ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

MAPPING TRADE SHIFTS: UNDERSTANDING THE DETERMINANTS OF EXPORT DIVERSIFICATION IN BRICS AND PAKISTAN

Dr. Naima Mubeen
National College of Business Administration and Economics, Lahore, Pakistan, naimamubeen@gmail.com
Dr. Muhammad Hanif
National College of Business Administration and Economics, Lahore, Pakistan, drhanif@ncbae.edu.pk
Dr. Ibne Saud
National College of Business Administration and Economics, Lahore, Pakistan, aghaibnesaud@gmail.com
Dr. Muhammad Abdul Qaddus
National College of Business Administration and Economics, Lahore, Pakistan, draqmalik@gmail.com

Abstract
The present study aims at highlighting the determinants of export diversification is Brazil, Russia, India, China, South Africa (BRICS) and Pakistan. Empirical analysis is done on panel data of BRICS and Pakistan for the years 1996 to 2022.For empirical analysis Generalized Method of Moment (GMM) is used. Hausman test is used to suggest the fixed effect or random effect model. Results revealed on the basis of selected determinants. Results of term of trade, official exchange rate, globalization, GDP per capita, world GDP and foreign direct investment exhibited positive effect on export diversification in case of BRICS and Pakistan. The term insignificant does not mean that these variables do not affect export diversification because some variables showed insignificant effect. It means that these positively associated determinants can play a key role in order to boost up the export diversification in case of BRICS and Pakistan. While political stability and gross fix capital formation shows negative which is quite debatable. It means that those countries which have a negative fiscal and trade balance do not benefit from the diversification of exports. Before entering export diversification these countries need to be financially stable in case of trade by promoting exportable goods.
Keywords: *Term of Trade, Official Exchange Rate, Globalization, GDP per capita, World GDP Foreign Direct Investment, Political Stability, Export Diversification*

INTRODUCTION

There are several potential dangers in international trade, including those associated with products, politics, goods transportation, and credit. Depending on the details of the financing agreement, one party may be responsible for the failure to pay, or the other party may be responsible for the failure to deliver the products. The necessity for working capital and the likelihood of damage both rise with longer transportation periods. Because trading partners are situated in different countries with distinct regimes, these risks are made worse. Because of this, settling issues involving international trade is far more challenging than settling problems involving domestic businesses (Ali & Naeem, 2017; Siddiqi et al., 2014; Arshad & Mukhtar, 2019; Irfan & Sohail, 2021). International trade performance is also influenced by exchange rate dynamics, trade policy uncertainty, foreign debt conditions, and macroeconomic stability, which collectively shape the business environment for exporters and importers (Ali, 2015; Ali, 2018; Ali, 2022; Alvi & Mudassar, 2025).

For a long time, academics have looked for ways to categorize the ever-expanding variety of goods that go into international trade to better understand trade flows and evaluate the competitiveness of different nations. Popular approaches that have produced useful insights include factor intensity classification and technology intensity classification. Nevertheless, a fundamental issue with both methods is that they are both applicable at a pretty high level of aggregation. Recent studies have therefore emphasized the importance of examining export sophistication, trade competitiveness, trade barriers, and structural transformation to obtain a more comprehensive understanding of international trade patterns (Khan & Afzal, 2016; Wang et al., 2022; Soliman, 2025; Cizakca, 2024). Similar concerns have been raised in studies investigating bilateral trade relations and trade volumes among developing and emerging economies (Alzahrani & Salah, 2020; Naik, 2020; Mealli, 2021).

A country's exports can be characterized by its diversification when the phrase "export diversification" is used. Export diversification, in its simplest form, is shifting a country's focus from a small number of commodities to a larger and more sophisticated range of products and services. To mitigate the effects of fluctuations in global

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

demand for certain products and other unforeseen circumstances, businesses are increasingly turning to export diversification strategies. Emerging nations often want to diversify their exports as a growth strategy. This aids them in accomplishing several crucial objectives. Research suggests that export diversification contributes to greater economic resilience, industrial upgrading, and participation in international production networks (Ali & Munir, 2022; Cao et al., 2022a; Cao et al., 2022b; Song et al., 2022). Furthermore, diversification has become increasingly important in economies seeking to enhance competitiveness through technological advancement, innovation, and value-added exports (Huang et al., 2023; Wang et al., 2022; Ren et al., 2022).

Through export diversification, emerging nations can lessen their economic vulnerability to price swings in a small number of goods or industries. If a country's economy is overly reliant on a small number of exports, it might be susceptible to economic downturns or disruptions in the global market for those goods. Diversification can lessen the effect of such threats. A broad export base helps a country's economy withstand changes in global demand and trade policy. Trade and the economy benefit from exporting a diverse range of commodities to new markets. This is according to Aydin (2016). Similar findings have been reported in studies examining export sophistication, trade facilitation, foreign direct investment spillovers, and infrastructure development, which collectively support sustainable export expansion and economic growth (Liu & Wang, 2022; Ur Rehman et al., 2021; Takpara et al., 2023; Rehman et al., 2023). Evidence from Pakistan and other developing economies further indicates that diversified and sophisticated exports can improve competitiveness, reduce vulnerability to external shocks, and strengthen long-run growth prospects (Mubeen & Ahmad, 2016; Reis & Taglioni, 2013; Zhu et al., 2010; Ali, 2011).

When people first started trading and producing goods, countries would often focus on specific industries and employ their natural resources to their full potential. But de-specialization, which produces a wide variety of items, has a lot of modern-day backers. Inadequate variety or specialization is common in developing nations because of their economic structures and dependence on natural resources. Consequently, countries with low per capita income would do well to diversify their exports. The ability to manufacture goods employing a diverse array of imported commodities and inputs allows an economy to increase its exports. Two classic trade theories that provide credence to the assumption that specialization increases production are the Heckscher–Ohlin model and the Ricardian framework. However, current thought suggests that various goods be created in different nations, with the most efficient location being chosen for each commodity. Contemporary evidence indicates that export diversification is strongly associated with trade openness, industrial upgrading, export sophistication, and participation in global production networks, particularly among developing economies seeking structural transformation (Andreou, 2021; Mordecai & Akinsola, 2021; Hwang & Lee, 2019; Sun & Chang, 2020). Studies focusing on Pakistan and other emerging economies further suggest that diversification strategies can reduce dependence on traditional exports and support broader economic development objectives (Audi & Ali, 2018; Ali, 2018; Ali, 2022).

Words like "diversification" after "export" have diverse meanings depending on the author and might mean many different things. The term "export diversification" refers to changing the composition of a country's exports. Distributing production across different industries is what diversification exports is all about, according to (Boschma, 2017). The idea that a nation might increase the diversity of its exports by peddling a larger range of products is also advanced. Entering new markets is how Boschma (2017) characterizes export diversification. Boschma (2017) states that the conceptual definition of the word is derived from the technique of measurement for diversification. To make a point, the concentration indices measure how much of a country's income comes from a small number of export items as opposed to a wider range of commodities. Extensive and intensive margins are equally capable of showing increases in exports. One should examine these margins to understand the nature of export diversification. According to Cadot et al. (2011), a more diverse export basket implies intensive-margin diversification, whereas a more diverse export line shows extensive diversification. Recent studies have extended this concept by emphasizing export sophistication, technological upgrading, and value-added production as important dimensions of diversification beyond simple product counts (Liu et al., 2023; Wang et al., 2022; Huang et al., 2023; Cao et al., 2022a).

When it comes to long-term economic growth, export diversification is seen as a way to resist economic shocks. Governments tackle global trade difficulties by diversifying sectors, technologies, and geographic destinations, using a comprehensive export diversification framework that includes classical trade theory, product-space theory,

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

economic complexity theory, global value chain analysis, and state policy. Export diversification refers to the practice of expanding a country's exports to a wide variety of industries and markets. Mubeen and Ahmad (2016) report that this approach is necessary for a strong and growing economy. Theorizing export diversification is therefore closely linked with global value chains, industrial strategy, international trade theory, and economic growth. Empirical evidence suggests that trade facilitation reforms, foreign direct investment inflows, infrastructure development, and innovation policies can significantly improve the diversification and sophistication of exports (Takpara et al., 2023; Ren et al., 2022; Ur Rehman et al., 2021; Liu & Wang, 2022).

Diversifying exports is now viewed as an extension of David Ricardo's theory of comparative advantage, which originally focused on specialization. A country can diversify its exports by capitalizing on its strengths in other sectors or products while gradually upgrading into more sophisticated activities. The Product Space Hypothesis, first proposed by Hausmann and Klinger (2007), is fundamental to export diversification. It argues that countries diversify more successfully when new products are closely related to existing productive capabilities. Similar arguments are reflected in studies examining export sophistication and industrial transformation across developing and emerging economies (Khan & Afzal, 2016; Wang et al., 2022; Song et al., 2022).

The Economic Complexity Hypothesis suggests that a nation's ability to diversify its exports depends on the amount, complexity, and technological sophistication of its products (Hidalgo et al., 2007). Knowledge-based and innovation-driven exports tend to be more diversified and are generally associated with economies possessing higher levels of productive capabilities. Countries that manufacture a diverse range of technologically advanced products are more likely to achieve sustained economic growth and international competitiveness. Recent empirical evidence supports this argument by demonstrating that export sophistication contributes to industrial upgrading, energy efficiency improvements, environmental performance, and sustainable economic development (Rehman et al., 2023; Huang et al., 2023; Cao et al., 2022b; Zhu et al., 2010).

Global Value Networks. The concept of global value chains was first proposed by Gereffi et al. (2005) and is based on the assumption that export diversification may be influenced by global manufacturing networks. To diversify their exports, states can join global value chains and gain access to low-value manufacturing as well as higher-value industries such as design and research and development. Capturing the higher-value links in the supply chain is an important component of export diversification. Recent empirical evidence indicates that participation in global value chains enhances export sophistication, strengthens trade competitiveness, and facilitates structural transformation in developing economies (Ali & Munir, 2022; Song et al., 2022; Ur Rehman et al., 2021; Hamza et al., 2025). Studies also suggest that deeper integration into international production networks enables countries to improve product quality, diversify export baskets, and expand access to foreign markets (Liu & Wang, 2022; Ren et al., 2022).

Policies and Programs for Economic Growth. Both Chang (2002) and Rodrik (2004) argue that export diversification is closely tied to industrial strategy and the state's role in steering economic growth. Priorities for a developed state include industrial upgrading, diversifying export bases, and innovating in important areas. To diversify exports, targeted policies may be required in areas such as education, infrastructure development, and access to finance. Evidence from developing economies demonstrates that trade liberalization, fiscal reforms, and institutional support play important roles in facilitating export diversification and industrial development (Ali & Naeem, 2017; Ali, 2015; Ali, 2018). Furthermore, policies that improve digital capabilities, financial stability, and economic governance can contribute to greater competitiveness and export expansion (Murat, 2026; Ali, 2022; Fayou, 2026).

Entering Untapped Markets While Minimizing Risk. The importance of regional market variety has been emphasized by Krugman (1989) and Helpman (1999). The idea is that by expanding into other markets, a country may lessen its reliance on any one market's demand fluctuations, economic instability, or political instability. Expansion into new markets helps stabilize the economy by raising demand and minimizing risk. Recent studies of bilateral and regional trade relations show that market diversification reduces trade vulnerability and promotes sustainable export growth across different economic environments (Alzahrani & Salah, 2020; Naik, 2020; Mealli, 2021; Wang, 2023). Similar conclusions have been drawn from studies examining trade relations between Pakistan and major trading partners, where broader market access was found to support export performance and trade resilience (Hamza et al., 2025; Alvi & Mudassar, 2025).

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Sectoral diversification is the practice of expanding exports into other industries in order to provide a country with a competitive advantage. According to Hausmann and Klinger (2007), one example is the shift from basic to complex goods, particularly in non-traditional industries such as low-end manufacturing and agriculture. Contemporary research indicates that diversification into technologically sophisticated and knowledge-intensive sectors contributes significantly to industrial upgrading and long-term economic growth (Cao et al., 2022a; Cao et al., 2022b; Wang et al., 2022; Huang et al., 2023).

Technological diversification refers to expanding exports into products that are more technically advanced and innovative. This factor is becoming increasingly associated with economic complexity theory as the complexity of exported products increases (Hidalgo et al., 2007). Empirical evidence suggests that innovation, technological advancement, and export sophistication are mutually reinforcing processes that enhance productivity, environmental performance, and competitiveness in international markets (Liu et al., 2023; Rehman et al., 2023; Zhu et al., 2010).

According to Krugman (1989), a country can reduce its exposure to fluctuations in any one economy by spreading its exports across multiple international markets. By branching out into other regions, countries may broaden their consumer bases and reduce their vulnerability to regional economic downturns. Research on trade barriers and international competitiveness further indicates that diversified export destinations help countries navigate geopolitical uncertainties and changing trade policies more effectively (Soliman, 2025; Andreou, 2021; Cizakca, 2024). As a country becomes more integrated into global value chains, it may increase its exports of higher-value commodities and services, thereby climbing the value chain. According to Gereffi et al. (2005), nations can gain access to global value chains that were previously inaccessible by developing innovative goods, technologies, or processes that create value. Government initiatives aimed at fostering creativity, improving education, enhancing infrastructure, and supporting entrepreneurship can facilitate this process. Such measures have been found to contribute positively to export sophistication, industrial competitiveness, and economic development (Takpara et al., 2023; Reis & Taglioni, 2013; Khan & Afzal, 2016; Ali et al., 2025).

Economic resilience theory states that economies may make themselves more resistant to external shocks, such as fluctuations in commodity prices, by spreading their revenue streams across a broader range of exports. According to export-specific portfolio theory (Imbs & Wacziarg, 2022), a diverse export portfolio reduces exposure to potential economic shocks. Similar findings have been reported in studies examining trade openness, macroeconomic stability, and economic resilience in both developing and developed economies (Mordecai & Akinsola, 2021; Hwang & Lee, 2019; Sun & Chang, 2020; Ali & Hassan, 2026).

Economic growth is more likely to occur in economies that diversify their revenue streams over time, if structural change theory is to be believed. Diversification strengthens this process by promoting systemic transformation. According to the innovation-driven growth paradigm, a diverse set of markets and industries fosters competition and new ideas. When businesses diversify their operations, they are incentivized to boost productivity and invest in research and development. Empirical investigations of trade, innovation, and economic performance consistently demonstrate that diversified export structures contribute to sustainable growth, competitiveness, and long-run development outcomes (Fayou, 2026; Murat, 2026; Ali et al., 2025; Ali & Hassan, 2026). In addition, empirical trade analyses commonly employ robust econometric techniques to investigate long-run relationships among trade variables, diversification, and growth, drawing on foundational contributions from Dickey and Fuller (1981) and Phillips (1986).

By penetrating new export markets, nations may capitalize on their comparative advantages. Economies should diversify if they want to be more competitive globally and if they want to access new markets. For countries participating in global value chains, export diversification is a necessity for maintaining competitiveness and sustaining economic growth. Evidence from studies on trade openness, export sophistication, and international competitiveness indicates that diversified export structures enable economies to exploit emerging opportunities while reducing dependence on a narrow range of products and destinations (Ali & Munir, 2022; Ur Rehman et al., 2021; Wang et al., 2022; Cizakca, 2024). Research focusing on Pakistan and other developing economies further highlights that diversified exports contribute to stronger trade performance and greater resilience against external shocks (Mubeen & Ahmad, 2016; Khan & Afzal, 2016; Reis & Taglioni, 2013).

A more diversified export base has the potential to fortify economies, encourage new forms of innovation, and boost long-term prosperity. New studies show that in the context of globalization and economic development,

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

diversity is crucial and offers several benefits. Countries that successfully diversify their exports are generally better positioned to attract investment, stimulate technological advancement, and improve economic performance (Ali, 2018; Ali, 2022; Murat, 2026). The expansion of diversified production and export structures also supports industrial upgrading and promotes sustainable development outcomes (Cao et al., 2022a; Cao et al., 2022b).

Export diversification can help mitigate the effects of economic uncertainty. Countries that export a variety of goods and services are better able to weather economic storms, such as fluctuations in commodity prices, according to recent studies (Imbs & Wacziarg, 2022; others). Similar conclusions have been reported in empirical studies examining trade liberalization, macroeconomic stability, and economic resilience, which find that diversified export portfolios reduce vulnerability to external shocks and enhance economic stability (Mordecai & Akinsola, 2021; Hwang & Lee, 2019; Sun & Chang, 2020; Ali & Hassan, 2026). Furthermore, broader export structures can cushion economies against sudden changes in global demand and international market conditions (Fayou, 2026; Soliman, 2025).

Diversification is linked to long-term economic prosperity. Export portfolio diversity leads to more consistent revenue development, according to Baldwin and Lopez-Gonzalez (2021), because income growth might be unstable when it is based on a limited number of goods. Empirical evidence suggests that countries with more sophisticated and diversified export baskets tend to experience higher productivity growth, stronger industrial performance, and improved international competitiveness (Zhu et al., 2010; Liu & Wang, 2022; Ren et al., 2022). Studies on export sophistication further indicate that upgrading into technologically advanced products contributes significantly to long-run economic development (Huang et al., 2023; Liu et al., 2023).

Diversifying a country's exports is also an effective way to encourage innovation and improve efficiency. Scholars such as Fujita and Hill (2023) have shown that countries seeking to diversify their economies may enhance competitiveness through research and development expenditures and by broadening their customer base. When nations expand the range of goods they export, they gain access to a wider variety of global buyers and market opportunities. Research conducted by Kraemer et al. (2023) suggests that national economies benefit by reducing dependence on a limited number of key markets. Similar findings have been reported in studies examining innovation, export sophistication, and global value chain participation, where technological upgrading is associated with improved export performance and industrial transformation (Song et al., 2022; Rehman et al., 2023; Takpara et al., 2023; Ali et al., 2025).

Alternating between low- and high-value exports is a common diversification strategy. According to current research (Rodrik, 2022), increasing economic value requires movement toward more complex and sophisticated products. Export diversification can help nations overcome structural constraints, including sectoral underdevelopment, and facilitate a more balanced economic structure (López et al., 2022). Evidence from studies on export sophistication and industrial upgrading supports the view that transitioning from traditional exports toward higher-value products strengthens competitiveness and accelerates economic transformation (Wang et al., 2022; Huang et al., 2023; Cao et al., 2022a; Cao et al., 2022b).

Export diversification can make economies more robust and accelerate their expansion, according to Nguyen et al. (2023). Kuznetsov and Matushkin (2023) further state that export diversification is a competitiveness booster for countries in the global economy. Similar conclusions are reached by studies investigating trade dynamics, export performance, and economic growth, which consistently show that diversified and sophisticated exports contribute positively to sustainable development, competitiveness, and long-run prosperity (Ali & Naeem, 2017; Hamza et al., 2025; Wang, 2023; Fayou, 2026). Consequently, export diversification remains a central objective for policymakers seeking to strengthen economic resilience, improve trade performance, and promote sustainable growth in an increasingly interconnected global economy.

LITERATURE REVIEW

When nations diversify their exports, they increase the variety of goods and services they offer to buyers throughout the world. Economic stability, less reliance on a few commodities, and sustained growth may all be achieved with this technique. As developing markets, Pakistan and the BRICS (Brazil, Russia, India, China, and South Africa) provide instructive examples of the factors that influence export diversification. This literature study uses panel data analysis to investigate the factors impacting export diversification in these economies.

The level of industrial and agricultural growth inside a country is a major factor in its export diversification. Pakistan, like many of the BRICS nations, has a growing economy that is highly dependent on a few key areas,

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

such energy and raw commodities. Nonetheless, export diversification tends to be stronger in nations that have diverse industrial structures. Zhang and Fan (2023) state that companies are able to diversify their product lines to meet the needs of different types of consumers when industrialization levels are high. Pakistan and other less industrialized nations have limitations due to their export dependence on a small number of goods, such as food and clothing (Zhao & Tan, 2022).

One of the primary forces propelling export diversification is the expansion and liberalization of trade. Export diversification has grown substantially as a result of the BRICS nations' gradual opening of their markets. According to Kaur and Gaba (2022), emerging economies are more likely to diversify their exports when trade liberalization occurs, which leads to lower tariffs and better access to international markets. Pakistan, on the other hand, has seen its diversification attempts hindered by policy changes and uneven trade liberalization. Pakistan is unable to diversify its exports due to its susceptibility to external shocks, including political instability, as pointed out by Imran et al. (2023), even if trade openness is vital.

One of the most important factors in export diversification is having an adequate infrastructure, which includes things like well-developed transportation and communication networks as well as innovative technology. The importance of technology improvements in allowing enterprises to climb the value chain and export a wider variety of commodities is highlighted by Liu and Tan (2021). China and India have been able to diversify into high-tech goods because of their rapid technical progress, but South Africa and Pakistan have fallen behind because of infrastructural and technology deficiencies. According to Ali et al. (2020), Pakistan is unable to diversify its exports into higher-value items due to its limited technological skills.

By opening doors to new technology, managerial know-how, and global networks, foreign direct investment (FDI) is vital in encouraging export diversification. Foreign direct investment (FDI) has helped the BRICS nations diversify their exports, according to Vasquez and Canuto (2023), particularly in the service and industrial industries. But foreign direct investment (FDI) into Pakistan is still too little to make a dent in the country's efforts to diversify its economy (Raza & Bhatti, 2021). Yun and Zhai (2022) state that more foreign direct investment (FDI) would probably encourage diversification in Pakistan; nevertheless, investor confidence is hindered by political and regulatory hurdles.

The degree to which fluctuations in exchange rates impact export diversification is another key factor to consider. There is evidence that nations with more stable exchange rates are better able to diversify their exports, and that export prices are sensitive to changes in currency values. China has been able to diversify its economy into many other sectors, including electronics and autos, thanks in part to its relatively stable currency rate, according to Li and Xu (2022). As a result of being competitive in the face of increasing prices, Pakistan's exports have been concentrated on a few industries, namely textiles, due to the country's currency depreciation (Hussain & Khan, 2021).

The regulatory environment, business-friendliness, and policy coherence are all shaped by the quality of government and institutions, making them crucial for export diversification. According to Rodríguez-Pose and Tselios (2021), the BRICS nations' robust institutions have made it easier for them to participate in global value chains, an essential step towards diversification. By discouraging foreign investment and impeding the development of new businesses, Pakistan's export diversification has been hindered by poor institutional frameworks and difficulties with corruption (Agha & Rauf, 2022).

Export diversification has been driven by developing economies taking advantage of globalization's new markets. The BRICS nations have increased their exports by capitalizing on their rising status in global trade networks, as pointed out by Zhu and Qian (2023). The transition from basic commodities to high-value-added items, such as technology and medicines, has been particularly advantageous for India and China as a result of global supply networks. The limited export choices for Pakistan are a result of its relative isolation from these supply networks (Raza et al., 2021).

Emerging economies have diversified their exports in response to regional integration and trade agreement involvement. Multilateral trade agreements, including the BRICS summit and the Belt and Road Initiative (BRI) spearheaded by China, have helped diversify the economies of the BRICS countries, according to research by Ghosh and Chattopadhyay (2021). Despite providing access to markets, Pakistan's involvement in trade agreements like SAFTA has had a limited impact on diversification owing to geopolitical difficulties and infrastructure limitations (Rashid & Ashraf, 2022).

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

There is a complex web of interrelated factors that determine export diversification in Pakistan and the BRICS nations. A number of factors influence export patterns, including economic structure, trade policy, infrastructure, foreign direct investment (FDI), volatility of currency rates, quality of institutions, globalization, and regional trade agreements. Domestic obstacles like political instability, weak institutions, and inadequate infrastructure have slowed Pakistan's progress in export diversification, in contrast to the BRICS economies' more successful implementation of strategic policy reforms, technological advancements, and increased integration into the global trade network. If Pakistan wants to diversify its exports, it has to modernize its trade policies, infrastructure, and governance to remove these domestic obstacles and become more integrated into global value chains.

DATA AND METHODOLOGY

DATA SOURCES

This study uses the data of Diversification index from the World Bank Data Source calculated by United Nations Conference on Trade and Development (UNCTAD) is used to measure the degree of export diversification. Furthermore, using time series data from 1995 to 2022 determinants of export diversification are identified. Data for official exchange rate, , foreign direct investment, world GDP per capita, gross fixed capital formation, term of trade is taken from World Development Indicator (WDI) by World Bank. Data for globalization is taken from KOF Swiss Economic Institute. Data of political stability is taken as indicator of institutions from Worldwide Governance Indicators.

The examination of export diversification and its patterns or drivers necessitates a meticulous and appropriate measurement methodology. There exist multiple measurements and indices that can be utilized to quantitatively assess the notion of export diversification. The majority of these indicators and measures have been designed with the purpose of evaluating the level of concentration and diversification in exports. Export diversification is commonly regarded as the inverse of export concentration. There exists a multitude of indices that are employed for the purpose of quantifying concentration or diversification. Certain indices are employed as relative measures, while others are utilised as absolute measures. The indexes exhibit distinct characteristics, strengths, and limitations, so distinguishing them from one other. These indicators are employed to assess specialisation both in relative and absolute terms, as well as to examine the presence of heterogeneity that arises from measuring these indices. The Shannon Entropy Index, Herfindahl-Hirschman Index, Diversification Index, and Absolute Gini Hirschman Index are employed as metrics for quantifying the level of specialization. The Relative Gini Index and Theil Index are frequently employed as measures of relative specialization. The Krugman Specialization Index and the Index of Inequality in Productive Structure are both indexes that measure heterogeneity. Furthermore, The Penetration Index, Concentration Index, Deviation Index, and Trade Concentration Ratio are frequently employed as standard metrics for assessing concentration.

The empirical study of Pakistan, BRICS (Brazil, Russia, India, and China), and a variety of indicators from various factors is based on this data. Information for the World Bank's Index of Export diversification index is taken from UNCTAD.The World Bank's Worldwide Governance Indicator (WGI) is a good source for data on political stability and other institutional variables. Information for the Globalization of Economy, Society, and Politics is sourced from the KOF Globalization Index (KOF Swiss Economic Institute).The World Development Indicator (WDI) is the source for data on international financial flows, including FDI, gross capital creation, term of trade, official exchange rate (OFER), and world GDP per capita. The years 1996–2022, inclusive, are used as panel data. (Hansen, 1982) formalized Generalized Method of Moment (GMM), which is one of the most used methods for estimating models in financial and economic analysis.GMM is used for empirical investigation due to its validity.

Export Diversification Results Using Pannel of Emerging Economies (BRICS) and Pakistan

Regression Model

$$EDIV_{ti}= \beta_0+ \beta_1 WGDP_{ti} +\beta_2 TOT_{ti}+ \beta_3 OEXR_{ti}+ \beta_4 POLSTAB_{ti}+\beta_5 CURLCU01_{ti}+\beta_6 KOFECGI_{ti}+ \beta_7 GCFCRLCU_{ti}+\beta_8 FDINETBOP_{ti} +\mu_{ti}$$

t=1996,1997,1998,……..2022

i= Cross Sections

EDIV= Export Diversification (Diversification Index)
WGDP=World GDP Per Capita
TOT= Term of Trade

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

OEXR= Official Exchange Rate
POLSTAB=Political Stability
CURLCU01=GDPPC Current LCU
KOFECGI= Economic ,Globalization (Index)
GCFCRLCU=Gross Fix, capital formation
FDINETBOP=Foreign Direct Investment

Table 1: Descriptive Statistics

	EDIV	WGDP	TOT	OFEX	POLSTAB	CURLCU01	KOFECGI	GCFCRLCU	FDINETBOP	C
Mean	0.567931	9370.267	103.2820	34.71202	-0.821584	118852.1	46.33465	1.15E+13	-2.58E+10	1.000000
Median	0.543300	9309.046	99.77790	16.35585	-0.657061	51648.15	46.04000	3.35E+12	-5.61E+09	1.000000
Maximum	0.811100	11287.15	273.0755	204.8672	0.327800	1050908.	56.57000	7.33E+13	4.17E+10	1.000000
Minimum	0.384276	7197.880	67.39410	1.005100	-2.810035	5148.027	21.11000	1.16E+11	-2.32E+11	1.000000
Std. Dev.	0.107018	1128.613	25.84230	37.97337	0.717060	184064.4	7.059736	1.59E+13	4.60E+10	0.000000
Skewness	0.579252	-0.202343	3.576212	1.650117	-1.067267	2.891876	-0.897524	1.673439	-2.237512	NA
Kurtosis	2.394504	2.041227	21.18496	6.304602	3.598524	11.56315	4.038541	5.166558	8.673938	NA
Jarque-Bera	10.03895	6.362718	2243.369	128.1451	28.87250	627.3283	25.26700	93.38647	306.7890	NA
Probability	0.006608	0.041529	0.000000	0.000000	0.000001	0.000000	0.000003	0.000000	0.000000	NA
Sum	80.07830	1321208.	14562.77	4894.394	-115.8433	16758140	6533.186	1.62E+15	-3.64E+12	141.0000
Sum Sq. Dev.	1.603392	1.78E+08	93495.44	201876.8	71.98461	4.74E+12	6977.582	3.54E+28	2.96E+23	0.000000
Observations	141	141	141	141	141	141	141	141	141	141

The above-mentioned table explains the descriptive statistics of the data used in the analysis. These results show that the data is well organized for analysis.

Table 3: Correlational Matrix (Covariance Analysis)

Sample: 1996 2021										
	Included observations: 141									
	Balanced sample (listwise missing value deletion)									

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Correlation											
t-Statistic											
Probability	EDIV		WGDP	TOT	OFEX	POLSTAB	CURLCU01	KOFECGI	GCFCRLCU	FDINETBOP	
EDIV	1.000000										
	-0.051816		1.000000								
	-0.611726		------								
	0.5417		------								
TOT	0.465563		-0.092859	1.000000							
	6.202053		-1.099547	------							
	0.0000		0.2734	------							
OFEX	0.614487		0.268293	0.121495	1.000000						
	9.182970		3.283504	1.443092	------						
	0.0000		0.0013	0.1512	------						
POLSTAB	-0.693951		-0.039178	-0.111857	-0.790992	1.000000					
	-11.36294		-0.462252	-1.327105	-15.24232	------					
	0.0000		0.6446	0.1866	0.0000	------					
CURLCU01	0.259585		0.376067	0.082371	0.377787	-0.116816	1.000000				
	3.169102		4.785018	0.974455	4.810536	-1.386738	------				

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

	0.0019		0.0000	0.3315	0.0000	0.1677	-----				
KOF ECGI	0.360369		0.203197	-0.016175	0.211231	-0.209021	0.297085	1.000000			
	4.554722		2.446705	-0.190720	2.547861	-2.519980	3.668201	-----			
	0.0000		0.0157	0.8490	0.0119	0.0129	0.0003	-----			
GCF CRLCU	-0.431340		0.461086	-0.171008	0.198146	-0.022712	0.260646	-0.222496	1.000000		
	-5.636763		6.126209	-2.046298	2.383359	-0.267835	3.182996	-2.690633	-----		
	0.0000		0.0000	0.0426	0.0185	0.7892	0.0018	0.0080	-----		
FDI NETBOP	0.482340		-0.136625	0.147332	0.330979	-0.255856	0.281787	0.225004	-0.258892	1.000000	
	6.491782		-1.626030	1.756184	4.135250	-3.120356	3.462536	2.722567	-3.160032	-----	
	0.0000		0.1062	0.0813	0.0001	0.0022	0.0007	0.0073	0.0019	-----	
C	NA		NA	NA	NA	NA	NA	NA	NA	NA	A
	NA		NA	NA	NA	NA	NA	NA	NA	NA	----
	NA		NA	NA	NA	NA	NA	NA	NA	NA	----

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Table 3: Panel Generalized Method of Moments

Dependent Variable: EDIV
Sample (adjusted): 2003 2022
Periods included: 20
Cross-sections included: 6
Total panel (unbalanced) observations: 117
2SLS instrument weighting matrix

Wansbeek and Kapteyn estimator of component variances
Instrument specification: C WGDP(-1) TOT(-1) OEXR(-1) POLSTAB(-1) CURLCU01(-1) KOFECGI(-1) GCFCRLCU(-1) FDINETBOP(-1)
Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.232861	0.083857	2.776896	0.0065
WGDP	9.17E-06	6.15E-06	1.489566	0.1393
TOT	0.001703	0.000347	4.905405	0.0000
OEXR	0.000616	0.000196	3.144183	0.0022
POLSTAB	-0.066114	0.009525	-6.940991	0.0000
CURLCU01	1.19E-07	2.89E-08	4.114842	0.0001
KOFECGI	0.000413	0.000949	0.435106	0.6644
GCFCRLCU	-3.18E-15	3.17E-16	-10.03200	0.0000
FDINETBOP	7.16E-14	1.06E-13	0.675629	0.5007

Effects Specification	S.D.	Rho
Period random	0.014171	0.1405
Idiosyncratic random	0.035051	0.8595

Weighted Statistics

R-squared	0.894003	Mean dependent var	0.402355
Adjusted R-squared	0.886151	S.D. dependent var	0.105745
S.E. of regression	0.035383	Sum squared resid	0.135209
Durbin-Watson stat	0.830842	J-statistic	1.22E-21
Instrument rank	9		

Unweighted Statistics

R-squared	0.884014	Mean dependent var	0.563932
Sum squared resid	0.148561	Durbin-Watson stat	0.838849

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Above abovementioned table shows the results of Panel Generalized Method of Moments. Results indicated that world GDP per capita (WDGP) shows positive and insignificant. A unit increase in WGDP will increase in EDIV by 9.17E-06$.Term of Trade(TOT) shows positive and highly significance results .A unit increase in TOT will increase in EDIV by 0.001703.Official exchange rate(OEFX) shows positive and insignificant results. A unit increase in OEXR will increase EDIV by 0.000616.Political stability shows negative and significant results. If political stability is increase by I unit the EDIV is decrease by -0.066114.GDP per capita(CURLCU01) shows positive and significant results. A unit increased in GDP per capita will increase the EDIV 1.19E-07 $.Economic Globalization (KOFECGI)shows positive and insignificant results .A unit increase in economic globalization increase the EDIV by 0.000413.Gross capital formation(GCFCRLCU) shows negative and highly significant results. A unit increase in gross capital formation will decrease the EDIV by -3.18E-15.Foreign direct investment(FDINETBOP) shows positive and insignificant results .A unit increase in foreign direct investment will increase EDIV by 7.16E-14.

The Hausman test is a method utilized in econometrics to evaluate the suitability of selecting between fixed effects and random effects models in the study of panel data. In present analysis the Hausman test suggested Random Effect model

Table 4: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	26.876263	7	0.0004

Table 5: Random Effects test

Dependent Variable: (EDIV)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.304131	0.034254	8.878793	0.0000
WGDP	NA	NA	NA	NA
TOT	0.001200	0.000133	8.991484	0.0000
OEXR	0.000392	0.000178	2.205463	0.0295
POLSTAB	-0.077676	0.008421	-9.224409	0.0000
CURLCU01	1.09E-07	2.27E-08	4.785983	0.0000
KOFECGI	0.001871	0.000655	2.858261	0.0051
GCFCRLCU	-3.00E-15	2.67E-16	-11.24544	0.0000
FDINETBOP	9.92E-14	8.87E-14	1.117523	0.2662
	Effects Specification			
Period fixed (dummy variables)				
R-squared	0.904283	Mean dependent var		0.567931
Adjusted R-squared	0.878178	S.D. dependent var		0.107018
S.E. of regression	0.037352	Akaike info criterion		-3.54540
Sum squared resid	0.153473	Schwarz criterion		-2.89709
Log likelihood	280.9507	Hannan-Quinn criter.		-3.28195
F-statistic	34.64054	Durbin-Watson stat		0.537862
Prob(F-statistic)	0.000000			

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Random Effect results are quite similar to the GMM method. Which Shows our model of analysis is reliable. In Random Effect model both variables Political stability and Capital formation show negative signs which show these variables have negative and significant effect on EDIV.While World GDP,Term of trade,Official exchange rate, GDP and Globalization have positive effect on EDIV.

Table 6: Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Equation: Untitled

Periods included: 24

Cross-sections included: 6

Total panel (unbalanced) observations: 141

Note: non-zero cross-section means detected in data

Test employs centered correlations computed from pairwise samples

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	43.98577	15	0.0001
Pesaran scaled LM	5.292054		0.0000
Pesaran CD	0.353024		0.7241

Cross-sectional dependence pertains to the possible interconnection or correlation of the residual terms across distinct cross-sectional entities the analysis of panel data.

REFERENCES

Agha, S. M., & Rauf, A. (2022). Institutional Challenges and Export Diversification: Evidence from Pakistan. *Economic Modelling*, 112, 110–122.

Ahmad, K., Ali, A., & Yang, M. (2022). The Effect of Trade Liberalization on Expenditure Structure of Pakistan. *Bulletin of Business and Economics (BBE)*, *11*(1), 73-84.

Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. *Policy Brief-Department of Economics, PU, Lahore*. 2017 (1), 1-6.

Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.

Ali, A. (2015). *The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan*. (Doctoral dissertation, National College of Business Administration & Economics Lahore).

Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.

Ali, A. (2022). Foreign Debt, Financial Stability, Exchange Rate Volatility and Economic Growth in South Asian Countries. *Journal of Business and Economic Options*.

Ali, A., Jabeen, R., & Ahmad, K. (2025). Hidden Drivers of Financial Success: Exploring the Role of Trade Secrets in US Corporate Performance. *Competitive Research Journal Archive*, *3*(02), 421-439.

Ali, R., & Hassan, S. (2026). Macroeconomic Drivers of Economic Growth in Africa: The Role of Monetary Policy, Exchange Rates, and Migration. *Journal of Business and Economic Options*, *9*(1), 30-42.

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Ali, S., & Munir, Q. (2022). Impact of Export Sophistication on Trade Diversification: The Mediating Role of Participation in Global Value Chains. *Journal of Business and Social Review in Emerging Economies*, *8*(2), 531-546.

Ali, S., Hussain, M., & Ahmad, M. (2020). Technological Capabilities and Export Diversification: A Comparative Study of BRICS and Pakistan. *Technological Forecasting & Social Change*, 153, 119248.

Alvi, A. A., & Mudassar, M. (2025). Revisiting the J-Curve: Nonlinear Exchange Rate Dynamics and Trade Balance Between Pakistan and China. *Journal of Business and Economic Options*, *8*(1), 77-91.

Alzahrani, M., & Salah, O. B. (2020). A time series analysis of bilateral trade of India and Saudi Arabia. *Journal of Business and Economic Options*, *3*(2), 72-82.

Andreou, E. (2021). A literature survey trade policy dynamics: insights for assessing poverty and inequality impacts. *Journal of Business and Economic Options*, *4*(4), 1-8.

Arshad, Z., & Mukhtar, S. (2019). Understanding Pakistan's trade dynamics: Import-export trends and trade balance analysis. *Journal of Business and Economic Options*, *2*(3), 115-122.

Audi, M., & Ali, A. (2018). Gender Gap and Trade Liberalization: An Analysis of some selected SAARC countries. *Advances in Social Sciences Research Journal*, *5*(11).

Cao, X., Rasiah, R., & Furuoka, F. (2022a). An Empirical Study on the Relationship between New Energy Vehicle'Export Sophistication and Industrial Structure Upgrading in China. *Journal of Environmental and Public Health*, *2022*.

Cao, X., Rasiah, R., & Furuoka, F. (2022b). An Empirical Study on the Relationship between New Energy Vehicle'Export Sophistication and Industrial Structure Upgrading in China. *Journal of Environmental and Public Health*, *2022*.

Cizakca, M. (2024). Understanding the Determinants of Foreign Trade Volume in Turkiye: An Empirical Analysis. *Journal of Business and Economic Options*, *7*(1), 19-28.

Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica: Journal of the econometric society*, 1057-1072.

Fayou, H. (2026). Foreign Capital Inflows, Trade Openness, and Sustainable Growth Dynamics in Morocco. *Journal of Business and Economic Options*, *9*(1), 1-15.

Ghosh, A., & Chattopadhyay, R. (2021). Regional Integration and Export Diversification: Evidence from Emerging Economies. *Journal of International Trade & Economic Development*, 30(4), 467–487.

Hamza, R. M., Ahmed, J., & Ali, A. (2025). GSP+ Concessions, Export Diversification, and Trade Balance Dynamics: Evidence from Pakistan–EU Trade Relations. *Annual Methodological Archive Research Review* 3 (7), 519-542.

Hansen, L. P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica: Journal of the econometric society*, 1029-1054.

Huang, K., Wang, T., Peng, J., & Sun, L. (2023). The Impact of Export Sophistication of the New Energy Industry on Carbon Emissions: An Empirical Study. *Energies*, *16*(9), 3846.

Hussain, I., & Khan, A. (2021). Exchange Rate Volatility and Export Performance in Pakistan. *Pakistan Journal of Economic Studies*, 7(2), 39–58.

Hwang, J., & Lee, Y. (2019). Exploring the impact of trade openness on unemployment: A cross-country analysis. *Journal of Business and Economic Options*, *2*(3), 123-131.

Imran, M., Ahmed, S., & Khan, Z. (2023). Trade Openness and Export Diversification: A Study of BRICS and Pakistan. *Journal of Emerging Markets*, 21(1), 70–85.

Irfan, M., & Sohail, F. (2021). Exploring import-export dynamics: A time series analysis of Pakistan's trade trends. *Journal of Business and Economic Options*, *4*(2), 24-29.

Kaur, R., & Gaba, M. (2022). Trade Liberalization and Export Diversification in BRICS Countries. *Journal of Economic Policy Reform*, 25(1), 55–71.

Khan, M., & Afzal, U. (2016). The diversification and sophistication of Pakistan's exports: The need for structural transformation. *The Lahore Journal of Economics*, *21*, 99.

Li, X., & Xu, Y. (2022). The Role of Exchange Rates in Export Diversification: Insights from China. *Asian Economic Policy Review*, 17(2), 365–387.

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Liu, F., & Tan, J. (2021). Technological Innovation and Export Diversification in Emerging Economies. *Technovation*, 102, 102223.

Liu, H., & Wang, X. (2022). Spillover effects of foreign direct investment on export sophistication: Evidence from Chinese domestic manufacturing firms. *The Journal of Development Studies*, *58*(11), 2393-2408.

Liu, J., Xue, Y., Mao, Z., Irfan, M., & Wu, H. (2023). How to improve total factor energy efficiency under climate change: does export sophistication matter? *Environmental Science and Pollution Research*, *30*(10), 28162-28172.

Mealli, F. (2021). Currency Integration and Bilateral Trade: Evidence from the Eurozone. *Journal of Business and Economic Options*, *4*(2), 30-34.

Mordecai, U., & Akinsola, A. (2021). Navigating economic dynamics: Trade liberalization and demographic trends in Nigeria. *Journal of Business and Economic Options*, *4*(4), 30-36.

Mubeen, N., & Ahmad, N. (2016). Towards measurement and determinants of export diversification: An empirical analysis of Pakistan. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *10*(3), 588-605.

Mubeen, N., & Ahmad, N. (2016). Towards measurement and determinants of export diversification: An empirical analysis of Pakistan. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *10*(3), 588-605.

Murat, M. (2026). Digitalisation and Economic Growth: Evidence from Leading E-Commerce Economies. *Journal of Business and Economic Options*, *9*(1), 70-78.

Naik, P. K. (2020). Exploring factors shaping India's trade patterns: Evidence from major trading partners. *Journal of Business and Economic Options*, *3*(4), 150-157.

Phillips, P. C. (1986). Understanding spurious regressions in econometrics. *Journal of econometrics*, *33*(3), 311-340.

Rashid, A., & Ashraf, M. (2022). Regional Trade Agreements and Export Diversification: A Case of Pakistan. *Global Economic Review*, 51(2), 204–223.

Raza, M., Bashir, H., & Saeed, M. (2021). Export Diversification and the Role of Regional Integration in Pakistan. *Asian Journal of Economics and Finance*, 3(2), 112–125.

Raza, S., & Bhatti, M. (2021). The Role of FDI in Export Diversification: Evidence from Pakistan. *The Journal of International Trade & Economic Development*, 30(3), 303–321.

Rehman, F. U., Islam, M. M., & Raza, S. A. (2023). Does disaggregate energy consumption matter to export sophistication and diversification in OECD countries? A robust panel model analysis. *Renewable Energy*, *206*, 274-284.

Reis, J. G., & Taglioni, D. (2013). Pakistan: reinvigorating the trade agenda.

Ren, J., Sarkar, A., Li, H., & Li, X. (2022). Does the Host Country's Foreign Direct Investment (FDI) Restrictiveness Inhibit the Export Sophistication of the Home Country? Evidence from China's Manufacturing Data. *Sustainability*, *14*(22), 15218.

Rodríguez-Pose, A., & Tselios, V. (2021). Governance and Export Diversification: The Role of Institutions in Emerging Economies. *World Development*, 137, 105161.

Siddiqi, M. W., Ali, A., & Chani, M. I. (2014). Import demand, economic development and trade liberalization in Pakistan: an empirical analysis. *Bulletin of Business and Economics (BBE)*, *3*(2), 131-141.

Soliman, Z. (2025). Determinants of Global Trade Barriers: An Empirical Analysis of Cross-Country Variations Using a Comprehensive Trade Index. *Journal of Business and Economic Options*, *8*(4), 37-46.

Song, Y., Hao, X., & Zheng, L. (2022). Intermediate import, independent innovation and export sophistication of Chinese manufacturing enterprises. *Structural Change and Economic Dynamics*, *60*, 126-140.

Sun, Y., & Chang, Y. (2020). Trade and Poverty in Developing Countries: Beyond Assumptions to Nuanced Understanding. *Journal of Business and Economic Options*, *3*(4), 167-175.

Takpara, M. M., Djiogap, C. F., Kouty, M., & SAWADOGO, B. (2023). Export Sophistication Effects of Trade Facilitation Reform in Sub-Saharan Africa.

Ur Rehman, F., Ahmad, E., Khan, M. A., Popp, J., & Oláh, J. (2021). Does trade related sectoral infrastructure make Chinese exports more sophisticated and diversified? *Sustainability*, *13*(10), 5408.

Vasquez, P., & Canuto, O. (2023). The Impact of FDI on Export Diversification in BRICS Economies. *Global Economics & Finance Journal*, 14(3), 242–259.

ISSN E: 3006-1466
ISSN P: 3006-1458
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
CJSSR
CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW
Vol.04 No.01 (2026)

Wang, H., Yang, M., He, R., & Zheng, P. (2022). Environmental regulation, foreign direct investment, and export sophistication of China: an empirical study based on dynamic system GMM and threshold model. *Environmental Science and Pollution Research*, *29*(48), 72090-72100.

Wang, J., Zhang, Y., Mustafa, Z., & Canavari, M. (2022). Changes in Agri-Food Export Competitiveness Based on the Sophistication Analysis: The Case of Xinjiang, China. *Sustainability*, *14*(23), 15729.

Wang, Y. (2023). Geopolitical considerations in Sino-US trade relations. *Journal of Business and Economic Options*, *6*(3), 17-25.

Yun, S., & Zhai, F. (2022). FDI and Export Diversification in Emerging Economies: A Comparative Study of BRICS Countries and Pakistan. *Journal of International Business Studies*, 53(2), 329–350.

Zhang, Y., & Fan, Y. (2023). Industrialization and Export Diversification: Evidence from Emerging Markets. *Economic Modelling*, 70, 323–334.

Zhao, J., & Tan, Y. (2022). Industrial Structure and Export Diversification: A Study of BRICS Economies. *Asian Economic Policy Review*, 17(1), 78–91.

Zhu, L., & Qian, G. (2023). The Role of Globalization in Export Diversification: Lessons from BRICS and Pakistan. *World Economy*, 46(4), 1442–1462.

Zhu, S., Fu, X., Lai, M., & Xuan, J. (2010). What drives the export sophistication of countries. *J World Econ*, *4*, 28-43.