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Effects of Utilizing Unilateral Trade Preferences on Foreign Direct Investment Flows in Iran

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Abstract
There is a lack of study in Iran's trade literature to investigate the role of Unilateral Trade Preferences (UTP) in the attraction of foreign direct investment (FDI) inflows. Indeed, the purpose of this research is to fill such research gap of the literature. This study examined the influence of non-reciprocal trade preferences (NRTPs) on foreign direct investment (FDI) flows in Iran, with a focus on the QUAD nations (QUAD[1]) Generalized System of Preferences (GSP) Schemes. The analysis used the time series data for the period from 1985 to 2021 using the ARDL technique to examine the relationship between preferences of unilateral trade utilization and FDI inflows. the symmetric results show that GSP intensify FDI in both the long and short-run.

Furthermore, this study revealed that if Iran aims to export sophisticated items or products that are less reliant on natural resources, as well as greatly liberalize its trading policy, the adoption of GSP is projected to generate larger FDI flows to the nation. Other significant research findings of the symmetric impact indicate the existence of an inverse relationship between the real effective exchange rate, the share of natural resources, and GDP on the level of FDI.

Highlights

- The present analysis highlights the importance of NRTPs and especially their use for foreign direct investment in Iran
- In an effort to increase GSP received, scholars and policymakers have concentrated on how the relationship between GSP and FDI influences FDI influx.
- Iran, a NRTP beneficiary nation, may draw in more foreign direct investment (FDI) if it manufactures and exports low-skilled, labor-intensive, or even less technologically intensive goods and if those goods have a significant preference margin under the NRTP.
- If the complexity and variety of manufactured products increases, the higher utilization rate of NRTPs (either GSP programs or other trade preferences (oTP)) will generate more foreign direct investment to the country.

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[1] The QUAD countries, also called the "Quadrilaterals," comprise Canada, Japan, the European Union (EU), and the United States of America (US).

1. Introduction

Foreign Direct Investment (FDI) is an essential source of financing for developing countries. However, policymakers need to be mindful of minimize the risks of such investment attraction. FDI can potentially aid in the creation of employment opportunities, transfer of technology, fostering economic growth, and supporting sustainable development in host nations, while the associated risks[1] should be minimized through effective strategies, such as good governance and capable institutions, high absorptive capacity, and a sound legal framework (Kgnangnon, 2021).

Many developing countries have prioritized attracting foreign direct investment (FDI) as part of their economic strategy. While FDI has traditionally been justified based on its anticipated contributions to economic growth and income enhancement, such a narrow focus may overlook its broader implications. Basing FDI justification solely on growth and income metrics to justify FDI could lead policymakers to dismiss its value in contexts where a direct link to growth is not evident. However, it's plausible that the positive impacts of FDI extend beyond immediate economic indicators, offering indirect benefits that contribute to overall welfare (Abor et al, 2024).

Foreign direct investment (FDI) has emerged as a focal point for economists and policymakers alike. Surging by 64% in 2021, global FDI soared to almost $1.6 trillion. Furthermore, developed nations contributed 75% of the total FDI outflows, indicating their substantial impact on the global economic landscape (lu and zhu, 2024).

Attracting foreign capital can be considered as an essential factor for complementary domestic capital, building human capital, expanding and strengthening capacities in developing countries (Miraali et al., 2023; Daliri, 2021). The inflow of FDI can provide various potential benefits[2] advantages to nations, such as aiding in the transfer of technology, the beneficial and substantial spillovers to businesses and investments, as well as enhancements in the quality index for institutions and governance, the upgrade skills (human capital), Increased employment, Improving overall productivity, boosting competitiveness and promoting entrepreneurship, poverty reduction through improving economic growth and development (Kgnangnon, 2021).

Extensive scholarly research has examined the broader economic factors driving Foreign Direct Investment (FDI) inflows, with specific attention given to the role of regional trade agreements. Some studies have investigated how reciprocal trade agreements, in particular, influence FDI inflows, taking into account the substantial increase in the prevalence of such agreements worldwide in the last couple of decades (Acharya, 2016; Hofmann et al., 2019; Manocha,

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[1] This would mitigate the risks associated with investor participation in prospective export sectors.

[2] These benefits are realized by host countries under particular conditions, including the development of robust backward and forward linkages within the FDI-targeted sector, initial levels of human capital and institutional quality, and trade policies.

2023, 2024). Despite the extensive research on various aspects of Foreign Direct Investment (FDI), little focus has been placed on the impact of NRTPs extended by wealthier nations to developing countries on FDI inflows into the latter (Acharya, 2016; Hofmann et al., 2019).

Despite the extensive literature that has been devoted to determining the influencing factors on foreign direct investment, and some studies have been reviewed on the impact of regional trade agreements, And While the acknowledgment of the substantial growth in regional trade agreements worldwide, there remains a remarkable lack of research investigating the influence of UTP provided by developed nations on foreign direct investment in recipient countries.

There are two main instruments to help developing countries are used by developing nations in development efforts. These preferences NRTPs, and foreign aid, alternatively termed development assistance or official development assistance (ODA) (Kgnangnon, 2021).

In an effort to increase GSP received, scholars and policymakers have concentrated on how the relationship between GSP and FDI influences FDI influx and economic growth. This study aims to explore the impact of the NRTPs arranged by the QUAD nations on Iran's FDI inflows. This study seeks to analyze the influence of the NRTPs provided by the QUAD nation on the FDI inflow into Iran. We used symmetric long and short-run correlations between the study's variables to evaluate Auto-Regressive Distributed Lag (ARDL) in order to ascertain how changes in GSP and other factors effect FDI in the case of Iran.

Building on the preceding discussion, this study formulates the following research inquiries specific to Iran. Does a change in GSP programs on the inflow of FDI? Is there any feedback effect between independent Variables and FDI? in other words, is there any symmetric effect of GSP, ECI, GDP, RENT, HC, FIND and REER on the FDI Inflow? Hence, this study seeks to provide answers to the raised question while expanding upon the existing literature with additional insights.

The emphasis of this analysis on NRTPs offered by QUAD countries is driven by the constraint that the most extensive dataset on NRTP utilization rates is available only for QUAD nations. Also, this dataset has been developed and made publicly available recently by the World Bank and UNCTAD[1]. The analysis in this study covers the period of 1985-2021 for Iran, using time series data to examine the impact of NRTPs provided by QUAD nations.

The structure of this paper is outlined as below: section 2 is a brief Hypothetical and literature on empirical studies on the relationship between FDI, GSP and other explanatory variables. Section 3 and 4 provides the econometric methodology and discusses the main finding while the last section ends our discussion by concluding the whole essence of the paper.

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[1] The United Nations Conference on Trade and Development.

2. Theoretical Discussion and Literature Review

We can observe the pair of equilibrium tariff-FDI, which in addition to the fact that he tariff is the most efficient according to the level of foreign direct investment, also the capital market is cleared with the given tariff. the intersection of the capital market clearing (KK) locus with optimal tariff function τ R(Kˆ) is shown in figure1, as equilibrium.
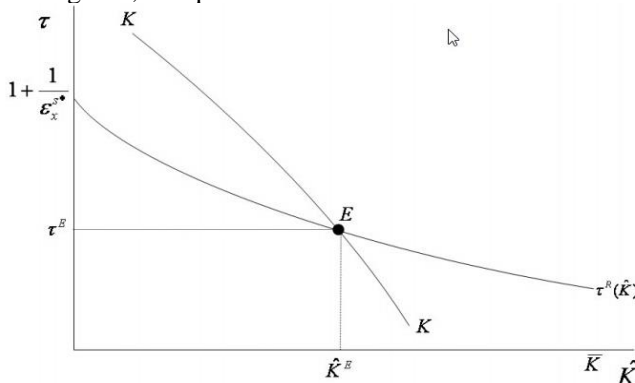
Figure 1. Tariff-FDI Equilibrium
Source: Blanchard, 2007.

The K locus intersects the Home's tariff reaction curve from above at only one specific point an unique and stable[1] equilibrium. The stable equilibrium is based on certain assumptions, such as technical criteria governing the elasticity of foreign export supply that dictate the slopes of both loci, as well as other clear and economically relevant conditions. First, it is essential that a slight positive movement of capital from Home to Foreign generates profit under the optimal tariff scenario in the absence of Foreign Direct Investment (FDI). Second, despite the implied decrease in the optimal home tariff, Foreign Direct Investment (FDI) may not yield profitability. When assumptions about endowment and preferences ensure that the rate of return on capital is greater in the Foreign country that of the Home country under goods and capital market autarky, it is expected that the first requirement is met based on the model's assumptions. Therefore, it is guaranteed that a positive flow of FDI from the Home country to the Foreign country is will occur even under a restrictive tariff (Blanchard, 2007).

There is an important point about the equilibrium level: the equilibrium quantity of Foreign Direct Investment (FDI), denoted as K^E, could be higher or lower than the FDI level needed to prompt a zero tariff, denoted as K^ft. It is commonly understood that the equilibrium level does not necessarily correspond to the level of FDI required to achieve free trade. The conditions leading to K^E = K^ft seem to lack significant economic interpretation and are considered insignificant. Therefore, the situation in which equilibrium leads to free trade is merely viewed as a fortunate razor's-edge situation. In Figure (2), three varieties

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[1] Stability implies that the equilibrium is robust to small tariff policy or capital market perturbations

of interior equilibria are apparent, Recognized by whether the equilibrium FDI level drops below, equal to, or above the level that maximizes worldwide income. Additionally, we can see the razor's-edge case in a scenario where equilibrium achieves efficiency and global income reaches its maximum, indicated by Figure (2) -a Figure (2)-b, illustrates the razor's-edge case when equilibrium is efficient, resulting in the maximization of global income. The third scenario is shown in Figure (2)-c, where the equilibrium FDI level exceeds the efficient level, leading to the presence of an import subsidy at equilibrium (Blanchard, 2007).
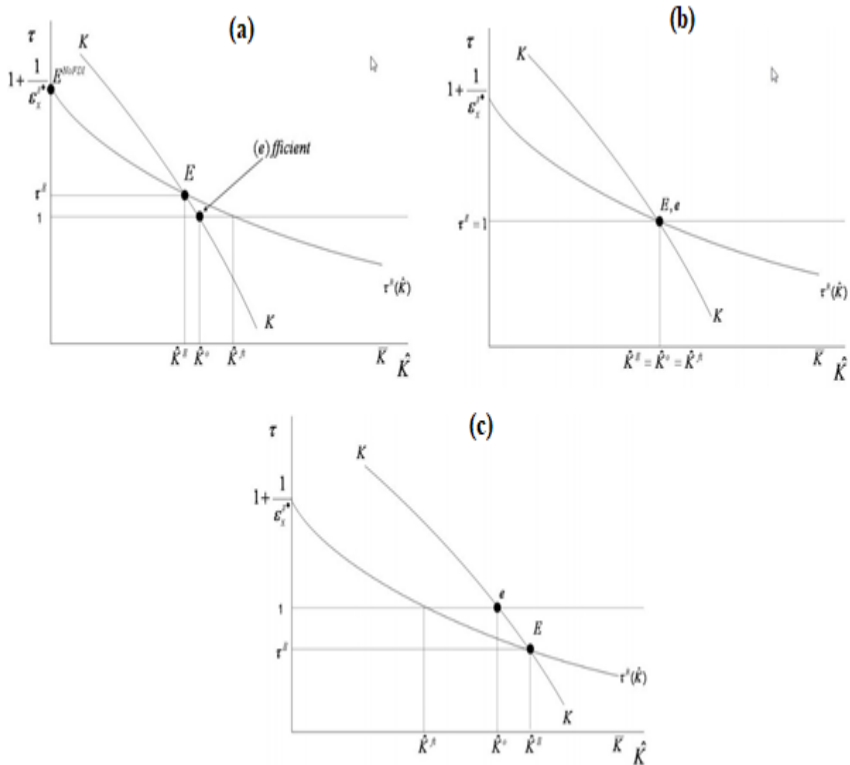

Figure 2:a) under -investing case, b) Razors Edge efficiency, c) over-investing case
Source: Blanchard, 2007.

The panels in in Figure (2), generally imply that, commencing from capital market autarky, an external shift to the right in the KK locus would at first bolster efficiency, yet not endlessly (for instance, this could arise from a relaxation of constraints on international capital movements, a decrease in international transportation costs, or a reduction in risk premiums associated with overseas investments). Starting with the example shown in Figure (2)-a, in cases where tariffs are excessively high and trade levels are unjustifiably low, an external expansion of the capital market clearing locus diminishes the equilibrium tariff,

resulting in an increase in trade volumes and a rise in global revenue. However, shifting the KK locus past the point in Figure (2)-b where equilibrium FDI and If the efficient level coincides, Home would subsidize imports, Leading to an abnormally high volume of FDI and trade.

This conclusion brings up the intriguing possibility that, in some cases, Cross-border flow of capital at an international level replace multilateralism in obtaining more liberal tariff regimes. The illustrations in Figure (2), broadly illustrate the potential importance of FDI in shaping the scope, and perhaps even the core of the tasks faced by multilateral trade forums. If we analyze the function of negotiated trade agreements like GATT/WTO as aiding governments in transitioning from traditionally inefficient unilateral trade policies at point E to the efficient point at E, these boards generally highlight the potential significance of FDI in defining the scope and perhaps even the nature of the tasks involved in addressing trade policy inefficiencies. In addition, the scenario presented in panel (c) raises the provocative hypothesis that, if there are adequate levels of export-platform foreign investment, the function of multilateral trade organizations could shift from one of facilitating the expansion of access to global markets to one of assisting governments in cooperatively restricting global trade. The foreign governments have been regarded as politically passive during the processes of tariff determination and global investment. To address this issue, the section introduces a specific subsidy or tax on the gains derived from FDI, presenting a policy mechanism enabling the foreign government to impact the final equilibrium. The investment subsidy per unit is intentionally straightforward, starting from zero and impacting the condition of capital market clearance while maintaining a constant value for Home's optimal tariff function, R(K). In the typical condition of export-platform investment, An FDI subsidy enhances the returns on FDI for any given tariff level, which leads to the capital market clearing locus shifting to the right in the (K) space. As a consequence, the equilibrium tariff decreases, and the equilibrium level of FDI increases (Blanchard, 2007).

The optimum investment approach for any small foreign country is determined by whether the possibility exists for it to gain more advantageous tariff conditions from its home country by enticing greater FDI through export platforms. Intuitively, each foreign nation is helpless to affect the MFN tariff if the home nation is obligated to follow a non-discriminatory tariff policy. For example, due to its commitment to MFN[1] provision of the GATT. However, if discriminatory tariffs are permissible due to an MFN exemption granted in accordance with GATT Article XXIV or through the GSP, Home's optimal tariff towards a specific foreign nation decreases in response to the growth of local export-platform FDI, Therefore, even a very small foreign nation can employ a localized FDI-TOT effect to achieve a more favorable tariff arrangement from Home. When the investment source country is bound by a non-discriminatory tariff, small investment-receiving countries lack the ability to independently affect

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[1] The Most Favored Nation.

the MFN tariff. Therefore, regardless of the sectoral direction of domestic FDI, non-intervention is the best investment strategy for all investment-hosting nations. The outcome is significantly altered when the potential of discriminatory tariffs is introduced via the GSP or an exemption to MFN in the vein of Article XXIV. When small nations are eligible for preferential tariff arrangements, the best strategy is to support foreign investment in the domestic export industry while taxing investment in the domestic import competitive sector. When discriminating tariffs are conceivable as opposed to when they are not, the equilibrium tariff level decreases, as a result, there is an increase in the overall level of investment focused on export platforms (competing with imports) Even in symmetric equilibrium, where an MFN exemption is not required by definition, this discovery remains valid (Blanchard, 2007).

Based on this finding, Iran, a country that benefits from NRTP programs, may draw in more if it manufactures and exports low-skilled, labor-intensive, or even low-tech items and Additionally, if these products are granted a considerable preference margin under the NRTP.

This part offers a theoretical analysis of how NRTPs influence FDI.

Melitz (2003) has pointed out the Enhanced access to foreign markets may result in improved export performance, fostering more efficient resource allocation and facilitating the expansion of the most proficient enterprises within the recipient nation. Moreover, the theory constructed by Melitz and Ottaviano (2008) suggests that enhanced access to foreign markets, such as preferential treatment, is likely to facilitate the entry of firms into domestic competition. Additionally, when considering firm heterogeneity, a larger number of firms entering the market would contribute to increased industry productivity. Ossa (2011) has proved that within the framework of PTA, the arrival of companies into the local market of the beneficiary economy would be beneficial to that country if faced with rising international trade costs and experiencing returns to scale.

Yannopoulos (1986) suggested that ownership-specific advantages (such as low labor costs and other locational benefits) within a beneficiary country, may entice Multinational Enterprises (MNEs) to invest. These MNEs could come from the preference-granting nation or other nations with export interests in markets linked to countries that grant preferences. Beyond the locational benefits offered by the beneficiary country, the type of FDI pursued by multinational enterprises (MNEs), be it (through joint outwards processing, ventures, or branch plant development), hinges on a multitude of elements. The additional factors encompass the preference margin, governmental policies within the recipient country, the production capacities of local enterprises, the accessibility of complementary inputs locally, the production technology's adaptability (specifically, the feasibility of relocating unskilled labor-intensive processes elsewhere), and the market framework within which multinational corporations operate (Kgnangnon, 2021)

Yannopoulos (1987) highlighted that the appeal of FDI inflows to a developing nation, recognized as a beneficiary of an NRTP, hinges on two primary factors: the specific skills and resources necessary for generating the additional or new exports facilitated by tariff preferences. With respect to the primary factor, if the NRTP includes products requiring high levels of marketing and management, as well as advanced production technology, exporting under preferential tariffs would entail transferable specialized informational assets through local-firm channels. Consequently, a country benefiting from NRTPs may entice multinational enterprises (MNEs) in sectors covered by these programs. Additionally, the country's comparative advantage can significantly influence the attraction of FDI flows, alongside its eligibility for tariff preferences. Many developing nations attract foreign direct investment through this avenue.

Qiu (2003) conducted a study on comparative advantage in attracting foreign direct investment. The renowned trade-cum-FDI model, featuring two nations (the countries hosting and providing FDI) and across two sectors (textile and automobile), concluded that the comparative advantage sector of the host nation is more effective in attracting greater inflows of FDI compared to the other sector (Kgnangnon, 2021). Based on this finding, Iran, a NRTP beneficiary nation, may draw in more foreign direct investment (FDI) if it manufactures and exports low-skilled, requiring significant labor intensive or possibly even lower technologically intensive goods and if those goods have a significant preference margin under the NRTP.

Callen (2008) has pointed out that shifts in the production of goods and services (GDP) are often utilized as a fundamental measure or marker of the prosperity of the typical citizen within a given country. Additionally, this factor carries substantial weight for foreign investors, who may view it as an indication of economic conditions. When the purchasing power and welfare of these individuals are high, it consequently incentivizes investors to prioritize investing in the country. Additionally, Jaspersen et al. (2000) employed the inverse of income level as a representative of capital return and discovered a negative relationship between real GDP and FDI/GDP. Nonetheless, Asiedu (2002) identified a positive association between the two factors. The researcher asserts that a higher GDP leads to enhanced opportunities for FDI in the host nation.

Froot and Stein (1991) suggest that the association between exchange rates and FDI could be due to market imperfections. In other words, Changes in the exchange rate would elevate the monetary value of companies that own assets denominated in a certain currency that appreciates in value relative to those holding assets denominated in another currency. Under constant conditions, the movement of the receiving country's currency value is contrary to the flow of foreign direct investment in that country. further emphasized that exchange rates can play an important role. The exchange rate are the main determinants and the greatest impact on FDI in a condition we faced acquisitions of high technology industries (industries with special assets of enterprises). However, Campa (1993), employing a theoretical framework focused on increased production, found that

exchange rates might even affect future profit expectations. Sharifi-Renani and Mirfatah (2012) found that when the currency of the recipient country depreciates, it leads to reduced FDI inflows into that country.

In the resource-based view, host-country location advantages and disadvantages are compared with those of the home country. From the perspective of MNCs, FDI recipient countries with location advantages are more attract to FDI for profit maximization. Thus, multinational enterprises (MNEs) are driven by various foreign resources, such as abundant raw materials and mineral deposits (natural resource-seeking FDI), larger markets (market-seeking FDI), availability of low-skilled and cost-effective/other factor inputs (efficiency-seeking FDI), and access to advanced technology (asset-seeking FDI. Nevertheless, having basic infrastructure like roads, railways, airports, and telecommunications is crucial for attracting FDI, and location advantages by themselves are insufficient to ensure FDI inflows into the host country (Bokpin et al., 2015).

The human capital level could play a fundamental role in deploying advanced technologies in the host nations. So the degree of the HC Index in the host nation determines which and how many types of FDI inflow can be attracted in the country. The level of human capital determines how well-advanced technologies are implemented in the host nations. In simpler terms, countries endowed with substantial human capital and productive capabilities might entice substantial investments from technology-intensive foreign MNCs, whereas nations with limited human capital and productive capabilities have the potential to attract foreign MNEs employing less sophisticated technology (Sadeghi et al., 2020).

Foreign direct investment is impacted by financial development in two ways: directly and indirectly. Every new foreign direct investment project, according to the direct effect, entails building or acquiring a production plant in the target nation (Helpman et al., 2004).

The capacity of a firm to use Internal funds for covering the initial fixed costs of FDI differs across sectors. In sectors where companies typically seek specific investment amounts surpass their internal cash reserves, there is a technological dependence on external finance (Rajan and Zingales, 1998). In order to attract foreign direct investment, firms are highly dependent on foreign financial resources in these financially vulnerable sectors, since their financial capacity allows them to finance only a small fraction of the fixed costs involved in FDI (Buch et al., 2009; 2010).

Enhanced financial development can intensify competition among firms. Conversely, enterprises encountering stiff domestic rivalry might prioritize allocating a larger share of their constrained financial assets toward expanding internationally rather than domestically. and this could enable enterprises to offset some of the deficit in internal funds by accessing external financing. Lastly, the growth of domestic manufacturing industries driven by increased financial development levels could generate a positive and indirect agglomeration impact

on foreign direct investment inflow (FDI), which may outweigh any potential negative indirect competitive effects (Rodolphe and Shang-Jin, 2017).

The literature on location complexity states that the value share of a country's exported goods in its export basket and the complexity of those goods determine the economic complexity of that country.

Economic diversity and the specialization pattern of a country's export basket are contingent upon various capabilities, including tangible inputs such as infrastructure (e.g., roads, ports, buildings) and intangible inputs like knowledge, skills, social norms, and institutional frameworks. Therefore, a rich country that exports increasingly complex products is poised to see amplified growth-promoting impacts on its GDP. In comparison, economically disadvantaged nations, hindered by their limited capabilities, particularly in intangible factors, tend to export products with lower complexity or simplicity. Thus, based on the literature, countries with advanced economic complexity tend to develop the productive knowledge and capabilities essential for drawing inward FDI and internalizing its impacts, which positively influences their human capital index and economic growth. in other words, nations with advanced economic complexity are expected to possess the necessary productive knowledge and capabilities to allure foreign direct investment (FDI) and absorb its influences, given the recognized impact of FDI on improving human capital performance and driving economic growth (Sadeghi et al., 2020).

Blanchard (2007) conducted research on FDI, Domestic Tariffs, and PTA. Two nations possessing identical and consistent internal and external preferences produce and trade two goods, X and Y, which have a constant international rate of return and equal scale technologies. In a basic two-country model, foreign investment is shown to relate to exports results in the unilateral reduction of tariffs by the investing country. The model suggests that international capital flows may serve as a viable alternative to multilateral organizations like the World Trade Organization (WTO) in achieving efficient tariff rate. Because of this article has used simple and basic assumptions and simulations, so its findings are not very reliable.

Gamberoni (2007) used Tobit and probit estimations to analyze a set of imported data from a group of European countries, including France, Greece, Denmark, Italy, Germany, Ireland, the United Kingdom, the Netherlands, Spain and Portugal from a total of 118 developing countries during the period 1994-2005. The findings suggest that UTP have caused an expansion in the assortment of export products, particularly in the agricultural sector, for African, Caribbean, and Pacific (ACP) countries. Moreover, developing nations can benefit from UTP by facilitating their exports in sectors that face comparatively more obstacles to trade liberalization. Hence, the results of Gamberoni (2007) are not very reliable because it relies on basic assumptions and simulations.

Büthe and Milner (2008) examined the effects of FDI policies in the economies of developing nations in the framework of an international trade agreement. The statistical analysis of panel data for 122 developing countries

from 1970 to 2000 confirms this argument. The research outcomes suggest that developing nations, which have membership in the World Trade Organization (WTO) and engage in preferential trade agreements exhibit an increased level of FDI inflows compared to nations without such agreements. Because each country's economic circumstances determine how agreements affect foreign direct investment, these effects vary across nations. However, this problem is not covered in Büthe and Milner (2008).

Cardamone and Scoppola (2010) conducted a study on The effect of European Union PTA on FDI. In this research, a dynamic panel model with fixed effects was used to examine the behavior of multinational enterprises during the period of 1995 to 2005. The sample included a large number of 173 countries. The results also indicate that unilateral trade agreements can be more effective than reciprocal trade agreements in increasing foreign direct investment in the European Union. As UTP programs become more widespread, therefore, there is a possibility that this finding may change.

Cirera and Alfieri (2012) evaluated the effect of UTP in the European Union on exports from Mozambique during the period of 2000-2007. The study uses two estimation methods, OLS and fixed effects and random effects models. The results show that for many production lines, exported products have zero profit margin. In other words, for these production lines, the profit from exporting is equal to the profit from importing, and therefore, no trade sanctions or preferences will affect them. it has been found that in general, the usage rate of trade preferences for Mozambique is high. However, this does not have a significant impact on the price margin of Mozambican products compared to other competitors. In other words, these trade preferences do not have a significant impact on the price of Mozambican products.

Gnangnon (2021) investigates the relationship between structural economic vulnerability, the utilization of UTP and the role of development aid. This analysis utilizes panel data from 84 beneficiary countries of NRTPs and development aid during the period of 2002-2019. The study shows that an increase in structural economic vulnerability leads to a decreased utilization rate of GSP and similar preferential trade program. However, As the level of economic vulnerability decreases, countries are inclined to utilize both Non-Tariff Barrier (NTB) blocks complementarily.

Gnangnon and Iyer (2021) Conducted a study on How Foreign Aid and FDI Flows Affect the Utilization of UTP Provided by Quad Countries. Their analysis was based on panel data from 114 beneficiary countries of NRTPs (including 38 least developed countries - LDCs) during the period of 2002-2018. Several findings have surfaced from the analysis. Across the entire sample, the overall flow of aid to trade contributes to a rise in the utilization rate of Generalized System of Preferences (GSP) and other Non-Reciprocal Trade Preferences (NRTPs). Inward FDI flows enhance the utilization of both GSP and other NRTPs, but the impact is more pronounced for GSP. Finally, the level of product

diversity in the exporting countries is important for the impact of AFT flows and inward FDI on the utilization of NRTPs.

Gnangnon (2021) investigated How economic growth in beneficiary countries correlate with the NRTPs granted by the QUAD? the Impact of NRTPs granted by the QUAD on Economic Growth in beneficiary countries. The analysis utilized a panel dataset of NRTPs for 90 beneficiary nations that also received development aid between 2002-2018. The findings indicate that a greater degree of utilization of either of these two categories of NRTPs is linked to higher economic growth rates, the positive impact is strengthened by development aid. Additionally, the results show that donor countries need to support a development strategy based on providing development aid and NRTPs to cooperate with beneficiary countries in promoting economic growth.

Gnangnon (2022) investigates How NRTPs provided by the QUAD nations to developing countries influence the inflow of FDI into these developing countries? An unbalanced panel dataset, consisting of 108 observations, was utilized for the analysis of 108 recipient countries of NRTPs from 2002 to 2019. the two-step Generalized Method of Moments (GMM) estimator was applied. it is found that lower utilization rates of GSP programs are linked with higher FDI flows to less advanced beneficiary countries, such as least developed countries (LDCs). However, higher adoption rates of the GSP programs lead to an increase in foreign direct investment (FDI) flows to advanced recipient nations, including Non-Least Developed Countries.

Gnangnon (2023) empirically examined whether the NRTPs granted by QUAD nations (the European Union, Canada, Japan and the United States) have contributed to enhancing economic growth in recipient nations. In this context, the analysis focuses on two major types of NRTPs: GSP programs and other trade preference (oTP) programs. A set comprising 90 beneficiary countries was employed for the analysis of NRTPs that also concurrently received development aid during the period spanning from 2002 to 2018. Through the application of the two-step system generalized method of moments approach, the analysis showed that while Increased utilization of both categories of NRTPs correlates with elevated economic growth rates, development aid strengthens this positive impact.

Although numerous studies have explored the positive and negative effects of trade preferences on FDI in both developed and developing nations, there exists a notable research gap when it comes to examining the empirical relationship between FDI and unilateral trade preferences in Iran using time series data analysis.

The current body of empirical literature on FDI and trade preferences has predominantly focused on a broader set of countries, often with an emphasis on regional trade agreements or reciprocal trade preferences. Consequently, the specific dynamics and impact of UTP on FDI in Iran remain largely unexplored.

By conducting a comprehensive time series data analysis, researchers can fill this research gap and provide valuable insights into the role and significance of

UTP in attracting FDI to Iran. This empirical investigation would involve analyzing historical data, economic indicators, and case studies to discern the specific effects of UTP on FDI inflows.

Such research would contribute to the existing knowledge by offering a deeper understanding of the relationship between unilateral trade preferences and FDI in the Iranian context. It could shed light on the mechanisms through which these preferences influence investment decisions, highlight the potential benefits and limitations of such preferences, and inform policy recommendations to optimize FDI inflows.

In conclusion, despite the extensive literature on trade preferences and FDI, there remains a research gap concerning the empirical analysis of UTP and their impact on FDI in Iran using time series data analysis. Filling this gap would provide valuable insights for policymakers and researchers interested in understanding the specific dynamics of FDI and trade preferences in Iran's economic landscape

3. Data and Methodology

The GSP was introduced to encourage exports from low-income countries to developed countries, thereby fostering their economic growth and development. The Generalized System of Preferences (GSP) involves developed countries granting lower or zero tariff rates on designated products from developing nations. Additionally, least developed countries receive extra preferential treatment for a diverse range of products (Herz & Wagner, 2011).

In the 1970s, the initial GSP schemes were awarded to low-income countries. Since then, GSP programs have become widespread, with approximately 40 industrialized countries providing them and over 200 states and territories benefiting from import privileges. The WTO has recently reiterated that "Aid for Trade" and preferential treatment are the suitable concepts to equip developing countries for the period following the crisis (Lamy, 2009).

For each combination of PGC, Beneficiary, Product and Year, the following elements are available:

Total Imports: the value in current US thousand dollars of all imports by the PGC from the selected beneficiary during the selected year for the selected product;

Dutiable Imports: the value of imports subject to the payment of customs duties unless they benefitted from preferences of any kind, i.e., the corresponding MFN rate of duty is greater than zero;

GSP-covered Imports: The total value of imports falling within dutiable tariff lines and encompassed by the GSP program of the PGC.

GSP-received Imports: The monetary worth of imports that have received GSP treatment.

Figure3, illustrates Iran's General Preferences received from the Quad countries for the 20-year period of 2002-2021, in dollars. As the graph shows, preferences can have a significant share in Iran's foreign trade. Since 2002, the

reception of trade preferences has exhibited an upward trajectory over the span of a decade. However, starting from 2011, there has been a notable decline in this trend that has persisted up to the present day.
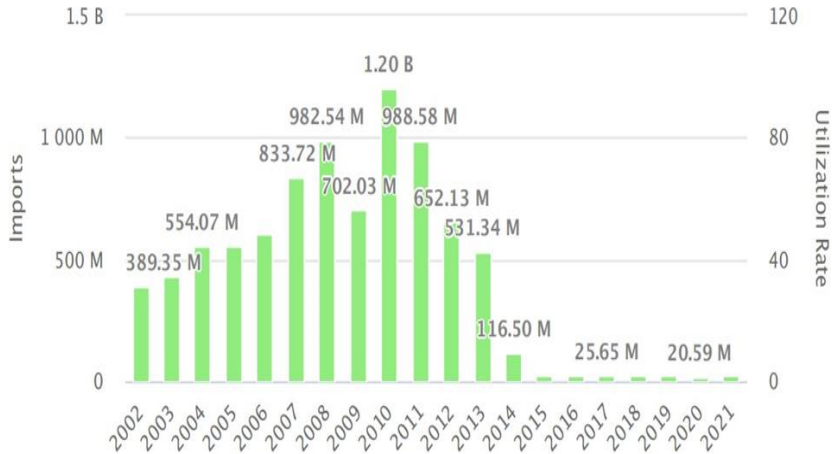

Figure 3: Evolution of the GSP (UR, right scale) and imports by tariff treatment (left scale).
source: www.unctad.org

Figure 4, displays the top 10 products imported by a preference economy (Japan) from a partner economy (Iran) in a selected year (2021), The data is categorized using the selected aggregation level (HS product level), as reported by UNCTAD. The codes are identified as 2-digit HS chapters (96 items), 4-digit HS headings (about 1000 items), or 6-digit HS subheadings (over 5000 items).
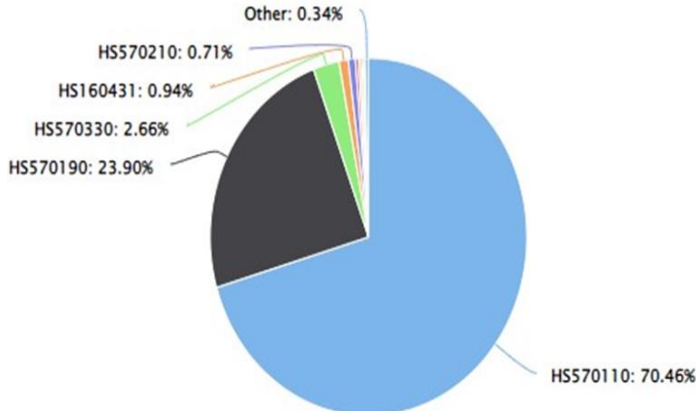

Figure 4: Top 10 products imported by Japan from Iran (Islamic Republic of) receiving GSP preferential treatment in 2021.
source: www.unctad.org

HS codes 570110 and 570190 specifically refer to woven floor coverings, including woolen carpets and other textile floor coverings. These products have garnered considerable attention within the Generalized System of Preferences (GSP) programs due to their significant contribution to exports. The classification of these items as "knotted or otherwise" stems from their inherent high value-added potential.

However, it is important to highlight that a noteworthy portion of GSP programs is allocated to low value-added products. Despite this fact, the inclusion of woven floor coverings, including carpets, within GSP programs reflects their substantial economic impact and the recognition of their export potential. However, NRTPs extend beyond GSP programs, encompassing additional NRTPs extended by developed nations to certain developing nations, authorized through an exceptional waiver stipulated in the WTO Agreement. (see WTO, 2010). Considering the QUAD nations administer GSP programs (each tailored to its own program) for developing nations, providing distinct concessions for LDCs, the EU, Canada, and the US also extend specific trade concessions to designated developing nations. For instance, the EU grants Special preferential treatment to goods from the Western Balkans, whereas Canada offers tariff treatment to goods from Commonwealth Caribbean countries (Gnangnon, 2021).

3.1 Data description

For the purpose of investigating the relationship between the variables in this article, we have chosen the FDI inflow as the dependent variable and GSP, GDP, FIND, ECI, REER, RENT, HC as the independent variable. Also We attempted to utilize annual secondary data throughout the period 1985-2021 as obtained by World Bank, Mcrotrends, IMF, UNCTAD and WITS, which contains 37 observations (Table 1).

Table 1. Data Elaboration

Variables	Description	Source
FDI	Foreign Direct Investment	MACROTRENDS[1]
GSP	the generalized system of preferences	UNCTAD[2], World Bank[3]
GDP REER RENT HC	Gross domestic product Real effective exchange rate Total natural resources rents Human capital	The WORLD BANK
FIND	Financial Development	IMF[4]

[1] Www.Macrotrends.Net

[2] Www.Unctad. Org

[3] Www.WorldBank. Org

[4] Www.Imf.org

| ECI | Economic complexity index | ATLAS[1], IMF |

Source: *Authors*

3.2 Definition of Variables

According to the discussion in Section 2, the purpose of this study is to build on the work of Genangon (2021) by specifying the linear relationship between FDI Inflow and GSP, GDP, REER, RENT, HC, FIND, and ECI. (1) shows the linear model for FDI as a function of all the studied variables. All of the series are converted into logarithm values.

$$LFDI_t = f\,(LGSP_t,\ LGDP_t,\ LREER_t,\ LRENT_t,\ LHC_t,\ LFIND_t,\ LECI_t) \qquad (1)$$

where;

FDI: Foreign direct investment (FDI) embodies the direct transfer of equity investment into the reporting economy, comprising equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment characterized by a resident entity in one economy having control or exerting significant influence over the management of an enterprise situated in another economy. A direct investment connection is identified when ownership of 10 percent or more of the ordinary shares of voting stock is established (current US$).

GSP Received: The import value eligible for GSP treatment (current US$).

GDP: GDP at purchaser's prices is determined by summing up the gross value added by all resident producers in the economy, taking into account product taxes, and subtracting any subsidies not reflected in the product value. Deductions for the depreciation of fabricated assets or for the depletion and degradation of natural resources are not accounted for in the calculation. Data are reported in constant 2015 prices, stated in U.S. dollars. GDP values are converted from local currencies using the 2015 official exchange rates.

FIND: We used the arithmetic mean of stock market capitalization to GDP and monetary sector credit to the private sector (% GDP) as indicators of financial development.

ECI: We used the arithmetic mean of Export Diversification and Quality Databases as indicators of Economic complexity index.

HC: We used the Gross enrollment ratio as a proxy of human capital. The Gross Enrollment Ratio is a metric that measures the proportion of total enrollment, irrespective of age, relative to the population within the age group corresponding to the specified educational level (% gross).

REER: The real effective exchange rate is computed by dividing the nominal effective exchange rate, which assesses a currency's value against a weighted average of multiple foreign currencies, by a price deflator or an index of costs (2010 = 100).

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[1] www.Atlas. Cid.Harvard. Edu

RENT :Oil rents, natural gas rents, coal rents (both hard and soft), mineral rents, and forest rents collectively constitute total natural resources rents (% of GDP).

We have applied the data of all variables in logarithmic form. Unilateral Trade preferences, gross domestic product, FDI inflow, economic complexity index, level of financial development, human capital index, share of natural resources and real effective exchange rate, respectively as LGSP, LGDP, LFDI, LECI, LFIND, LHC, LRENT and LREER are shown. In order to, we have chosen EViews 10 software for data analysis.

3.3 Econometric Specification of FDI

According to the previous studies on the macro-determining factors of FDI, which have relied on the characteristics of the dynamic model to conduct their empirical analysis. We hypothesize the following basic model following Genangon's (2021), in which we examine the role of Unilateral Trade Preferences on FDI in beneficiary nations (developed and developing):

$$LFDI_t = \alpha_0 + \beta_1 LFDI_{t-1} + \beta_2 LGSP_t + \beta_3 LREER_t + \beta_4 LRENT_t + \beta_5 LGDP_t + \beta_6 LHC_t + \beta_7 LFIND_t + \beta_8 LECI_t + \beta_9 DUM + \varepsilon_t \quad (2)$$

where the model variables are defined as follows;

LFDI= logarithm of foreign direct investment.
LGSP= logarithm of the General system of preferences
LREER= logarithm of real effective exchange rate.
LRENT= logarithm of share of natural resources.
LGDP= logarithm of gross domestic product.
LHC= logarithm of human development index.
LFIND= logarithm of financial development level.
LECI= logarithm of economic complexity index.
DUM= Dummy variable.
t= Represents the time from 1985-2021.
ε= Represents the Error term.
$\beta_1..\beta_n$= are the relevant parameters.

Empirical estimates about the relationship between FDI inflows and influencing variables in developing countries show different results. In the first step, the focus of our investigation lies in exploring the relationship between variables and discerning any causal relationships, utilizing Autoregressive Distributed Lag (ADRL) within a tri-variate estimation approach, coupled with an error correction metric (ECM). The utilization of the ARLD model stands as the most fitting and efficient approach to scrutinize the dynamic relationship between variables, a fact substantiated by numerous studies such as Pesaran and Smith (1995), Pesaran et al. (2001), Pacheco-López (2005), Chaudhry and Choudhary (2006), and Zachariadis (2006). Consequently, the aim of this paper

is to assess the relationship regarding Foreign Direct Investment, Unilateral Trade preferences, gross domestic product, economic complexity index, level of financial development, human capital index, share of natural resources and real effective exchange rate Both in the long and short run, this paper employs the latest and robust ARDL bound test estimation method (Pesaran et al., 2001) to analyze the relationship (Pesaran et al., 2001).

The ARDL methodology encompasses a consolidated equation format where regressors can comprise a mix of levels I (0), first differences I (1), or exclusively I (0) or I (1). It's crucial to be vigilant to avoid including I (2) variables. In other cases, the model may yield spurious results. According to Narayan (2005), the ARDL estimation technique is recognized for its capability to operate effectively with small sample sizes (i.e., 30–80 observations), Guaranteeing more robust and consistent conclusions.

For this study, in ARDL Approach, First, we conduct descriptive statistics tests to examine the Maximum, Minimum, Mean, Median and finally Standard Deviation. In the second step, we conduct unit root tests, applying the Augmented Dickey-Fuller (ADF) tests to evaluate stationarity. Before examining the co-integration relationship, we employ an unrestricted VAR model to determine the lag order. The selection of the optimal lag length constitutes the third step in this process. In the fourth step, The ARDL model is utilized to analyze the co-integration relationship over the long run. Following the fifth step's outcome, we proceed to test the relationship in both the long and short term. The sixth step involves testing for Serial Correlation-LM, Heteroscedasticity, and Stability to verify the model's fitness.

4. Empirical Results

Table (2), Measures such as Mean, Median, Maximum, Minimum, and Standard Deviation are part of the descriptive statistics. Standard Deviation and Mean are particularly emphasized to ascertain the dispersion and range of the data. According to the calculations, the maximum FDI value in Iran is 0.22%, while the median and mean stand at 0.21%. Despite the broad range, the low standard deviation implies a stable pattern of FDI inflows in Iran.

Table 2. Statistical Description of Data

Variables	LFDI	LFIND	LGDP	LGSP	LHC	LREER	LRENT	LECI
Mean	21.61	3.80	26.39	19.37	0.52	4.79	24.82	1.07
Median	21.63	3.71	26.45	19.81	0.53	4.73	24.88	1.07
Maximum	22.27	5.96	26.87	20.78	0.58	5.69	25.80	1.20
Minimum	21.25	3.079	25.77	17.72	0.42	3.99	22.63	0.94
Std. Dev.	0.22	0.71	0.35	0.99	0.04	0.44	0.69	0.06

Source: Authors

In evaluating the stationary of FDI inflows, GSP, GDP, FIND, ECI, HC, REER, and RENT, we utilize Augmented Dickey-Fuller (ADF) tests, applying the Akaike Information Criterion (AIC) and including a constant term. Hill, Griffiths, and Judge (2001) suggest that When time-series variables demonstrate non-stationarity, they should not be incorporated into any regression analysis. To prevent spurious regression, all variables must demonstrate stationarity.

Table 3. Unit Root Tests of the Model Variables

Variables	LFDI	LGSP	LREER	LRENT	LGDP	LHC	LFIND	LECI
ADF Test t-Statistic	-6.17	-7.25	-3.87	-4.45	-4.90	-4.63	-5.24	-5.87
P.-Value	0.0000*	0.0000*	0.0054*	0.0012*	0.0003*	0.0000*	0.0001*	0.0000*
Status	I(1)	I(1)	I(1)	I(1)	I(1)	I(0)	I(1)	I(1)

*Notes: denotes Level and first differences. Significant at * 1% level ** 5% level and *** 10% level*
source: Authors

Furthermore, according to the ARDL Technique, it is recommended that all variables demonstrate at order I (0) and (I (1)), or solely at order 1 (I (1)) before running the model. Hence, subsequent to conducting of unit root tests utilizing the Augmented Dickey-Fuller (ADF) technique, As seen in Table (3), all variables exhibit, LFDI in I (1), LGSP in I (1), LGDP in (1), LFIND in (1), LECI in (1), LREER in (1), LRENT in (1) and LHC in I (0) show stationary behavior at the level of 1, 5 and 10% significant level.

Optimal lag selection based on maximum criteria led to the choice of lag 3 for computing F-statistics, facilitating the exploration of co-integration relationships among the variables. The appropriate lag order plays a critical role in avoiding serial correlation in the error correction terms. According to Lütkepohl (2006), we prioritize selecting the suitable lag order based on the Schwarz Information Criterion (SIC), as it offers robust and reliable information, especially for datasets with fewer than 100 observations.

We utilized the Schwarz Information Criterion (SIC) to determine a maximum lag order of 3 for ARDL estimation. The model was executed with a constant term and no trend. ARDL estimation was conducted according to the guidelines provided by the SIC.

Table 4. ARDL Bound test estimates

K	F-Statistic	Significant	Lower Bound, I(0)	Upper Bound, I(1)
7	7.640343	10%	2.03	3.13
		5%	2.32	3.5
		2.50%	2.6	3.84
		1%	2.96	4.26

Source: Authors

The outcomes of the test are shown in Table (4), The F-statistic, calculated at 7.640343, exhibits significance, Exceeding the lower threshold for I(0) and the upper threshold for I(1) at the specified significance levels of 1%, 2.5%, 5%, and 10% according to Pesaran et al. (2001). Nevertheless, Narayan (2005) notes that if the F-statistic is below or falls within the median of the lower and upper bound critical values, the results become inconclusive. The ARDL bound test method provides lag information for the model, facilitating the examination of both long and short-run relationships. The lag configuration of the model being estimated is (2, 2, 2, 1, 0, 0, 0, 0, 1), indicating a long-run co-integrated relationship among the variables. Consequently, we continue to derive the long-run coefficients of the regressors.

Table (5), The coefficient associated with GSP is positive and exhibits statistical significance at the 5% level. An increase of 1% in GSP results in a 0.43% increase in FDI inflow. According to the results, GSP inflows emerge as a key determinant in attracting FDI to Iran's economy. The results also suggest that foreign companies with interests in the preference-granting nations markets, whether originating from the preference-granting country or from other nations, would be encouraged to take advantage of the export prospects provided by the NRTPs. Policymakers should regard GSP receipts as a crucial indicator of their economy's performance. Furthermore, we find the negative and significant relationship between RENT and FDI Inflow in 5% level. The FDI Inflow decreases significantly by.28% for every 1% increase in rent.

However, we have been unable to demonstrate the positive and significant relationship between FDI and GDP in the long run. According to our findings, GDP deters foreign direct investment (FDI) and this relationship Is significant at the 1% statistical level. A 1% increase in GDP causes the FDI inflow to drop by 1.87%. Secondly, the dominance of the unproductive sector in Iran's economy can also negatively affect FDI inflows. This is because of the unproductive sector does not generate as much economic growth as the productive sector, making it less attractive for foreign investors to invest in these countries. Also government spending in Iran's economy is high, which can lead to fiscal imbalances and higher inflation rates, making it less attractive for foreign investors to invest in Iran. Additionally, the lack of separation and differentiation between the productive and unproductive sectors of the economy can lead to a misallocation of resources, which can further discourage FDI inflows.

Additionally, as anticipated, the relationship between HC and ECI with FDI is both positive and statistically significant. A 1% increase in either HC or ECI causes an increase in FDI inflow of 3.85% or 2.73%, respectively. The next step involves creating an ECM using long-run factors.

Table 5. Long-term coefficient estimates: FDI as a Dependent Variable

Variables	Coefficient	Std. Error	t-Statistic	P-Value
LGSP	0.439607	0.099265	4.428613	0.0003*
LREER	-0.060379	0.070989	-0.850537	0.4051

LRENT	-0.28274	0.130273	-2.170357	0.0422**
LGDP	-1.870051	0.586763	-3.187066	0.0046*
LHC	3.852685	1.121659	3.43481	0.0026*
LFIND	0.072412	0.080856	0.895565	0.3811
LECI	2.738377	1.324137	2.068046	0.0518***

*Note: Significant at * 1% level ** 5% level and *** 10% level*
Source: Authors

Table (6), indicates that D(*LFDI* (-1)) In the short-run analysis, the relationship is negative and statistically significant at the 5% level. In the event that *FDI* (-1) inflows rise by 1%, FDI falls by 0.24672%. It is noteworthy that the reasons for the indirect effects of investment disruptions on foreign direct investment (FDI) flow can differ based on the particular context and conditions. These reasons may include: investor confidence, uncertainty and risk, disrupted supply chains, and competing investment destinations. D(*LGSP*) is likewise positive at the 5% significance level, but D (*LGSP* (-1)) is significant and negative at the 5% significance level. FDI will rise by 0.073157% and decrease by -0.11906 for an 1% increase in *GSP* and *GSP* (-1). Additionally, D(LREER) is significant and negative at the 5% significance level; *FDI* falls by 0.43554% as *LREER* increases at this level. *DUM* is also significant and positive at the 5% significance level.

Table 6. Error Correction Representation for the ARDL Model (short-run estimates)

Variables	Coefficiet	Std. Error	t-Statistic	P-Value
D(*LFDI*(1))	-0.24672	0.089689	-2.75079	0.0123**
D(*LGSP*)	0.073157	0.024927	2.934879	0.0082*
D(*LGSP*(1))	-0.11906	0.027903	-4.26674	0.0004*
D(*LREER*)	-0.43554	0.053331	-8.16673	0.0000*
DUM	0.174415	0.054172	3.219641	0.0043*
CointEq(-1)	-0.42772	0.047086	-9.08382	0.0000
R-Squared		Adjusted R-Squared		Durbin Watson
0.828692		0.784279		2.6400

*Note: Significant at * 1% level ** 5% level and *** 10% level*
Source: Authors

Additionally, estimated results demonstrate that lagged error correction representations (ECMt−1) have a statistically significant negative sign. It breaks up the relationship between the all variables. The *ECM* (−1) coefficient represents the speed at which equilibrium is being adjusted. Each year, 42.77% of adjustments from the short run to the long run are corrected, based on an ECM (−1) of -0.42772. The dependent variable is 82.86% explained by the independent variables, according to the R^2 value of 0.83. The adjusted R^2 is 78.42% as well. The Durbin–Watson (D–W) value of 2.64 indicates that there is no autocorrelation between residuals. All statistical indicators (R-squared, R-squared. Adjusted,

Durbin-Watson) demonstrate. the robust and reliability of the estimated Equation (*1*).

According to Table (7), The Breusch–Godfrey Serial Correlation LM Test confirms that diagnostic tests indicate the absence of serial correlation in the model.

Table 7. Results of Diagnostic Tests for the Eq. (1)

Diagnostic tests	ObsR-square	F Statistic	P-Value
Serial correlation: Breusch–Godfrey Serial Correlation: LM Test	6.118534	1.906649	0.1774
Heteroscedasticity: Breusch–Pagan–Godfrey	17.64984	1.453247	0.2169
Heteroscedasticity: Harvey	11.9128	0.737131	0.717
Heteroscedasticity: ARCH	0.065868	0.062113	0.8048
Heteroscedasticity: Glejser	16.13921	1.222431	0.3326

Source*: Authors*

Moreover, according to the B–P–Godfrey, Harvey, ARCH, and Glejser tests, there is no evidence of autoregressive conditional heteroscedasticity. Following the sensitivity analysis, Table (7). provides the relevant F-statistics and probability values. Thus, the results suggest that the model fits perfectly.

We utilized the CUSUM and CUSUMSQ tests to conduct stability assessments for the model. The analysis determines the stability of the model. Using the CUSUM and CUSUMSQ tests, the ARDL-based ECM demonstrates the stability of our model (specked by Figure 5) in the stability method established by Brown, Durbin, and Evans (1975), respectively. The critical value line, represented by the red line in each blue line plot, indicates the stability of the estimated techniques. The goodness of fit of this model is excellently specified.
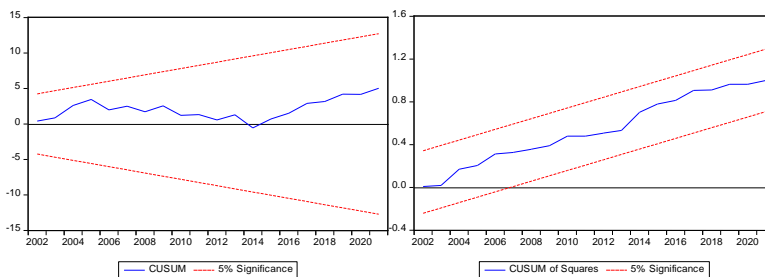
Figure 5. Stability test (CUSUM) and (CUSUMQ)
Source*: Authors*

5. Concluding Remarks

Unilateral Trade Preferences are a significant means by Which developed countries help developing nations in their endeavors to enhance integration into the global trading system and foster development. The main focus of this empirical paper is to explore the influence of trade preferences, particularly GSP programs, granted by QUAD nations by providing some systematic analysis of its effects on the FDI Inflow in Iran using a time series data set for the period 1985-2021 using the ARDL approach. The analysis has produced several results.

According to our ARDL results, there exists a significant and positive relationship between general system of preferences and foreign direct investment in the short and long-run. Regarding the characteristics of GSP and FDI in Iran, the following can be deduced.

a) Enhancements in the utilization of GSP Schemes will lead to increased foreign direct investment in the country in the short run.

b) Enhancements in the utilization of GSP Schemes will lead to increased foreign direct investment in the country in the long run.

Also, from the obtained results, it can be noted the negative relationship between FDI inflow and GDP in the long run. developing countries, may lack proper infrastructure and physical capital, which can make it less attractive for foreign investors to invest in these countries. This is because foreign investors may require access to good transportation systems, reliable power supply, and other necessary infrastructure to carry out their business activities effectively.

The symmetric results indicate the share of natural resources has a significant and negative impact on foreign investment in the long-run. This can be attributed to the fact that the importance of knowledge and its accumulation on the GDP is greater compared to the share of natural resources when it comes to attracting FDI. The analysis of using symmetric approach reveals that human capital has a positive and significant impact on FDI flow in the long term. This finding suggests that investing in education, training, and skills development can pay off in terms of attracting foreign investment. Companies often seek to invest in countries with a skilled and knowledgeable workforce, as it can lead to increased productivity and efficiency. Therefore, countries that prioritize human capital development may have a competitive advantage in attracting FDI.

The present analysis emphasizes the significance of and especially their use for foreign direct investment in Iran. This study complements the research of Kenangon (2021), who examined the impact of NRTPs on both developed and developing and this study is a case study of Iran. It is also complementary to the study of Yiannopoulos (1986, 1987) who examined the effect of (NRTPs) and not their use on foreign direct investment.

Considering the high importance of FDI in economic development and also the role of UTP to enhance the attractiveness of foreign direct investment, the followings can be made to attract more NRTPs:

a) If the complexity and variety of manufactured products increases, Increased utilization of NRTPs (Encompassing GSP Schemes along with oTP), will generate more foreign direct investment to the country.

b) Similarly, if a country seeks to decrease its reliance on natural resources, a greater utilization of NRTPs has been found to lead to increased FDI inflows.

The current analysis is constrained by the availability of data, limiting it to QUAD countries. Future research avenues may involve examining the impact of NRTPs (including GSP Schemes or oTP) on FDI inflows in Iran, incorporating data from both QUAD and non-QUAD countries that provide trade preferences.

Author Contributions:

Conceptualization, all authors; methodology, validation, formal analysis, all authors; resources, writing—original draft preparation, writing—review and editing, all authors; supervision, all authors has read and agreed to the published version of the manuscript.

Conflicts of Interest:
The authors declare no conflict of interest.

Data Availability Statement:
The data used in the study were taken from https://www.macrotrends.net/, https://unctad.org/, https://www.worldbank.org/, https://www.imf.org/, https://atlas.cid.harvard.edu/

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