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GSP+ Concessions, Export Diversification, and Trade Balance Dynamics: Evidence from Pakistan–EU Trade Relations

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Article Details

ABSTRACT

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This paper examines the Pakistan–European Union (EU) trade relationship, with a particular focus on how the Generalized System of Preferences Plus (GSP+) concessions and greater export diversification can help reduce Pakistan's trade deficit, which continues to threaten its export sector. The analysis is grounded in classical trade theories, with particular attention to comparative advantage and the effects of trade creation. The empirical findings indicate that the GSP+ status plays a significant role in narrowing the trade deficit between Pakistan and the EU in both the short and long term. The real effective exchange rate also shows a statistically significant association with a worsening trade balance, explaining that currency appreciation tends to increase the deficit. While foreign direct investment inflows do not have a statistically significant short-run impact on the trade balance, their effect becomes positively significant in the long run, indicating a delayed but beneficial influence on export performance. An unexpected finding is the negative long-run effect of EU GDP on Pakistan's trade balance, which points to structural weaknesses in Pakistan's export capacity. The highly robust error correction term confirms the existence of a stable long-run relationship and indicates a rapid adjustment process. These results underscore the importance of strategically leveraging GSP+ concessions through targeted export diversification, maintaining a competitive exchange rate, and ensuring a stable environment for long-term FDI to sustainably reduce the trade deficit.

Introduction

Through international trade relations, emerging economies such as Pakistan rely heavily on their engagement with large trading blocs, particularly the European Union, to advance their economic development (Irshad et al., 2016). The global trading environment is evolving rapidly, and preferential trading arrangements have emerged as critical instruments for promoting economic integration and growth (Keck & Lendle, 2012). Trade between the European Union and Pakistan has attracted considerable scholarly and policy interest, largely because Pakistan's persistent trade imbalances with the European Union have become a matter of economic concern (Nasir & Kalim, 2012). Despite its favourable geographical position and considerable economic potential, Pakistan has struggled with a persistent trade deficit, particularly with major partners such as the European Union (Ahmed & Hamid, 2014). The continuation of such a deficit represents a significant impediment to long-term economic growth and macroeconomic stability (Khan et al., 2018). In this context, the Generalized System of Preferences Plus status, along with the strategic diversification of exports, is central to narrowing this gap (Borchert et al., 2020). The granting of Generalized System of Preferences Plus status to Pakistan on 1 January 2014 marked a turning point in bilateral trade relations, creating new opportunities for an export-led boost to Pakistan's economy (Faiza & Afzal, 2019).

The experience illustrates the importance for developing economies to capitalise on preferential trade terms offered by developed economies as a means to enhance export performance and correct structural imbalances in trade (Hoekman & Nicita, 2011). However, Pakistan's inability to eliminate its trade deficit with the European Union, despite favourable conditions, reflects the existence of long-term structural constraints within its export sector (Kemal, 2009). These constraints include a lack of diversification in export products, an over-reliance on traditional industries, inefficiencies and congestion within the supply chain, and insufficient value addition to export goods (Mahmood & Azhar, 2001). The persistence of these imbalances carries serious consequences for Pakistan's balance of payments and macroeconomic stability, as well as for the country's foreign exchange reserves (Khan & Ahmad, 2005). Understanding the underlying causes of this trade deficit and identifying effective policy measures to reduce it to sustainable levels represent important areas of economic research with significant policy relevance (Shahbaz et al., 2011).

This trade relationship extends beyond a simple exchange of goods and services. It reflects a broader process of integrating Pakistan into European markets through preferential trading arrangements, while simultaneously aligning with Pakistan's geo-economic and strategic development priorities (Wolf, 2014). The relationship has played a significant role in Pakistan's economic diplomacy and long-term growth strategy, particularly given that the European Union remains one of Pakistan's principal development and trading partners (Irshad & Xin, 2015). Moreover, the evolution of this partnership offers important insights into how developing countries can capitalise on preferential market access to developed economies to improve export performance and address structural trade imbalances (Abbas & Waheed, 2017).

The trade deficit between Pakistan and the European Union has persisted across various economic cycles, reflecting underlying weaknesses in Pakistan's export competitiveness and capacity (Aurangzeb & Stengos, 2014). Contributing factors include low levels of export diversification, an excessive concentration in a few established sectors, supply-side bottlenecks, and limited value addition in export products (Siddiqui & Iqbal, 2001). The persistence of these imbalances has serious implications for Pakistan's balance of payments, foreign exchange reserves, and overall macroeconomic stability (Khan & Afzal, 2011). Understanding the determinants of this trade deficit and identifying effective policy interventions is, therefore, a matter of high economic and policy relevance (Rehman et al., 2015).

The Generalized System of Preferences Plus represents an extension of the European Union's broader development aid and cooperation framework. It is structured to provide qualifying developing countries with preferential tariff treatment, thereby granting greater access to European markets (Hakim & Anwar, 2015). For Pakistan, the attainment of GSP+ status was both a diplomatic and economic achievement, significantly expanding its ability to export to the European Union (Mukhtar & Nabi, 2017). However, the long-term effectiveness of this preferential access in narrowing the trade deficit depends on several factors, including the capacity to expand the range of exports, strengthen competitiveness, and address supply-side constraints (Pasha, 2018).

Export diversification remains the critical missing element in resolving structural trade imbalances (Kalim & Shahbaz, 2009). While GSP+ offers an avenue for deeper market penetration, its benefits can only be fully realised if the country's export basket is sufficiently broad and competitive. Pakistan's exporter base has historically been small and overly concentrated in textiles and agricultural products, limiting the scope for maximising the

potential of preferential trade arrangements (Javed & Farooq, 2009). A strategic shift towards the development of new products and entry into new markets offers both opportunities and challenges for maximising the benefits of schemes such as GSP+ (Mustafa & Mahmood, 2016). This study is undertaken in response to the pressing need for an empirical assessment of the effectiveness of GSP+ and the feasibility of export diversification as strategies to reduce Pakistan's trade deficit with the European Union. The aim is to construct a sound theoretical framework and conduct rigorous empirical analysis to determine the extent to which GSP+ and export diversification can mitigate trade imbalances. This involves integrating established classical and contemporary trade theories with empirically grounded economic models to develop testable hypotheses and robust methodologies.

1. Literature Review

The evolving nature of international trade relations between the European Union and Pakistan has attracted considerable academic attention, particularly regarding the success of preferential trading schemes such as the Generalized System of Preferences Plus (GSP+). Classical trade theory, with its emphasis on comparative advantage and trade creation, provides a sound theoretical foundation for understanding the dynamics of such arrangements. In this context, reduced trade barriers are expected to generate increased bilateral trade flows between partner countries, a phenomenon widely recognised in both theory and empirical evidence.

Contemporary literature has extensively examined the GSP+ status granted to Pakistan by the European Union. Malik (2020) offers a detailed analysis showing that Pakistan's admission into the GSP+ scheme in January 2014 granted the country preferential access to European markets, eliminating tariffs on over 66 percent of tariff lines. This policy shift resulted in a notable 47.25 percent increase in Pakistan's total exports to the European Union, with the textile sector—one of the most prominent manufacturing industries—recording an even greater increase of 66.6 percent since 2013. These findings align closely with the theoretical predictions of trade creation, whereby the reduction of trade barriers leads to expanded trade volumes.

Expanding upon this perspective, Rashid (2022) highlights the long-term economic multiplier effects of GSP+, noting that its benefits extend beyond direct export growth. The preferential access has driven industrial modernisation and restructuring in Pakistan, encouraging manufacturers to invest in quality enhancement and adopt advanced technologies to remain competitive in European markets. This interpretation underscores that the developmental

benefits of trade preferences are not confined to market access alone but can also foster broader structural transformation within the domestic economy.

However, as Hikmatullah et al. (2022) observe in a sectoral analysis, the gains from GSP+ have been disproportionately concentrated in the textile and apparel industry. While this concentration has generated short-term export growth, it poses a longer-term risk of overdependence on a single sector. This overreliance has hindered diversification of Pakistan's export basket, which remains heavily weighted toward traditional products.

Some scholars have examined the conditions that either enhance or constrain Pakistan's ability to leverage GSP+ for export growth. Ghauri et al. (2022), using an autoregressive distributed lag (ARDL) cointegration approach, find that while GSP+ has generally improved export performance, the growth trajectory remains below its potential. The authors attribute this shortfall to persistent supply-side constraints, including inadequate infrastructure, chronic energy shortages, and limited access to financing. These findings explain that without addressing such structural impediments, the full benefits of preferential market access will remain unrealised. Industry-specific studies further reveal uneven patterns of benefit within sectors. Analysing Pakistan's denim industry through a global economic model, Shahid et al. (2024) demonstrate that within textiles, GSP+ preferences have disproportionately favoured larger, more technologically advanced firms. The ability to fully exploit preferential access varies significantly across industries, as well as within industries, depending on firm size and technological capacity. Finally, Rasool et al. (2024) explore the interplay between foreign direct investment (FDI) and trade under GSP+. Their analysis reveals a bidirectional relationship, explaining that GSP+ can enhance FDI inflows into export-oriented industries, while FDI itself can bolster export performance. The preferential access to European markets may therefore serve as an additional incentive for foreign investors, positioning Pakistan as a more attractive destination for capital inflows. This finding broadens the understanding of GSP+ from a purely trade-related policy to one with wider economic development implications.

Macroeconomic stability also plays a critical role in determining the effectiveness of preferential trade access. Khalid (2022) concludes that exchange rate dynamics and overall macroeconomic stability are key determinants of Pakistan's export performance to the European Union under the Generalized System of Preferences Plus (GSP+). His findings indicate that the benefits of preferential access can be significantly diminished by macroeconomic instability and exchange

rate fluctuations. To fully realise the advantages of trade preferences, selective and targeted economic governance measures must therefore be implemented.

Ahmad et al. (2024) provide a contemporary assessment of Pakistan's export potential by analysing both the scope for expanding existing product categories and introducing entirely new product lines. Their study identifies substantial untapped potential in both areas, particularly in sectors where GSP+ preferences could be most effective. They argue that measures aimed at promoting export diversification and upgrading product quality would significantly enhance Pakistan's export earnings in the European Union markets.

The literature broadly agrees that Pakistan's exports remain heavily concentrated in traditional product categories, leaving the country ill-prepared to fully exploit the diversification opportunities presented by GSP+. Zeshan (2025) highlights that maintaining balance in trade and enhancing domestic competition is essential. He notes that while GSP+ has given Pakistani exporters competitive advantages in international markets, it has also intensified competition within domestic markets, thereby driving efficiency gains and encouraging market consolidation. Rathore et al. (2023) position GSP+ within a broader global trade framework, arguing that the scheme helps maintain Pakistan's relevance in international trade, especially given the competitive pressures from other emerging economies benefiting from similar arrangements. This perspective underscores that preferential access is not static; export competitiveness must be continually strengthened. Ahmad et al. (2024), in their study of Pakistan's trade relations with BRICS countries, confirm that high export concentration and limited diversification are structural issues affecting the country's export sector as a whole, not just its trade with the European Union. This reinforces the argument that realising the full potential of GSP+ requires addressing underlying structural weaknesses in export competitiveness.

The literature also reflects increasing methodological diversity in the study of GSP+ and export performance. For example, Ghauri et al. (2022) employ an autoregressive distributed lag (ARDL) cointegration approach, while Shahid et al. (2024) apply a global economic model (GEM) to industry-specific analysis. This methodological variety enhances the robustness of findings and offers multiple perspectives on the same phenomenon. However, it also points to the need for greater methodological standardisation to allow deeper cross-study comparisons and more coherent conclusions.

An extensive research has examined the effects of GSP+ on Pakistan's export performance, much of the literature focuses on aggregate export growth rather than its impact on the trade balance

and the interaction between preferential access and export diversification, with many studies highlighting the disproportionate gains for the textile sector and the risk of overdependence on a narrow export base (Malik, 2020, Hikmatullah et al., 2022, Ahmad et al., 2024; Ali et al., 2025; Bukhari et al., 2025). While some works acknowledge the role of structural constraints such as infrastructure gaps, energy shortages, and limited financing in limiting the potential of GSP+ (Ghauri et al., 2022), few integrate these supply-side challenges with empirical assessments of diversification outcomes across multiple sectors. Existing studies also tend to overlook the combined influence of macroeconomic stability, exchange rate movements, and foreign direct investment on the long-term sustainability of trade gains under GSP+ (Khalid, 2022; Rasool et al., 2024). Furthermore, there is limited empirical evidence on how GSP+ concessions interact with targeted diversification strategies to improve the trade balance over time, particularly in the presence of structural export weaknesses and competitive pressures from other preferential trade beneficiaries (Rathore et al., 2023; Ditta et al., 2025; Zeshan, 2025; Iqbal et al., 2025). This creates a clear need for research that jointly evaluates GSP+ concessions, sectoral diversification, and macroeconomic determinants within a unified framework to identify policies capable of delivering sustained improvements in Pakistan's trade balance with the European Union.

2. Theoretical Framework and Data Sources

The analysis of trade relations between Pakistan and the European Union is firmly rooted in established international trade theories. Ricardo's (1817) principle of comparative advantage asserts that countries benefit from engaging in international trade by specialising in goods they can produce relatively more efficiently. In the case of Pakistan, the textile and apparel industries demonstrate this principle. By capitalising on abundant low-cost labour, these industries align with the broader pattern observed in many developing economies, where labour-intensive production constitutes the core of export competitiveness. Building upon Ricardo's foundation, the Heckscher–Ohlin model expands the explanation of comparative advantage by linking it directly to a nation's relative factor endowments. Under this framework, Pakistan's labour-rich economy is naturally positioned to excel in the production and export of labour-intensive goods, particularly to capital-abundant economies such as those within the European Union. This endowment-driven trade relationship is consistent with the structural composition of Pakistan's export portfolio.

The Generalized System of Preferences Plus (GSP+) can also be evaluated through the lens of

Viner's (1950) concepts of trade creation and trade diversion. By granting Pakistani goods preferential access to European Union markets, the GSP+ arrangement is theoretically expected to generate trade creation—whereby higher-cost European Union domestic production, or imports from non-preferred countries, are replaced by more competitively priced Pakistani exports. Moreover, the advantages conferred by GSP+ have the potential to catalyse “investment creation.” This process occurs when preferential access improves the expected profitability of export-oriented sectors, encouraging both domestic and foreign investment, as well as fostering technological upgrading to meet the quality standards of European markets. Informed by these theoretical foundations, the empirical component of this study seeks to identify the determinants of Pakistan's trade deficit with the European Union, placing particular emphasis on the role of GSP+ status, export diversification, and macroeconomic factors. To achieve this, the following linear regression model is proposed:

$$TD_t = \alpha + \beta_1 \cdot GSP_t + \beta_2 \cdot FDI_t + \beta_3 \cdot EXCH_t + \beta_4 \cdot PGDP_t + \epsilon_t$$

The dependent variable in this study is the Trade Deficit with the European Union (TD_t), measured as the value of imports from the European Union minus the value of exports to the European Union, or expressed as a percentage of gross domestic product. A higher positive value represents a larger deficit.

Generalized System of Preferences Plus Status (GSPt) – A binary variable that takes the value of 1 if Pakistan holds Generalized System of Preferences Plus status in year t , and 0 otherwise. The expected sign of the coefficient is negative, indicating that preferential market access under the Generalized System of Preferences Plus should help reduce the trade deficit by encouraging exports to the European Union.

Foreign Direct Investment Inflows (FDI_t) – Measured as the net inflow of foreign direct investment, expressed either in current United States dollars or as a percentage of gross domestic product. The expected coefficient sign is negative, as inward foreign direct investment is generally expected to enhance production capacity, stimulate export-oriented industries, and contribute to a reduction in the trade deficit.

Real Effective Exchange Rate Index ($EXCH_t$) – An index representing the value of the Pakistani rupee relative to a basket of major trading partners' currencies, adjusted for inflation. An increase in the index reflects an appreciation of the domestic currency, making imports relatively cheaper and exports relatively more expensive. The expected coefficient sign is positive, as currency appreciation is likely to widen the trade deficit.

Partner Countries' Gross Domestic Product (PGDPt) – The aggregate gross domestic product of the European Union, representing the demand side of Pakistan's principal trading partner. Theoretically, a higher gross domestic product in the European Union is expected to stimulate demand for Pakistani exports and thereby reduce the trade deficit. Accordingly, the expected sign of the coefficient is negative.

The dataset spans the period from 1980 to 2024, although certain variables—such as the Generalized System of Preferences Plus status—are only available from 2010 to 2024. All data have been obtained from reputable and authoritative international and national sources, including the State Bank of Pakistan, the Pakistan Bureau of Statistics, Eurostat, the International Monetary Fund, Macrotrends, the United Nations Conference on Trade and Development, and the World Bank.

3. Empirical Results and Discussion

Descriptive statistics presented in Table 1 reveal substantial variability across the variables in the dataset. Although the mean trade balance with the European Union is positive at 584.867 million euros, the large standard deviation of 1,126.941 million euros indicates pronounced fluctuations over time. This variability explains that Pakistan's trade balance with the European Union has alternated between periods of surplus and deficit, largely influenced by prevailing macroeconomic conditions. The Generalized System of Preferences Plus status dummy variable records a mean value of 0.244, implying that Pakistan benefited from this preferential market access for approximately 24.4 percent of the sample period, concentrated primarily in the years following 2014.

Table 1: Descriptive Statistics

Variable	Count	Mean	Std. Dev.	Min	25%	50%	Max
GSP+ Status (0=No, 1=Yes)	45	0.244	0.435	0.0	0.000	0.00	1.0
Trade Balance with EU (EUR million)	45	584.867	1126.941	-800.0	0.000	275.00	4640.0
FDI Inflows (USD million)	45	961.111	722.345	100.0	430.000	760.00	2580.0
REER Index (Base 2010=100)	44	98.602	5.637	85.0	100.000	100.95	102.9
EU GDP (USD Trillion)	44	10.355	4.987	3.0	6.225	9.45	18.6

The correlation matrix presented in Table 2 depicts the linear relationships among the key variables, providing preliminary insights into potential associations and the possibility of multicollinearity before undertaking regression analysis. This assessment is instrumental in identifying strong direct or inverse relationships that merit further econometric investigation. The results indicate a pronounced positive correlation between the Generalized System of Preferences Plus status and the trade balance (0.587), explaining that the implementation of the scheme has had a favourable effect in narrowing Pakistan's trade deficit with the European Union. This finding is consistent with existing literature, which generally observes that preferential trade agreements enhance the export performance of developing countries in European markets. An equally strong positive correlation is identified between the Generalized System of Preferences Plus status and foreign direct investment (0.901), implying that preferential access may catalyze attracting foreign investment. This aligns closely with the "investment creation" dimension of trade preferences, wherein improved market access encourages capital inflows into export-oriented sectors.

Table 2: Correlation Matrix

	GSP+	Trade Balance	FDI	REER	EU GDP
GSP+	1.000				
Trade Balance	0.587	1.000			
FDI	0.901	0.596	1.000		
REER	-0.915	-0.756	-0.767	1.000	
EU GDP	0.759	0.617	0.912	-0.680	1.000

The stationarity of the time series data is a prerequisite for examining the cointegration relationships among the variables of the model, as the presence of a unit root in most time series can render regression results spurious. The estimated results of the unit root tests are presented in Table 3. The outcomes of the Augmented Dickey-Fuller tests indicate that all variables are non-stationary at their level form, leading to the inability to reject the null hypothesis of non-stationarity for each variable. However, after applying first differencing, all variables become stationary, enabling the rejection of the null hypothesis in favour of the alternative hypothesis of stationarity. This finding confirms that the variables exhibit a mixed order of integration, which meets the methodological requirements for applying the Autoregressive Distributed Lag (ARDL)

bounds testing approach to cointegration analysis.

Table 3: Unit Root Tests

Variable	ADF	p-value	Critical Value (1%)	Critical Value (5%)	Critical Value (10%)	Stationary (p < 0.05)
GSP+	-0.538	0.8844	-3.589	-2.930	-2.603	No
Trade Balance with the EU	-1.732	0.4147	-3.639	-2.951	-2.614	No
FDI Inflows	1.732	0.9982	-3.639	-2.951	-2.614	No
REER Index (Base 2010=100)	-1.881	0.3412	-3.606	-2.937	-2.607	No
EU GDP (USD Trillion)	-0.017	0.9571	-3.593	-2.932	-2.604	No

The ordinary least squares regression results presented in Table 4 provide valuable insights into the determinants of Pakistan's trade deficit, with particular emphasis on the roles of trade preferences, macroeconomic conditions, and external demand. The coefficient for the Generalized System of Preferences Plus (GSP+) status is negative and highly significant (-2686.63), explaining that attaining GSP+ access is associated with a substantial reduction in the trade deficit. This finding aligns with prior empirical evidence that Pakistan's exports to the European Union (EU) increased significantly following the country's receipt of GSP+ status in 2014, as preferential tariff concessions facilitated enhanced market penetration for Pakistani goods—particularly in the textile and garment sectors, which dominate the country's export basket (Ahmed & Kalim, 2017; European Commission, 2020). The economic rationale behind this relationship lies in the ability of preferential trade agreements to improve price competitiveness for domestic exporters in foreign markets, thereby expanding export volumes and improving the trade balance. In the case of Pakistan, GSP+ status has not only reduced tariff barriers but also signaled improved trade relations and policy credibility to EU partners, fostering longer-term trade relationships (Khan & Khan, 2021; Kongmanila, 2023; Farhadi & Ahao, 2024; Ali et al., 2025). The textile industry, which accounts for over 60% of Pakistan's exports, has been a primary beneficiary, experiencing growth in both production and foreign exchange earnings (World Bank, 2021). However, the sustainability of these gains depends on

Pakistan's capacity to comply with the stringent social, labor, and environmental conditions attached to GSP+ concessions. These include adherence to 27 core international conventions on human rights, labor rights, environmental protection, and good governance (European Commission, 2020). Non-compliance risks the suspension of benefits, which could reverse trade balance improvements. Moreover, while GSP+ can stimulate export growth, it is not a panacea for structural trade imbalances—macroeconomic stability, diversification of the export base, and productivity improvements remain critical complementary factors (Rehman et al., 2019; Hussain & Khan, 2022; Rossi, 2023; Ali et al., 2025).

The real effective exchange rate (REER) also exhibits a negative and highly significant coefficient (-263.52), indicating that an appreciation of the domestic currency is associated with a worsening of the trade deficit. This outcome aligns with the Marshall-Lerner condition, which states that, provided the sum of the price elasticities of demand for exports and imports is greater than one, a currency appreciation will reduce export competitiveness and simultaneously make imports relatively cheaper, thereby deteriorating the trade balance (Bahmani-Oskooee & Kara, 2003). In the context of Pakistan, an appreciating REER has historically placed pressure on export-oriented sectors—particularly textiles, agriculture, and light manufacturing—by eroding their price advantage in key markets such as the European Union, the United States, and the Middle East (Khan & Qayyum, 2007; Porro & Gia, 2021). Empirical studies on developing economies consistently show that sustained currency appreciation, in the absence of commensurate productivity gains, tends to exacerbate trade imbalances and widen current account deficits (Edwards, 1989; Razmi et al., 2012; Skhirtladze & Nurboja, 2019; Kumar & Wu, 2025). In Pakistan's case, the adverse effects of an appreciating REER are further compounded by structural constraints such as low export diversification, a narrow manufacturing base, and limited integration into global value chains. These factors limit the ability of exporters to offset price disadvantages through quality upgrades, product innovation, or scale economies (World Bank, 2021). The policy implications of this finding are significant. Effective exchange rate management—coupled with broader macroeconomic stability—can play a crucial role in sustaining export growth and preventing sharp deteriorations in the trade balance. This may involve targeted interventions to curb excessive currency appreciation, implementing export-promotion policies, and improving competitiveness through infrastructure upgrades, skill development, and technological adoption. However, exchange rate policy alone is insufficient; it must be part of a coordinated macroeconomic

framework that addresses inflationary pressures, fiscal imbalances, and structural productivity bottlenecks (Rodrik, 2008; Marc & Ali, 2018; Weber, 2022; Ali & Audi, 2023; Ibrahim & Simian, 2023; Audi, 2024; Ali et al., 2025; Hanvoravongchai & Paweenawat, 2025; Ali et al., 2025).

Foreign direct investment (FDI) inflows display a negative but statistically insignificant coefficient (-0.23), indicating that, in the short run, FDI may not exert a significant direct impact on narrowing Pakistan's trade deficit. This outcome explains that the mere inflow of foreign capital does not automatically translate into improved external balances, particularly when the composition of FDI is concentrated in sectors with high import requirements or extended gestation periods before generating exportable surpluses (Rasiah, Gammeltoft, & Jiang, 2017; Audi & Ali, 2023; Audi, 2025; Al Rasasi, 2025). For example, large-scale investments in energy infrastructure or telecommunications may initially increase imports of machinery, technology, and intermediate goods, thereby offsetting potential export gains in the short term. The absorptive capacity of the host economy also plays a crucial role in determining the trade effects of FDI. In developing economies like Pakistan, limited technological capabilities, supply chain weaknesses, and inadequate backward linkages can constrain the spillover benefits of foreign investment to domestic industries (Borensztein, De Gregorio, & Lee, 1998). Without strong local integration, much of the intermediate and capital goods required for FDI-related production may continue to be sourced from abroad, dampening its net effect on the trade balance. Empirical evidence from other emerging markets supports this interpretation, showing that the trade-enhancing effects of FDI tend to materialize over the medium to long term, once production facilities become operational and begin generating exportable output (Makiela & Ouattara, 2018; Cizakca, 2024; Irfan & Ahmad, 2025). Moreover, the nature of the investment—whether market-seeking, resource-seeking, or efficiency-seeking—matters considerably in shaping its external sector implications (Dunning, 1993). Efficiency-seeking FDI in export-oriented manufacturing is more likely to contribute positively to the trade balance compared to market-seeking FDI targeting domestic consumption. In Pakistan's case, the insignificant coefficient may therefore reflect both structural characteristics of the economy and the sectoral composition of recent FDI inflows. Policy measures aimed at channeling FDI toward export-oriented sectors, strengthening domestic supply chains, and enhancing technological absorption could help transform foreign investment into a more effective tool for reducing trade imbalances over time (Arshad & Mukhtar, 2019; Sun & Chang, 2020; Andreou, 2021).

EU GDP, used in the model as a proxy for external demand, has a positive and statistically significant coefficient (117.91), indicating that economic growth in the European Union stimulates Pakistan's exports and contributes to an improved trade balance. This relationship reflects the importance of external demand conditions in shaping Pakistan's export performance, particularly given the EU's role as one of the country's largest trading partners. When EU economies expand, household incomes and industrial production typically rise, leading to increased import demand for goods such as textiles, leather products, and agricultural commodities—sectors in which Pakistan holds a comparative advantage (Ahmed & Kalim, 2017; Mealli, 2021). This finding underscores the high degree of sensitivity of Pakistan's trade position to fluctuations in global economic activity, especially within major partner markets. Positive growth in the EU not only drives higher export volumes but can also enhance terms of trade by supporting stable or rising export prices (Bussière et al., 2013; Hwang & Lee, 2019; Naik, 2020; Mordecai & Akinsola, 2021). Conversely, during periods of economic slowdown or recession in the EU, demand for Pakistani exports may weaken sharply, worsening the trade balance. Such cyclicity emphasizes the need for diversification of export markets to mitigate exposure to demand shocks originating in any single region (Huchet-Bourdon et al., 2018; Alzahrani & Salah, 2020; Irfan & Sohail, 2021; Wang, 2023; Alvi & Muddassar, 2025). From a policy perspective, maintaining strong trade relations with the EU through instruments like the Generalized System of Preferences Plus (GSP+) is vital to sustaining export growth in favorable demand conditions. However, the heavy dependence on a limited set of external markets also explains that Pakistan should pursue a dual strategy—deepening integration with the EU while simultaneously expanding into emerging markets in Asia, Africa, and the Middle East to reduce vulnerability to region-specific downturns.

Table 4: OLS Regression Results

Variable	Coefficient	Std. Error	t-Statistic	P-value
Const	26081.7291	3200.8518	8.1484	0.0000
FDI Inflows (USD million)	-0.2338	0.3898	-0.5998	0.5521
REER Index (Base 2010=100)	-263.5151	31.5634	-8.3488	0.0000
EU GDP (USD Trillion)	117.9121	35.4161	3.3293	0.0019
GSP+ Status (0=No, 1=Yes)	-2686.6297	631.7211	-4.2529	0.0001

4. Conclusions and Policy Implications

The empirical analysis of Pakistan–European Union trade relations, with a focus on the role of Generalized System of Preferences Plus status and export diversification in addressing the trade deficit, produces several important findings with clear policy implications. The econometric evidence demonstrates that Generalized System of Preferences Plus status has a statistically significant effect on improving Pakistan’s trade balance with the European Union. This effect is evident in both the short run and the long run, confirming the programme’s effectiveness in supporting sustained export growth. The results underscore the importance of maintaining stable institutional frameworks that preferential trade agreements provide. The real effective exchange rate emerges as another key determinant of the trade deficit. The significant and negative coefficient confirms that currency appreciation undermines export competitiveness and widens the trade deficit. This reinforces the need for sound macroeconomic management to maintain a competitive exchange rate, thereby supporting the export-oriented industries of Pakistan.

Foreign direct investment inflows, while not statistically significant in the short term, exert a positive and significant effect on reducing the trade deficit over the long term. This explains the existence of a gestation period during which foreign investment translates into enhanced export capacity, facilitated by technology transfer, productivity improvements, and integration into global value chains. Accordingly, foreign direct investment policies should prioritise long-term stability and structural support rather than focusing solely on immediate outcomes.

An unexpected finding is the negative long-run relationship between the gross domestic product of the European Union and Pakistan’s trade deficit. While greater European Union economic activity should, in theory, stimulate demand for Pakistani exports, this result explains that Pakistan’s export profile—dominated by traditional industries such as textiles and constrained by supply-side bottlenecks—limits its ability to capitalise on such opportunities. It also reflects vulnerability to shifts in European Union consumption patterns and competition from other suppliers. Overall, the evidence indicates that Generalized System of Preferences Plus has been instrumental in improving Pakistan’s trade position with the European Union; however, its full potential is constrained by structural rigidities and insufficient export diversification. Sustainable deficit reduction will therefore require a multi-dimensional strategy. This strategy should involve maximising the benefits of Generalized System of Preferences Plus by broadening the export basket beyond traditional products, ensuring a competitive real effective exchange rate through prudent macroeconomic policy, and fostering an investment climate that encourages long-term,

export-oriented foreign direct investment. Addressing fundamental supply-side barriers—such as inadequate infrastructure, energy shortages, and restricted access to finance is also essential to increasing productive capacity and enabling exporters to adapt to evolving global demand and competition.

Future research should focus on identifying the specific mechanisms through which export diversification can be achieved under the Generalized System of Preferences Plus framework, exploring the differentiated effects of the programme on firms of varying sizes and capacities—particularly small and medium-sized enterprises and assessing the long-term sustainability of its benefits in the context of potential changes to European Union trade policy. Additionally, an examination of the political economy aspects of trade preferences could provide further insight into strategic policy design.

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