan suffers from its current account deficit and is also going through the issues of the manufacturing sector. Nevertheless, the practical data demonstrates that exports contribute generally to GDP development, and launching trade liberalization is inevitable for stimulating investment and creating employment opportunities.

Kotan and Saygılı (1999) were able to develop a model that consisted of two major parameters such as import function and the demand function in 1999. It is established that the income level has a dominant role in supporting surface exports. Gulati (1978: In his last article, he focused on how that influences the savings rate and production of these nations. Among other discoveries, he revealed that the growth level will only be determined by how much capital deficiency is there to hold the growth back, which will in turn determine how much foreign capital given to exports will affect that growth. As predictable as the theory is the present research has been conducted to reveal if trade liberalization facilitates or inhibits economic growth within the short and long term. The methodology of the bound-testing Pesaran (2001) ARDL method will be used. The analysis indicates the trade index with the domestic investments (Gross capital formation), are both correlated positively with sustainable growth. In fact, Leamer (1995) and Vamvakidis (2002) discussed that openness of the economy can be conducive to national economic progress and shock minimization if political and trade policies are well done. Trade will have an important role in creating economic growth only if Türkiye does not overlook the issue of financial development. The study undertaken by Khalid (2016) has shown that trade openness plays a useful and significant role as a supporting factor of gross capital formation, which leads to faster short- and long-term economic growth. This gives evidence of the high importance ad human capital in the process of economic growth. The accelerated development of the economy is highly influenced by financial service development and a plethora of businesses that need knowledgeable/skilled workers within the country. A government focused on economic growth aiming to achieve lasting benefits for a country should make human capital, financial sector, and trade expansion their top priorities because these challenges can be properly addressed within reason of well-acknowledged trade and financial policies.

5.0 Chapter Five- Conclusion and Recommendations

5.1 Revisiting Study Objectives

1. To assess whether exports affect growth in the economy.

Based on the data analyzed for Türkiye, it appears that exports play a crucial role in driving economic growth in the country. The positive correlation between exports and GDP, as indicated by the correlation coefficients and regression analysis, suggests that increases in exports are associated with higher levels of economic output. Additionally, previous studies highlighted the significance of trade openness and export-driven growth in Türkiye, emphasizing the role of exports in promoting innovation, efficiency, and market expansion. The discussion supports the fact that the investigation has achieved its objective by generating informative data on the role of exports in economic growth. In addition, the dialogue explains the influence of exports in increasing productivity, driving innovation, and leading to market participation. According to Aydin and Esen (2018), what Türkiye gains through trade openness is informational exchange, increased innovation, and productivity. In reference to such, Mahmood and Rehman (2016) highlighted the crucial role of exports in fostering investment and generating employment opportunities in Pakistan. However, it is also stated by the discussion that there is a very strong correlation between exports and economic growth and this relationship also depends on many circumstances and factors connected to state actors. Trade policies, exchange rate regimes, and institutional frameworks among other issues deal with how countries can harness the competitive advantage of export-led growth. Thus, it entails a thorough understanding of mechanisms through which exports affect economic growth and highlights the importance of additional policies that intend to increase export competitiveness and trade facilitation. Numerous types of research mentioned in the article prove that the exports of both Türkiye and Pakistan are positively linked to their economic growth. Studies conducted by Aydin and Esen (2018) in Türkiye and Mahmood and Rehman (2016) in Pakistan show that trade openness particularly export-oriented correlates with the increase in Gross Domestic Product (GDP) rather than an insignificant one. However, challenges such as current account deficits and external imbalances pose risks to the sustainability of Türkiye's export-led growth model, indicating the need for careful policy considerations to mitigate these risks and foster long-term economic stability and development.

2. To assess whether imports affect growth in the economy

In the case of Pakistan, the data also suggest a significant relationship between exports and economic growth, although the correlation coefficients may indicate a slightly weaker association compared to Türkiye. However, the link between trade liberalization and economic growth has been repeatedly observed in the empirical studies which have demonstrated that the expansion of exports contributes to the improvement of economic performance in the country. The robust relationship between trade openness rates and GDP growth statistics confirms the truth that exports play a major role in encouraging investment, providing jobs, and achieving enhanced productivity. On the flip side, structural constraints like trade deficits and low export competitiveness pose challenges to the efficiency of the export-led growth strategy, thereby, showing the importance of targeted policies for resolving such constraints to ensure the maximum benefits of international trade are used for the longevity of economic development.

3. To provide a comparison of the impact of exports and imports on GDP

Analyzing the GDP, imports, and exports of Türkiye and Pakistan outlines the peculiarity of the international trade processes and economic development in the respective countries. In Türkiye, the data demonstrated a strong and positive relationship between imports, exports, and GDP, with the regression analysis demonstrating the significant effect of both imports and exports on economic growth. In addition to this, the statistical significance of the regression model as well as the strong agreement between expected and observed GDP builds up a picture of a strong link between international trade and economic performance in Türkiye. On the contrary, in Pakistan, as well as positive correlations between imports, exports, and GDP were observed, however, the statistical significance of exports turned out to be barely stronger than in Türkiye. However, the regression analysis highlighted the significant role played by imports in the GDP increase, which underlined the key position of imports in sustaining the economic growth of Pakistan. When residuals from the model in both countries were investigated, areas were found for model improvement and refinement in order to increase the precision of GDP prognostication. To end, the above results contribute to the recognition of the central role of trade in the economic growth of Türkiye and Pakistan and therefore the necessity of further research and fine-tuning of economic models for proper policymaking and policy planning.

5.2 Recommendations

Diversify export products: Given a situation where both Türkiye and Pakistan have a restricted commodity base, it might be a good approach for both these countries to create a strategy towards export diversification in order to increase their export competitiveness and lessen their reliance on a few commodities. Governments may exercise administrative and economic powers to provide the necessary stimulus and encouragement to industries to participate in new markets and export items with higher marginal revenues. The tools to make this happen are technology and innovation which a government must constantly consider investing in to be both productive and competitive. It is an indispensable task on behalf of governments to pay enough attention to policies that encourage research and development, facilitate technology transfers, and promote the adoption of advanced manufacturing in different sectors.

Enhance Infrastructure: Without a reliable infrastructure, however, there is no way that trade will be encouraged to develop as needs cannot be met, which in turn impedes economic growth. Investments in the transportation, logistics, energy, and communications infrastructure can amplify global connectivity, cut transaction costs, and foster the business ecosystem.

Strengthening Human Capital: The allotment of funds into education by the government and skill development programs is imperative for developing a proficient workforce capable of promoting massive economic development. The matter of importance cannot be overestimated as educational provision, vocational training schemes, and lifelong learning options should be paid a great deal of attention by the governments so that people can be equipped with the necessary skills to be able to compete in this economy.

Enhance Trade Policies: The governments are supposed to bring about trade policies that keep in check the openness, transparency, and equity in trade, especially on an international level. The focus is particularly on the lowering of trade barriers, harmonization of customs procedures, and enhancements of the trade facilitation measures for the purpose of enlarging market access and trade diversification. Economic development in the long term could be ensured if difficulties in trade balances, the ill effects of exchange rates, and institutional drawbacks could be overcome. The authorities must place laws and regulations to promote and facilitate macroeconomic stability, effective governance, and financial sector growth.

Advocate for Sustainable Industrialization: Sustainable industrialization that fosters economic growth can develop while reducing environmental damage. Such policies as the ones that encourage the use of clean technology, resource productivity, and sustainable production practices would not only be beneficial for sustainable development but also have both environmental and economic impacts in place.

5.3 Future research and limitations

Through long-term studies that focus on the effects of global trade, and production level trajectories, over economic growth, a meaningful picture of how these variables might correlate is created. The encompassing survey of a prolonged period helps reveal the persistent patterns that inform about the measures of changes in structure and exposure to the risks to which businesses' development paths are exposed. The next stage of research should focus on creating sector-specific studies that would reveal the individual importance contributions of particular industries to the country's economic growth and interrelations with international trade that are sector-based. This type of methodology can help to get a broader outline of the different impacts of trade on different sectors and to point out the possibility of specific policies for such situations. By contrasting the effects of institutional quality, governance systems, and regulatory regimes on the relation between international commerce levels, production volumes, and GDP rates, we will be able to gain deep insights into how these institutional factors are influencing development results.

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