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**China's Trade Policy Since Joining the World Trade
Organization (2001 – 2024)**

**Project prior to obtaining a Bachelor's Degree in
International Studies**

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To those who were my support in challenging moments and my joy for each achievement I have achieved. To my family for teaching me what effort, discipline and perseverance entails. To my grandfather, for his teachings and his example of life, for having left an indelible mark on my path. To the people who believed in me even when I didn't, for supporting me to keep going and not give up.

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Política Comercial China desde su Ingreso a la Organización Mundial del Comercio (2001-2024)

ABSTRACT

The study analyzes China's trade policy after its entry into the World Trade Organization in 2001 until 2024, with the aim of covering its transformation and its role within the multilateral trading system. China's accession to the WTO marked a turning point in the functioning of global trade, restructuring its integration, competitiveness and positioning as a key economic player. This study focuses on mixed methods, combining quantitative and qualitative analysis to analyze both structural changes and trade policy dynamics. To this end, data published by the World Bank was collected. Trade indicators were implemented using econometric tools applied for the period 1994 to 2024, identifying trends and structural breakdowns before and after their entry into the WTO. The theoretical current is based on the political economy of trade, as well as on the theories of trade integration and multilateralism. Likewise, the regression model presents a significant relationship with variables such as GDP, exports, trade surplus, and foreign direct investment, showing growth after the entry of the World Trade Organization. The structural breakdowns around the period confirm China's commercial and economic dynamics.

Keywords: Economic analysis, international trade, economic growth, economic integration, economic model, trade policy.

China's Trade Policy since its Accession to the World Trade Organization (2001 – 2024)

RESUMEN

El estudio analiza la política comercial de China tras su ingreso a la Organización Mundial del Comercio en el año 2001 hasta el año 2024, con el objetivo de abarcar su transformación y su rol dentro del sistema multilateral de comercio. La adhesión de China a la OMC marcó un punto de inflexión en el funcionamiento del comercio global, reestructurando su integración, competitividad y posicionamiento como actor económico clave. Este estudio se enfoca en métodos mixtos, combinando análisis cuantitativo y cualitativo para analizar tanto los cambios estructurales como las dinámicas de la política comercial. Para ello se recolectó datos publicados por el Banco Mundial. Se implementó indicadores comerciales mediante herramientas econométricas aplicadas para el periodo 1994 a 2024, identificando tendencias y quiebres estructurales antes y después de su ingreso a la OMC. La corriente teórica se fundamenta con la economía políticas del comercio, de igual manera como en las teorías de integración comercial y multilateralismo. Asimismo, el modelo de regresión presenta una existencia de relaciones significativas con variables como el PIB, las exportaciones, superávit comercial y la inversión extranjera directa, mostrando un crecimiento tras el ingreso de la Organización Mundial del Comercio. Los quiebres estructurales alrededor del periodo, confirman su dinámica comercial y económica de China.

Palabras Clave: análisis económico, comercio internacional, crecimiento económico, integración económica, modelo económico, política comercial

1. Introduction

China's economic and trade performance within its multilateral trading system integrates its relevance with the contemporary global economy. Since its entry into the WTO, China has undergone a profound transformation, due to a sustained growth of its exports, having a greater attraction of foreign direct investment with its integration into global value chains. This process helped to create developed economies as well as for developing countries, making China one of the important players with respect to international trade.

The People's Republic of China and its accession to the World Trade Organization underwent a transformation without barriers, becoming an influential actor in international trade. With the reforms of the late 1970s, China evolved from a planned and underperforming economy to become an export power within global value chains. This research is important because of the need to understand the role that China has played in the multilateral trading system since its accession to the WTO, a milestone that marked a new stage of economic development. As Rodríguez (2003) explains, their integration not only transformed their national economy, but also generated profound repercussions on the dynamics of international trade, on global value chains and on economic relations with other powers.

This study aims to look at China's economic performance as a partner within the multilateral trading system, examining its evolution and trade policy challenges since its accession to the WTO. That is why a quantitative approach is used, analyzing the relationship between variables such as foreign direct investment and trade surplus, with data from 1994 to 2024, using data from 1994 to 2024, identifying their behavior, but also evaluating the consistency with the results obtained.

On the other hand, this study made it possible to understand China's economic evolution during the period 1995 to 2024, providing an empirical basis for studying the process of integration into the multilateral system, including macroeconomic variables. It was evidenced as an integration that has influenced their economic performance. That is why the importance of applying econometric tools is highlighted, since they guarantee the validity and robustness of the results, helping to interpret the dynamics of China within the global economic environment.

China's entry into the World Trade Organization in 2001 marked a turning point along with international trade, encouraging integration with global markets through the reduction of tariff barriers, the attraction of foreign investment and its influence on the multilateral system (Monsalve & Ríos, 2004; Rodríguez, 2003; Romero, 2011). However, there was an economic model characterized by significant state intervention, with comparative advantages in labor costs and rapid industrialization, producing tensions with other economies, which have been evident in the trade war in the United States and in accordance with WTO rules (González, 2020; Romero, 2011; Weksler, 2006).

It is essential to assess how China's trade policy has evolved between 2001 and 2024 to understand how China's entry into the WTO transformed its exports, its bargaining power, and international competition, as well as the benefits and challenges that this process has implemented for China and for the multilateral system as a whole.

The data were adjusted and filtered in order to observe the significant relationships between the variables analyzed, which allowed an understanding of China's economic dynamics in the context of international trade. Overall, the findings demonstrate China's role within the multilateral system, as well as its contribution to global economic integration processes.

After this introduction, the state of the art is presented, followed by the methodology used, the results obtained and, finally, the respective conclusions of the study.

2. Theoretical Framework and State of the Art

2.1 Theoretical Framework

Trade policy is one of the fundamental pillars of the economic policy of States and is defined as the set of strategies, norms and instruments through which governments regulate the international flows of goods and services with the aim of promoting economic growth, protecting strategic sectors and facilitating insertion into the international economic system (Krugman et al., 2018). These strategies include tariff and non-tariff instruments, subsidies, import quotas, export promotion policies, and participation in bilateral, regional, and multilateral trade agreements (Baldwin, 2016; Sachs & Thye, 2010).

In the context of economic globalization, trade policy has evolved and has become increasingly important due to the intensification of trade, financial and productive flows

between countries. According to Rodrik (2017), states face a structural tension between trade openness, national sovereignty, and social stability, thus explaining the diversity of integration models observed globally with respect to international trade. From this point of view, trade policy is understood as a technical tool but at the same time as an instrument that links political, institutional and social decisions.

International trade is analyzed based on the classical theory of comparative advantage, formulated by Ricardo (2005), arguing that countries should specialize in the production of goods that can be produced with lower relative costs, even without having absolute advantages. This explains that economies with different levels of development also benefit from exchange by increasing overall efficiency in resource allocation. Contemporary authors such as Krugman (2018) and Dornbusch et al. (1977) have expanded this approach by incorporating technological differences and productivity between countries.

The Heckscher-Ohlin model deepened international trade by explaining patterns of exchange depending on the endowment of productive factors, such as labor, capital, and natural resources (Helpman & Krugman, 1986). Based on this model, countries can export goods based on factors that they possess in abundance and import those that require approximately scarce factors. Despite this, future studies have shown that doing this process creates unequal distributional effects, affecting wages, employment, and social integration, even more so in sectors exposed to international competition (Huang, 2016; Rodrik, 2017).

Baldwin (2016) developed the new theory of international trade at the end of the twentieth century, introducing elements such as imperfect competition, economies of scale, and product differentiation. Allowing this approach to explain intra-industrial trade and exchange between countries with similar productive organization, this phenomenon could not be adequately understood by classical theories. This theory also highlights the central role of large multinational corporations and imperfect markets in shaping global trade.

Lately, the analysis of international trade has been broadened through the global value chain approach, arguing that production is internationally fragmented and distributed among multiple countries according to their relative advantages (Krugman et al., 2018). With this perspective, international trade is not limited by the exchange of final goods, but also the flows in intermediate inputs, such as capital, technology and knowledge. This has increased

interdependence between economies and redesigned trade policy strategies of states, especially in emerging and developing economies.

From an analytical approach, the structuralist and dependency theory, developed by authors such as Prebisch (2012), consolidated trade liberalization since it can reinforce structural asymmetries between developed and developing countries. With this approach, patterns of specialization that are based on the export of raw materials have limited their diversification. Palma (2009) complemented this argument by arguing that trade liberalization can produce economic growth without having relevant improvements in income distribution or in the productive structure.

At the organizational level, the World Trade Organization (WTO), created in 1995, has as its main regulatory framework for international trade. Its purpose is to promote trade liberalization, avoiding discrimination and establishing a sustainable and sustainable environment. It aims to promote trade liberalization, ensure non-discrimination, and establish a rules-based multilateral trading system (World Trade Organization, 2023). However, several authors argue that the multilateral system is increasingly challenged by the coexistence of heterogeneous economic models, with the active use of industrial police and their covert protectionist measures (Hoekman, 2012; Steinberg, 2022).

Similarly, contemporary literature incorporated a geoeconomic approach that analyzes how states employ commercial policing as an instrument of power and competition in the international system (Huang, 2016; Scott, 2017). According to this perspective, trade is no longer an economic phenomenon but is now linked to policing and global governance. This approach is relevant in a context of fragmentation of international trade and a reconfiguration of global value chains.

Porter (2010) also applied the concept of comparative advantage of nations, highlighting the role of innovation, technological development, institutional quality, and the management of international competitiveness. It thus allows us to understand how countries can achieve dynamic advantages beyond their factors, integrating public policies, companies and markets into the production system.

From an international political economic perspective, China and its entry into the World Trade Organization can be analyzed as a crucial moment in the reconfiguration of the global trading system. The theory of liberalism incorporates emerging economies into multilateral regimes by encouraging predictability, the reduction of barriers and economic cooperation. However, in the case of China, different authors point out that this integration does not imply a convergence aimed at the principles of the free market, but rather at the consolidation of a model where the State has a central role in planning, financing, and its orientation of foreign trade (Huang, 2016; Porter, 2010; Scott, 2017).

Based on this context, the theory of the state analyzed by Nathan and Zhang (2022) was fundamental to understanding the trajectory of China's economy after its entry into the WTO. This shows that accelerated growth can occur through state intervention that is aimed at industrialization, its exports, and the selective protection of strategic sectors. China This approach argues that accelerated growth can be achieved through active state intervention aimed at industrialization, export promotion and selective protection of strategic sectors. China would have used its affiliation to the WTO to expand its access to international markets, preserving internal instruments of economic control, generating tensions with trading partners, especially with the United States and the European Union.

At the same time, the theory of comparative advantage can explain how China is transforming its position in international trade. Contrary to the classical conception, he explains that this approach observes that advantages are not static, but can be built hand in hand with industrial policies, technology transfer and accumulation of productive capacities. That is why, with the entry into the WTO, China has transitioned from being specialized in manufacturing in labor to sectors with greater added value, modifying global value chains (Dugger, 2007).

From the perspective of North-South relations, dependency theory contributes to the interpretative framework, particularly for the analysis of China-Latin American ties. The approach notes that trade intensification can lead to patterns of primary specialization and structural dependence. On the side of Latin American countries, there is an increase in trade with China, which has specialized in the export of raw materials and natural resources. With respect to imports from China, it is composed mostly of manufactured goods, which helps

to develop debates about reprimarization, deindustrialization and trade asymmetries. (Rodrik, 2017).

On the contrary, with more recent approaches, such as regionalism and South-South cooperation, they argued that the relationship with China also generates development opportunities if it goes hand in hand with appropriate domestic policies. This is why trade integration is not negative by nature, but its effects are focused on the state's capacity to diversify exports, thus attracting quality foreign direct investment and in the same way the local productive apparatus was strengthened. This is why China not only appears as a trading partner, but also as an actor in the traditional dynamics of the international system (Naughton, 2007).

Also in the environmental field, the theory of the displacement of ecological impacts (*pollution haven hypothesis*) is included, which has been used to analyze the indirect consequences of China's entry into the WTO. This approach suggests that the relocation of production processes to countries with less stringent environmental regulations can lead to increased global emissions and environmental degradation. With the expansion of China's production, which was driven by international trade, it has had significant environmental effects both domestically and internationally, which introduces an indispensable environmental dimension into the theoretical analysis of global trade (Rodríguez, 2003).

2.2 State of the Art

China's entry into the World Trade Organization in 2001 is marked by important milestones in contemporary globalization. This not only increased the economic model, but also altered the balance of world trade, hurting advanced and emerging economies alike. Unification has addressed the structural, social, socioeconomic, political and geopolitical impacts from different approaches.

Weksler (2006) argued that China's accession to the WTO reinforced the process of opening-up initiated in 1978 with Deng Xiaoping's reforms. The variables studied by this author are trade liberalization, foreign direct investment, GDP growth and export expansion. Their results show that entry into the WTO helped China to fully integrate into the global economy, generating steady growth that laid the foundation for its positioning as one of the world's leading economies. Similarly, Cheng (2018) evidences the internal effects of international

insertion. The variables examined include productive modernization, technological development, regional inequality, and income distribution.

These authors employ a quantitative approach through descriptive analysis of variables that are based on macroeconomic indicators such as GDP, exports, and regional growth, to measure the impact of China's accession to the World Trade Organization. They analyzed the evolution of the variables in the chronology of China's entry into the WTO, comparing the results between regions and productive sectors. The results show that, while WTO accession boosted industrial and technological upgrading, especially among industrialized coastal regions.

On the other hand, Romero (2011) argued that China's entry into the WTO was a long-term political strategy to strengthen its international legitimacy and thus consolidate a heterogeneous model between state capitalism and controlled openness. The methodology applied is analytical and interpretive, its design was based on policy review, official discourses with a political-instrumental analysis. Variables such as trade policy and international legitimacy are observed. From this point of view, the results indicate that trade liberalization was used as an instrument to reinforce the model of state capitalism, combining economic efficiency with political stability. This vision coincides with that of Adhikari and Yang (2002) who, from the International Monetary Fund, applied a quantitative approach methodology, since it shows how China and the WTO have a political strategy to strengthen their legitimacy and internal balance. Its study variables are social cohesion, international competition and institutional transparency. The results warn that although trade liberalization promotes economic growth, it also generates internal pressures that can affect social cohesion if they are not accompanied by adequate redistributive policies.

At the regional level, Monsalve and Ríos (2004) examined the effects of China's participation in world trade on Latin America, thus pointing out that its introduction altered exchange structures by encouraging the export of raw materials and reducing the region's industrial competitiveness. A descriptive and comparative methodology is applied, with this analyzing variable of international trade through exports and imports. The results show that China promoted a pattern of exchange based on the export of raw materials from Latin America, reducing the region's industrial competitiveness and reinforcing its role as a supplier of natural resources. Along these lines, Gao et al. (2022) argued that China's

development within the multilateral system. The methodology applied is quantitative, analyzing the comparative and analytical, together with international trade and China's participation in the international system. The variables considered include commercial diplomacy, making the results of the transformation of globalization that combines integration into world trade with state intervention.

As indicated by the World Bank (2024), China's GDP growth was reported from 1.2 billion dollars in 2001 to more than 17 billion in 2023. This growth is related to trade liberalization and the consolidation of China as the world's leading exporter. However, China's accession to the WTO also generated tensions with developed economies, especially the United States, questioning the Asian power's industrial policies and state subsidies.

From the perspective of global value chains, Luo et al. (2025) analyzed the restructuring of productive networks after Covid-19 and recent geopolitical crises, concluding that China has a dominant role thanks to its logistics and technological infrastructure. The results show that China has a dominant role in world production thanks to industrial scale and technological capacity. This is related to what Lardy (2019) stated when he said that the Chinese model demonstrates that it is possible to achieve global economic leadership without adopting the principles of the free market, evidencing an alternative model within the multilateral system.

Likewise, Steinberg (2022) indicated that the WTO's architecture, designed for altruistic economies, faces difficulties in handling the case of China, whose state intervention and industrial subsidies distort competition. The results indicate that the WTO's institutional architecture faces difficulties in regulating economies with a strong state presence, which became evident during the trade war that began in 2018. That is why Hoekman (2012) analyzed the liberalization of the service sector in which its variables considered include sectoral openness and economic growth. The results show that the controlled opening of services contributed significantly to China's economic rise.

For his part, Wang (2008) explained the combination of liberalization and protectionism that characterizes China's trade policy, which is fundamental for the analysis between 2001 and 2024. Dunford (2021) agreed that China's integration into the WTO is a structural challenge, as China's economic model moves away from the Western paradigm of free trade. The

tension that occurs was during the trade war that occurred in 2018, showing that political movements between the United States and China slow down global trade.

Luo et al. (2025) has a qualitative and quantitative approach, analyzing global value chains after Covid-19 to focus on their dominant role applied an approach with a dominant role of China in world production. Lardy (2019) used a mixed approach, combining economic data with political analysis and thus seeing how China was achieving its leadership without fully adopting the free market. In turn, Steinberg (2022) and Dunford (2021) applied a quantitative, analytical and institutional approach, focused on the formation of the WTO and the effects of the Chinese state model on global competition. Wang (2008) and Hoekman (2012) used a quantitative descriptive analysis, verifying the impact of the trade war between China and the United States on international trade.

At China's domestic level, Lardy (2019) showed that joining the WTO brought with it a sustained increase in industrial productivity, the expansion of urban employment, and an improvement in the birth rate of millions of citizens. The methodology applied is of a mixed nature, having an analytical and explanatory study, analyzing macroeconomic and sectoral data, such as GDP, productivity and Foreign Direct Investment. However, inequalities between sectors have also increased, which has prompted the Chinese government to implement common prosperity strategies. The results show significant improvements in productivity and employment, but also an increase in inequalities, which motivated policies of "common prosperity". This mixed balance is reflected in the studies of Adhikari and Yang (2002), who emphasize that trade liberalization, while promoting growth, can exacerbate social gaps if it is not accompanied by redistributive policies.

From a geoeconomic perspective, Huang (2016) and Scott (2017) argued that the Chinese experience is redefined with the balance of power within international trade, helped by bilateral and regional agreements, positioning itself as a key player in global governance. The variables these authors analyze include trade agreements, economic power, and global governance. With this, the results indicate that China's position has redefined the structure of international trade, promoting bilateral and regional agreements, weakening the traditional multilateral consensus.

Huang (2016) applied a geoeconomic quantitative approach, based on the analysis of foreign policies and strategies combining economic data with political interpretation, being able to demonstrate that China's integration into the WTO was not only an economic process, but also a profound change that united growth as a new global paradigm. Currently, this research has been expanded, analyzing China's entry into the WTO within commercial, financial, institutional, geopolitical and environmental dimensions, showing that its effects transcend trade in goods and are projected on global governance and international production chains.

Navejas (2024) studied international cooperation from an empirical-analytical approach, with variables such as international trade, FDI, South-South cooperation, and the central role of the State. Its results show that China has consolidated its global leadership by combining trade liberalization with strong political centralization, applying international cooperation as a tool that helps strengthen soft power and its legitimacy within the international system.

On the side of the global financial perspective, Liu (2024) applied variables such as stock market volatility, investment flows, cross-border financial policies, and supply chain realignments. This research has a mixed approach, demonstrating that China's accession to the WTO helped increase global financial interdependence, amplifying the transmission of economic shocks and reconfiguring international value chains, forcing states to adopt more adaptive macro-prudential policies.

On the institutional side, Tang (2025) applied China's participation in the WTO Dispute Settlement Mechanism in his research, analyzing variables such as the number of disputes, regulatory compliance, and conflicts with the U.S. and the European Union. The results indicate that China has used the dispute system strategically, as it counters protectionist measures, although it faces persistent challenges in sensitive sectors such as intellectual property and agriculture.

Ianchovichina (2004) was based on an economic evaluation, using quantitative simulations to analyze variables such as exports, manufacturing production, wages and employment. Therefore, its results confirm that China is the main beneficiary of its entry into the WTO, making significant gains and strengthening its manufacturing sector in terms of labor, but with unequal distributional effects between urban and rural sectors.

Now in the European context, Bellora and Jean (2016) analyzed bilateral trade variables of China and the EU, observing that China's trade policy has reduced the industrial competitiveness of countries such as Germany and France. The results show that there is an intensification of manufacturing competition driven by a Chinese model that fuses extreme openness with strong state intervention. From Latin America, Angulo et al (2023) analyzed panel data to analyze the relationship between trade with China and inclusive growth. Their results show that there is a negative relationship between exports such as imports with China and its regional inclusive growth, with no evidence of positive effects of Chinese FDI, which poses challenges for the region.

Vizcaychipi (2023) studied bilateral trade and FDI between China and Cuba, using variables such as exports, imports, and investment flows. The results show an asymmetrical trade relationship, with a sustained surplus for China and Cuban dependence on primary products, evidencing the impact of Chinese trade also on small economies.

Lopes et al. (2022), analyzed variables with a general equilibrium model, their variables were the productive structure, trade balance, and terms of trade. The results obtained indicate that Chinese growth promotes the reprimarization of Latin American exports and also their reduction in industrial activity, although with temporary balances in welfare derived from better terms of trade.

Parra (2016) analyzed the *XIII Five-Year Plan* incorporating variables of economic planning, sustainability, external openness and global leadership. The results obtained show that China uses strategic planning as an instrument to consolidate its geopolitical influence and its insertion in global governance. From a geopolitical perspective, Merino (2020) studied variables such as crisis of hegemony, strategic rivalry, and reconfiguration of the world order. Its results indicate that China's rise accelerates the transition to a multipolar system, deepening structural tensions with the United States.

Carrión (2023) examined foreign and trade policy under the governments of Xi Jinping and Donald Trump, showing that trade tensions reflect a broader strategic rivalry that redefines the international order. Biba (2025), from the role theory, showed that the EU has modified its strategic positioning vis-à-vis China, basing itself with the United States in the context of geoeconomic competition. Akbarova (2024) studied the global impact of China's entry into

the World Trade Organization on trade and supply chains, concluding that China has established itself as the dominant player in world trade since 2001.

Hernández (2001) highlighted the role of APEC as a key platform to facilitate China's entry into the WTO, using multilateral negotiation variables and trade reforms. Lu et al. (2024) by adding environmental variables such as GHG, SO₂ and NO₂ emissions, demonstrating that post-accession trade growth had significant global environmental impacts, necessitating low-carbon trade policies.

3. Methods

For the development of the research, a descriptive method was used, which allowed examining the process over time of China's foreign trade from its entry into the World Trade Organization in 2001 until 2024, for which data from the World Bank was used. However, in order to analyze the data before joining the WTO, it was also considered since 1994, the year from which information is available for the variables considered in this study.

Therefore, it was divided into three periods: 1994 to 2000, corresponding to the stage prior to China's entry into the WTO; 2001 to 2010; and 2011 to 2024, which reflect its long-term participation in the multilateral trading system. Following the study carried out by Gao et al (2022), changes and trends in variables such as exports, trade surplus, foreign direct investment, and nominal GDP growth were compared. Data collected in the amount of billions of dollars and their growth rates in percentage data.

As for the statistical method, specific variables such as the rates of change of the nominal Gross Domestic Product (GDP), exports, foreign direct investment received and trade surplus were used in order to identify growth trends, structural changes and variations in the country's economic performance.

It was possible to contrast the behavior of economic indicators in the three aforementioned moments, before China's entry into the WTO, during its process of integration into the multilateral trading system and the current period. This comparative analysis made it possible to descriptively analyze the incorporation into the WTO in its economic growth and in its positioning within international trade. The sources from which the data were obtained were the World Bank.

For data analysis, the Stata econometric software was used, through which regression models were estimated in order to evaluate the relationship between study variables. Specifically, the Ordinary Least Squares (OLS) method was applied, allowing the impact of the independent variables on the dependent variable to be identified.

In this study, the dependent variable is the logarithm of the Gross Domestic Product (GDP), while the independent variables correspond to the logarithm of the trade surplus and the logarithm of foreign direct investment (FDI), including a constant term.

The model used is as follows:

$$\log(PIB) = \beta_0 + \beta_1 \log(Superavit) + \beta_2 \log(IED) + \varepsilon$$

This model shows that $\log(\text{GDP})$ is the dependent variable, so we want to analyze economic growth. The independent variables are $\log(\text{Surplus})$, which shows the effect of foreign trade, and $\log(\text{FDI})$, representing Foreign Direct Investment. The term β_0 corresponds to the constant of the model, while ε is the error term that includes factors not considered. Being in logarithmic terms, the elasticity coefficients β_1 and β_2 are interpreted as percentage changes in GDP in the face of fluctuations in the variables used.

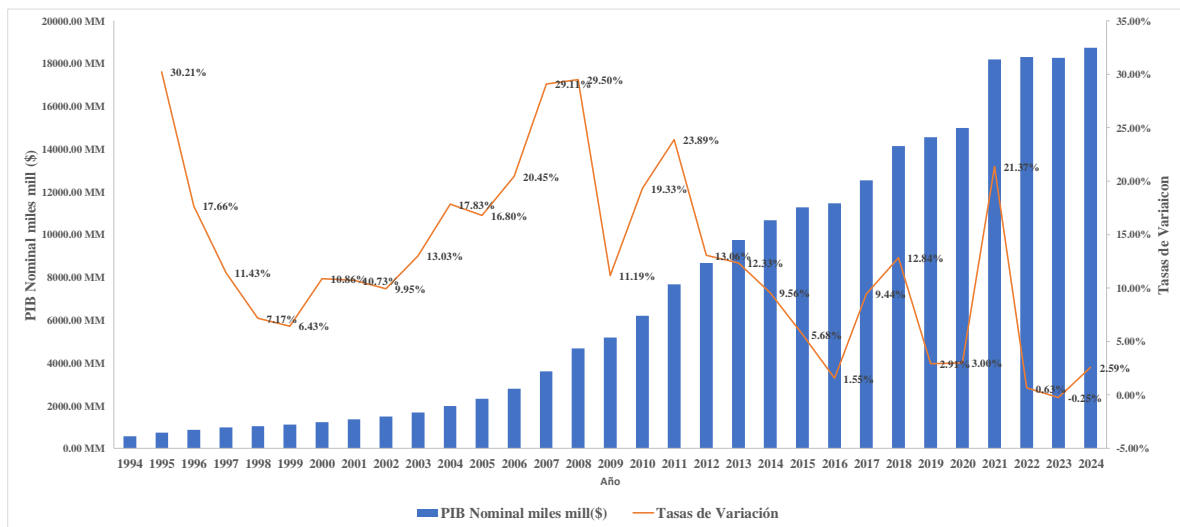
The results show that the model presents multicollinearity conditions, seeing that with the Variance Inflation Factor (VIF) they maintain low levels, indicating a correlation that guarantees the stability of the coefficients analyzed. However, with the Durbin-Watson and Breusch-Godfrey tests, there is a presence of autocorrelation with the initial model.

4. Results

4.1 Evolution of China's nominal GDP and its Rates of Change

It then examines the evolution of the main variables, comparing their behaviour before and after China's accession to the WTO. Figure 1 shows China's nominal GDP, expressed in billions of dollars, together with its annual percentage rates of change for the period from 1994 to 2024. These rates of change are calculated from year-on-year changes in GDP, using data from the World Bank (2024).

Figure 1
China's Nominal GDP and Rates of Change (1994–2024).



Source: Based on World Bank data (1994 – 2024)

In the period from 1994 to 2000, GDP grew from \$566.93 billion in 1994 to \$1.223.75 billion in 2000. The rates of change are high, with a rate of change of 30.21 per cent in 1995 and 17.66 per cent in 1996. This is based on the fact that, in the years prior to its accession to the WTO, China implemented a set of reforms aimed at transitioning to a more open and market-oriented economy. These include trade liberalization, the attraction of foreign direct investment and the creation of economic zones, which facilitated their integration into international markets. Likewise, the industrial sector was strengthened through policies that encouraged manufacturing production and exports, generating greater competitiveness and economic dynamism. Together, these factors drove sustained GDP growth, evidencing that the economic expansion was not an isolated process, but the result of structural reforms and increasing trade openness.

At the end of the 1990s, rates began to moderate, reaching between 6% and 11%, indicating a phase of stabilization of growth. On average, from 1994 to 2000, the nominal GDP growth rate was 13.96 per cent. In the period from 2001 to 2010, China joined the WTO, which shows an acceleration of economic growth, going from 1355.04 billion dollars in 2001 to 6192.56 billion dollars in 2010. Its rates are significant, such as in 2007 with 29.11% and 2008 with 29.50%. This is explained by China's growing integration into international markets, which boosted its exports, attracted greater flows of Foreign Direct Investment and strengthened its productive capacity. As a result, the country progressively established itself

as a global manufacturing center. However, in 2009 the growth rate decreased to 11.19% due to the effects of the global financial crisis in 2008, which temporarily affected the dynamism of the global economy.

In the most recent period, between 2011 and 2024, GDP continues to grow, reaching 18,743.80 billion dollars in 2024, but with a slowdown in the rates of change. For example, in 2016 with a rate of 1.55%, this is explained by the transition of the Chinese economic model, which went from relying mainly on investment and exports to a greater focus on domestic consumption and the service sector, thus reducing the relative weight of industry and modifying its growth dynamics. Subsequently, in 2021 there is a significant growth of 21.37%, associated with the economic recovery after the crisis caused by COVID-19. After that, it was registered with 0.63% in 2022, -0.25% in 2023 and 2.59% in 2024. Its total average is 12.68%.

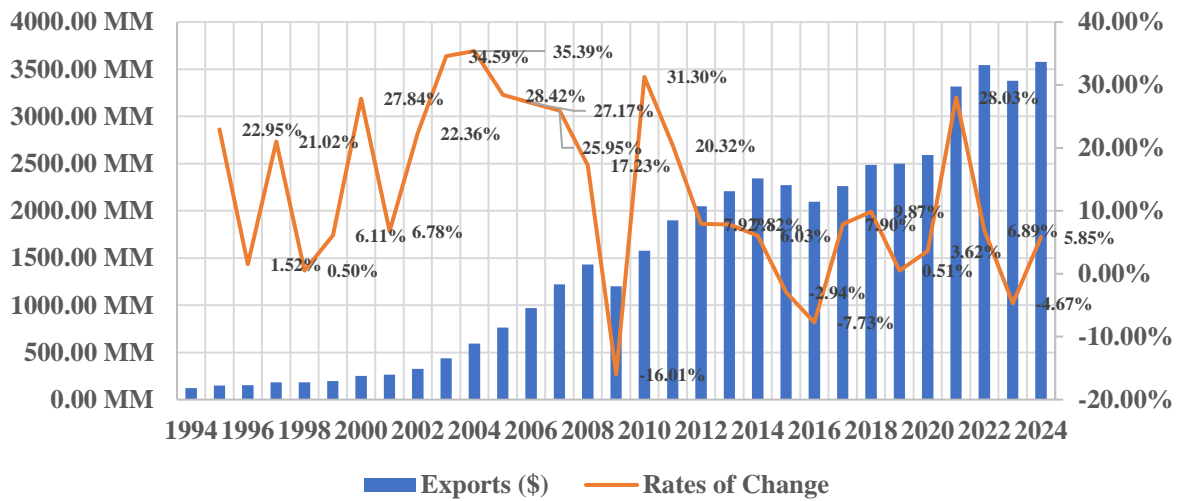
The GDP value together with the rates of change, made it possible to identify the magnitude of China's economic growth and the changes it has had over time. That is why it is possible to see the trade liberalization, integration into the world economy and international economic contexts that have influenced the evolution of China's economy.

4.2 Evolution of China's Exports with their Rates of Change

Next, the evolution of the main economic variables mentioned in the previous section is observed, this will show the behavior over time. This observation allows us to find the changes registered before and after China's entry into the WTO, identifying the variations in terms of the country's economic and trade performance. In this way, exports are examined, which allow us to understand the evolution of the Chinese economy within international trade.

Figure 2 presents the evolution of China's exports, measured in billions of dollars (USD), along with their rates of change over the period 1994 to 2024. As can be seen in the image, there are two variables, which are total exports in dollars and growth rates, calculated from the variations in exports from year to year. Data comes from the World Bank (2024).

Figure 2
China's Total Exports (billion) and Rates of Change (1994 – 2024).



Source: Based on World Bank data (1994 – 2024)

In the initial period from 1994 to 2000, exports show a gradual growth from 121.01 billion dollars in 1994 to 249.20 billion dollars in 2000. Throughout these years, moderate rates of variation can be observed, with different increases such as in 1995 with 22.95% and in 1997 with 21.02%. This is justified because, in previous years, China steadily increased its exports and its participation in international markets, evidencing greater trade openness and a strengthening of its external sector before its accession to the World Trade Organization.

Later, between 2001 and 2010, the period after China's accession to the WTO, there is an expansion considered accelerated in terms of exports, which go from 266.10 billion dollars in 2001 and in 2010 to 1577.75 billion dollars. In these years there are high rates of change, particularly in 2003 and 2007 there were significant increases, in 2003 and 2004 the growth was 35%, while in 2005 it reached 28.42% and in 2006 27.84%. consolidating it as an international manufacturing center. However, in 2009 there was a fall of -16.01%, associated with the Global Financial Crisis of 2008 on world trade. Its total average rate is 4%.

In the near period, from 2011 to 2024, it is evident that exports continue to grow, although with greater fluctuations in growth rates. For example, in 2015 with a percentage of -2.94% and in 2016 with -7.73%, these reductions are due to the slowdown in international trade. Subsequently, in 2021 there is a significant rebound with a rate of 28.03%, related to the

recovery of trade due to the 2020 pandemic crisis caused by COVID-19. By 2024, exports reach up to 3576.65 billion dollars, which shows the consolidation of China as one of the world's leading exporters.

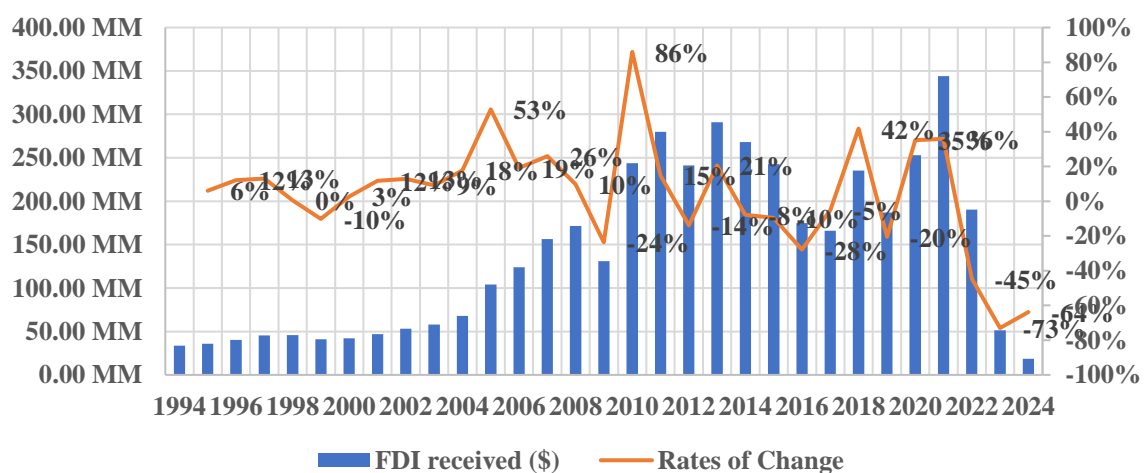
The analysis of export values, expressed in dollars, together with their rates of change, allows us to identify how foreign trade has expanded over time, as well as the peaks of acceleration, deceleration and recovery associated with changes in the global economy and in the country's trade integration.

4.3 Evolution of China's FDI with its Rates of Change

Now as a next point, China's Foreign Direct Investment is analyzed, the changes that have been registered before and after joining the WTO are observed, seeing variations with the economic performance and trade of the country.

Figure 3 shows the evolution of Foreign Direct Investment received by China, expressed in billions of dollars, together with its annual rates of change, during the period from 1994 to 2024. The figure is constructed from two variables, in this case the total value of FDI received in dollars and the year-on-year growth rates, these data come from the World Bank (2024), and are calculated from the variations between consecutive years.

Figure 3
China's Foreign Direct Investment and Rates of Change (1994 -2024)



Source: Based on World Bank data (1994 – 2024)

In the period from 1994 to 2000, FDI began showed moderate but stable levels, transforming from 33.79 billion dollars in 1994 to 42.10 billion dollars in 2000 together with the rates of change with moderate fluctuations in 1996 of 12% and in 1997 of 13%. This is justified by the implementation of policies aimed at liberalizing the economy and facilitating the entry of foreign investment, which allowed China to progressively integrate into international markets even before its entry into the WTO. The total average is 25%

For the year 2001 to 2010, a much faster growth of Foreign Direct Investment (FDI) was observed, going from 47.05 billion dollars in 2001 to 243.70 billion dollars in 2010. In this period, there were increases, such as 53% in 2005, due to the increase in confidence of international investors after China's integration into the global trading system. Despite this, in 2009 there was a fall of -24%. This is explained by the impact of the 2008 Global Financial Crisis, which led to a contraction in international trade, a decrease in external demand and a reduction in investment flows, thus affecting economic growth, which temporarily reduced investment flows worldwide.

In the most recent period from 2011 to 2024, FDI shows a more variable behavior. The important increases that exist are in 2018 with 42% and in 2021 with 36%, a year in which investment reached approximately 344.07 billion dollars, one of the highest values of the period analyzed. This is explained by the progressive recovery of the global economy from the COVID-19 pandemic in 2020, which revived international demand, trade and investment flows, thus boosting growth. However, in recent years, a significant decrease in the rates of variation has been observed, such as in 2022 with -45%, in 2023 with -73% and in 2024 with -64%, caused by the slowdown in international investment flows to the country.

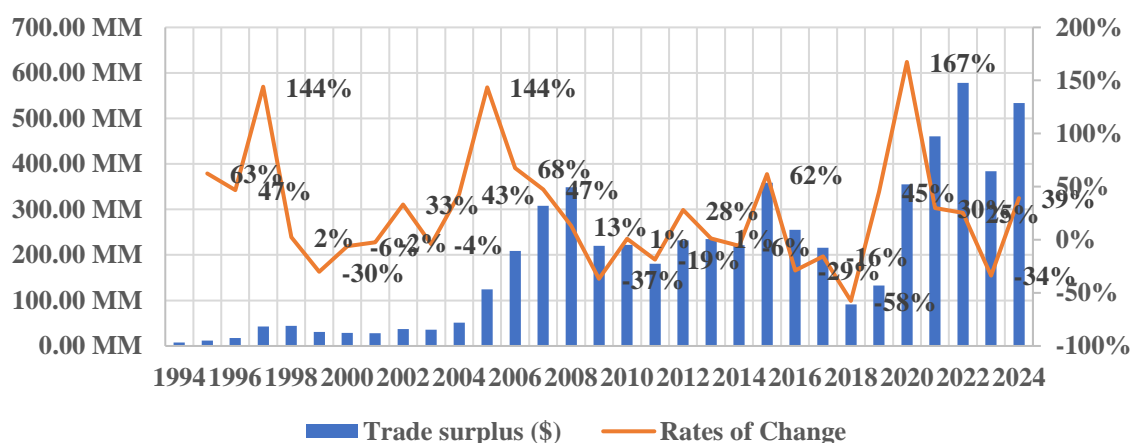
The analysis of Foreign Direct Investment in billions of dollars and its rates of change allows us to understand the degree of attraction of foreign capital to the Chinese economy and how it has happened over time. Observing this variable allows us to identify how China's trade liberalization and integration into the international economic system have influenced the arrival of productive investments, which were a key factor for industrial growth, technological development and the expansion of the country's foreign trade.

4.4 Evolution of the Trade Surplus and its Rates of Change

Finally, with the variable of the surplus, calculated in billions of dollars and its annual rates of change. The observation allows us to evidence its behavior over time, identifying changes before and after China's entry into the WTO. In this way, the analysis of the trade surplus allows us to understand how the difference between the country's exports and imports has evolved and its impact on the performance of Chinese foreign trade.

Figure 4 presents the evolution of China's trade surplus, measured in billions of dollars, during the period 1994 to 2024. The figure is constructed from two variables, the trade surplus in dollars and the year-on-year rates of change, calculated from the changes of each year. The data comes from the World Bank (2024).

Figure 4
China's Trade Surplus (billion) and Rates of Change (1994 – 2024)



Source: Based on World Bank data (1994 – 2024)

In the years 1994 to 2000, the trade surplus remained at relatively low levels, although with progressive growth. For example, it went from 7.36 billion dollars in 1994 to values close to 28.79 billion dollars in the year 2000. During these years, there were significant fluctuations in the rates of change, with a significant increase in 1997, which is explained by the sustained growth of exports and the improvement in productive capacity, which shows greater competitiveness and insertion of China in international markets before its accession to the World Trade Organization.

Subsequently, between 2001 and 2010, the trade surplus experienced accelerated growth, going from 28.09 billion dollars in 2001 to 222.40 billion dollars in 2010. This is explained

by the fact that the increase in exports reflects China's greater participation in global markets, which is evidence of its growing integration into international trade and the strengthening of its external sector. In 2005, there was a significant increase in the surplus, reaching more than 124 billion dollars, together with a rate of change of 144%, which shows the consolidation of the country as one of the world exporters.

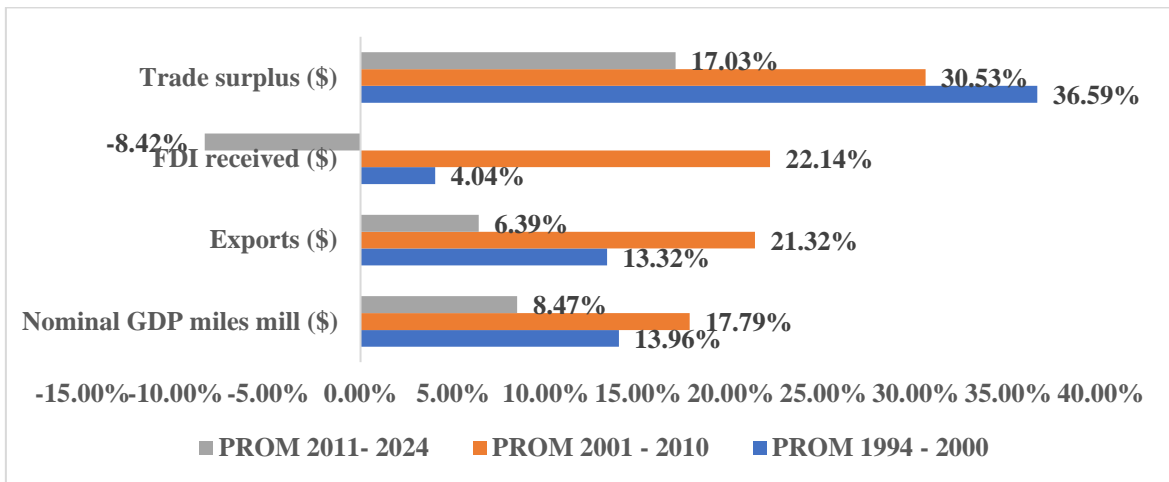
In the most recent period from 2011 to 2024, the surplus continues to increase, even with fluctuations in its rates of change. During these years, increases are observed, such as in 2020, when the surplus exceeds 355.15 billion dollars, this increase occurs due to the international demand for manufactured products. The maximum value of the period is recorded in 2022, with 577.85 billion dollars, reflecting the country's strong export position. In 2023, negative variations are observed, caused by changes in the dynamics of international trade and global demand.

The analysis of the trade surplus in billions of dollars and its rates of change allows us to understand China's export capacity vis-à-vis its imports over time. Observing this variable is relevant because it allows us to identify the degree to which the growth of foreign trade has contributed to the strengthening of the Chinese economy and its positioning as one of the main actors in the international economy.

4.5 Averages by Period (1994 – 2024)

Next, it is important to highlight the average for each decade and one with 14 years, this is explained from the perspective of their rates of variation. Figure 5 shows a comparative analysis of the average rates of change of four variables already mentioned above, such as nominal GDP, exports, foreign direct investment and trade surplus, for three periods, from 1994 to 2000, from 2001 to 2010 and from 2010 to 2024. With this analysis, it is possible to contemplate how the dynamism of each variable has changed before, during and after China's entry into the World Trade Organization.

Figure 5
Average Growth Rates by Period (1994 -2024)



Source: Based on World Bank data (1994 – 2024)

The nominal GDP, it is observed that the highest average growth is recorded in the period from 2001 to 2010 with a rate of variation of 17.79%, reflecting the positive impact of trade liberalization after entry into the WTO. In 1994 to 2000, the variation was 13.96%, while in 2011 to 2024, it decreases to 8.47%, this shows a slowdown in economic growth in the most recent years.

As a result, exports can be observed, the greatest change occurs in the period from 2001 to 2010 with a variation rate of 21.32%, in 1994 to 2000 with 13.32% and in 2011 to 2024 with 6.39%. This shows that the expansion of foreign trade was most intense in the first years after China's integration into international trade. The recent stage has seen moderate growth, which shows that its highest peak was in the period from 2001 to 2010, in the rise of China within the World Trade Organization.

With respect to foreign direct investment, it has a more volatile behavior, since there has been a change in the three different periods. In the period from 1994 to 2000 with a growth rate of 4.04% before the WTO, in the period from 2001 to 2010 with a variation of 22.14%, and in the last period from 2011 to 2024 with a variation rate of -8.42%.

As for the trade surplus, there is an unusual behavior, since its average growth is recorded in the most current period, that is, from 2011 to 2024 with a rate of 17.03%, followed by 2001 to 2010 with a rate of 30.53% and 1994 to 2000 with a rate of 36.59%, the high values can be seen that there are punctual increases in those periods. This shows that, despite the

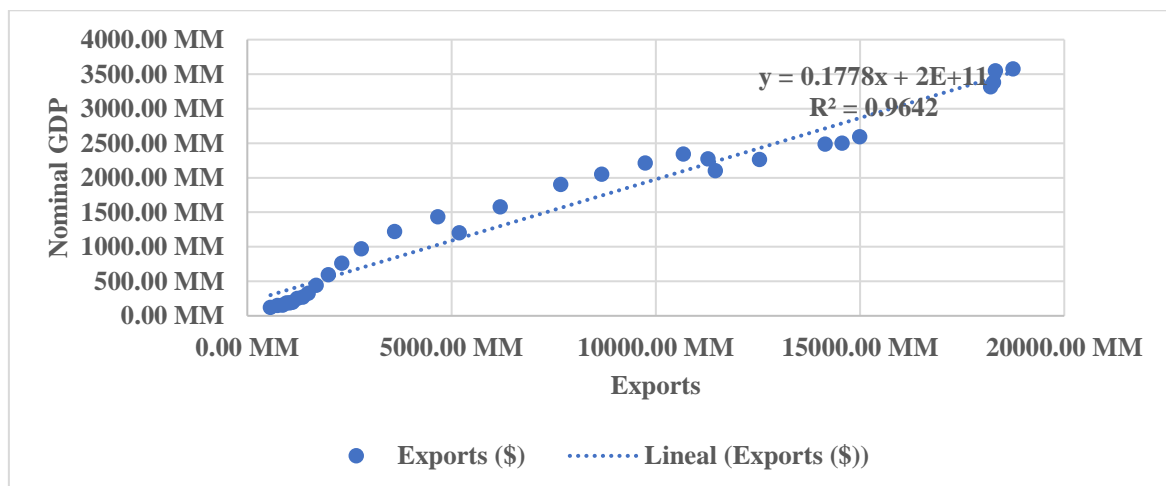
slowdown in the other variables, China has maintained a strong commercial position in terms of the global outlook.

This analysis shows that the period from 2001 to 2010 was the greatest period of economic and commercial activity, driven by China's accession to the global economy. That is why it can be observed that in the current period from 2011 to 2024 there is a slowdown in the growth of GDP, exports and FDI, although with a trade surplus that is still relevant. This makes it easier to understand the structural changes in the Chinese economy over time and their impact of China's entry into the World Trade Organization.

4.6 Export Scatter Chart with GDP Perspective

The scatter plot will be seen from the perspective of nominal GDP, compared with three variables, exports, foreign direct investment and finally the trade surplus. Figure 6 shows a scatterplot between exports and nominal GDP, this to analyze the relationship between the two variables in the Chinese economy. The data is expressed in billions of dollars.

Figure 6
Scatter Plot of China's Exports to Nominal GDP



Source: Based on World Bank data (1994 – 2024)

The trend line has a positive slope, which shows a direct relationship between nominal GDP and exports. In this sense, the growth of exports is accompanied by an increase in GDP, reflecting a joint and proportional behavior between both variables.

Likewise, the determination coefficient shows a very strong correlation between nominal GDP and exports. This is why 96.42% of the variation in nominal GDP can be explained by the behavior of exports. Given that this value is greater than 0.5, the model is considered to exhibit an appropriate fit and a strong positive relationship, confirming that exports are a key factor in economic growth.

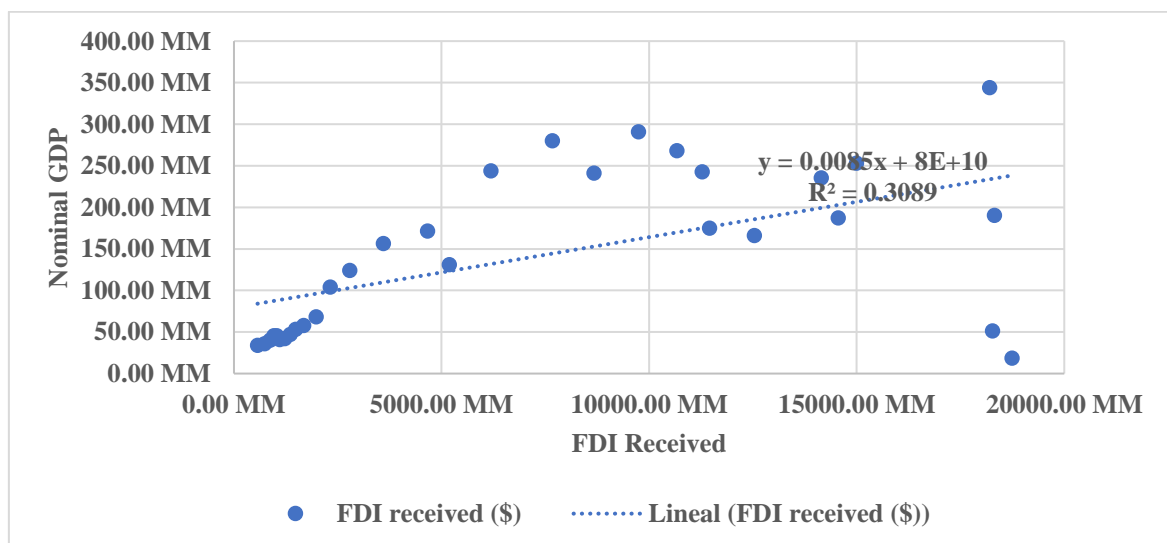
This is based on the fact that, throughout the period analyzed, including the years prior to joining the WTO, there has been sustained growth in exports accompanied by an increase in GDP. This dynamic shows that the export sector has contributed to expanding production, generating employment and attracting foreign exchange. The trend is also intensifying after accession to the WTO, reinforcing the idea that China's economic performance has been closely linked to its insertion in international trade.

4.7 FDI Scatter Plot with GDP Perspective

The scatterplot continues the analysis of nominal GDP, now examining its relationship with Foreign Direct Investment, in order to identify how external capital flows and how it has influenced China's economic growth and how this variable explains its behavior over time. Figure 7 presents a relationship between FDI received and nominal GDP, both variables expressed in billions of dollars.

Figure 7

Scatter Plot of China's Foreign Direct Investment with Respect to Nominal GDP



Source: Based on World Bank data (1994 – 2024)

A positive relationship is observed, since the slope of the trend line indicates that, in general terms, the increase in Foreign Direct Investment is accompanied by an increase in GDP. However, it should be noted that the relationship is not as strong as in exports.

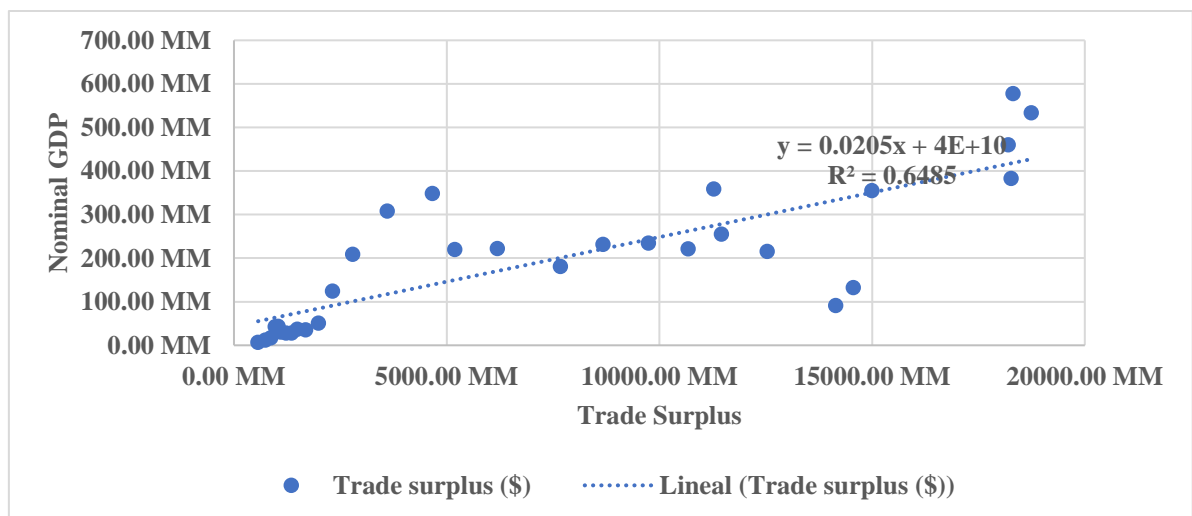
The coefficient of determination is 30.89% of the variation in GDP comprised by FDI, where the value is less than 0.5, it is considered a weak or moderate positive relationship, this implies that FDI is not a highly determining factor of economic growth.

In addition, the dispersion of the points in the figure shows that, at high levels of FDI, there are not necessarily proportional increases in GDP; there are even outliers in which GDP is low despite high levels of investment. This is why, although FDI brings capital, technology and knowledge, its effect on growth is not automatic or uniform. Therefore, this analysis shows that Foreign Investment is important, but complementary within a broader set of variables that drive China's growth.

4.8 Surplus Scatter Diagram with GDP Perspective

Completing the analysis of nominal GDP now related to the trade surplus, in order to assess whether the positive balance in the trade balance has been a relevant factor in China's economic growth. Figure 8 presents a scatterplot showing between trade surplus and nominal GDP, both variables expressed in billions of dollars, using data from the World Bank (2024).

Figure 8
Scatter Plot of China's Trade Surplus



Source: Based on World Bank data (1994 – 2024)

A positive relationship can be seen in the figure, as it can be evidenced by the slope of the trend line, which suggests that increases in the trade surplus tend to be associated with increases in GDP. However, this relationship is not particularly strong.

This is confirmed by a coefficient of determination indicating a small proportion of the change in GDP explained by the trade surplus. As it is close to 0.5, it is interpreted as a weak relationship, i.e. the surplus does not have a significant capacity to explain economic growth on its own.

In addition, the dispersion of the points reflects that there are years in which the trade surplus grows without GDP growing by the same magnitude, and vice versa. This shows that there is no clear or consistent pattern between the two variables.

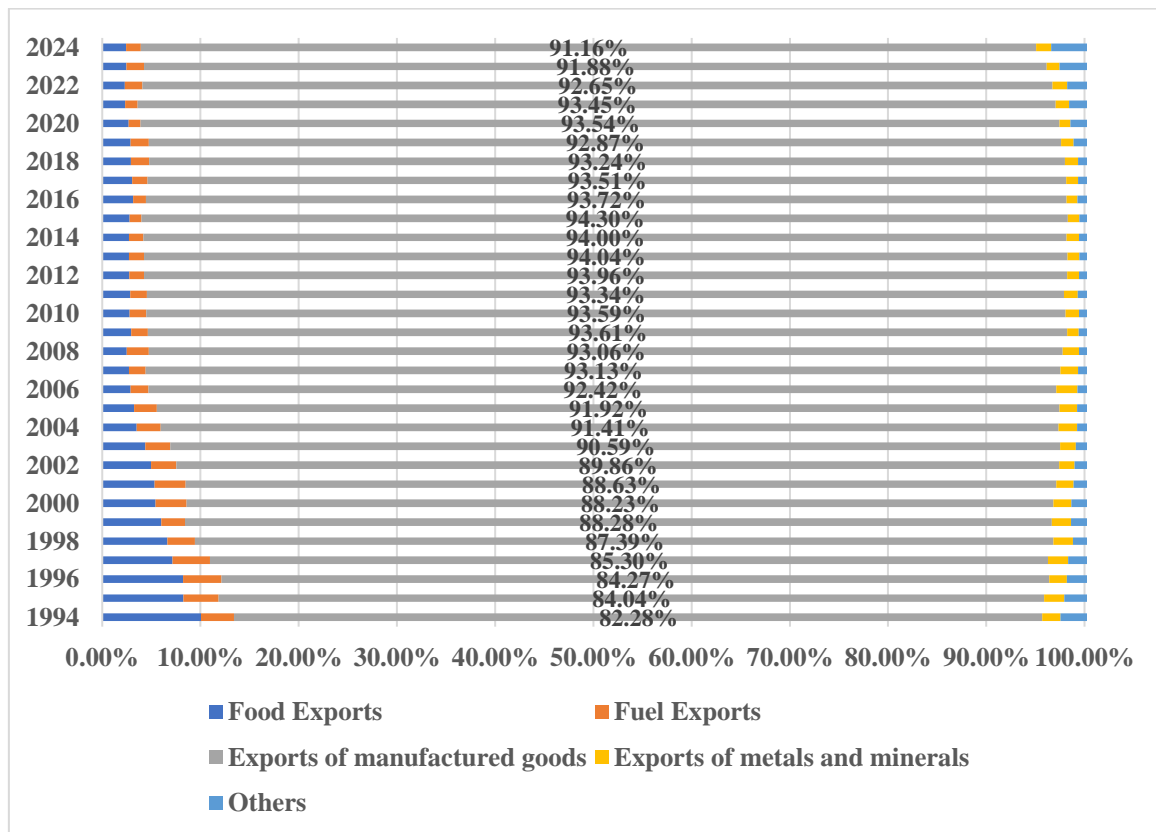
From an economic perspective, although the trade surplus implies higher exports than imports and a net inflow of foreign exchange, GDP growth depends on multiple additional factors, such as domestic consumption, investment, and economic policies. Therefore, this analysis allows us to conclude that the trade surplus, although a relevant indicator of external performance, is not a direct determinant of China's economic growth, but rather a

4.9 China's Exports by Different Sectors

Figure 9 shows percentage values of China's exports by product type from 1994 to 2024, analyzing the evolution of the country's export structure over time.

Figure 9

China's Exports by Different Sectors



Source: Based on World Bank data (1994 – 2024)

It is possible to observe the exports of manufactured products that dominate throughout the period, analyzing that they change between 82% and 94% of the total, that is, compared to all sectors of the economy. In addition, there is evidence of a growing trend in the 1990s to reach up to 90% in recent years, confirming the consolidation of China as a strong and manufacturing-oriented economy.

On the other hand, food exports have a downward trend, having low levels in the nineties of up to 10% and decreasing up to 2% in recent years. It reflects a loss in the importance of primary products on the export side.

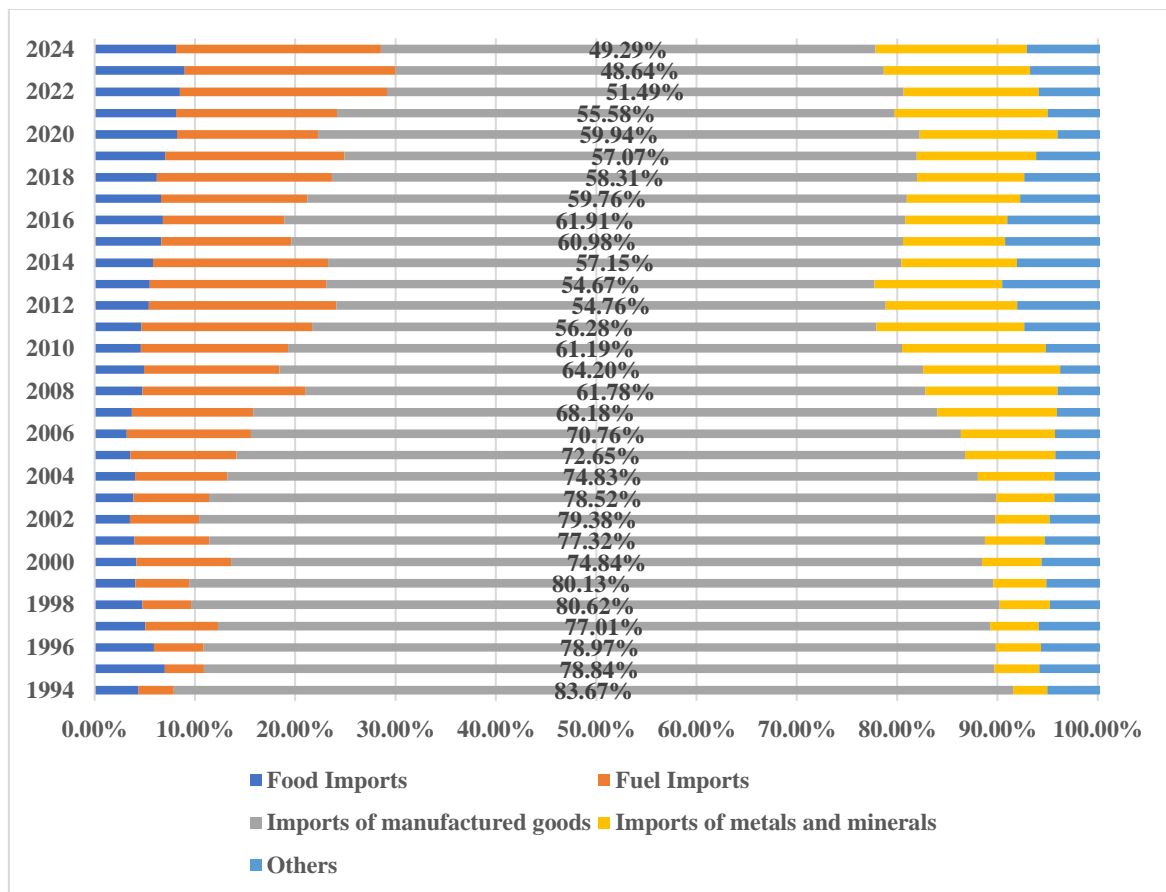
However, in fuel exports, they have a reduction that has been progressing from 3% to 1% in recent years, indicating a lower dependence on this type of product. Exports of metals and minerals also have a low but stable share, below 2% over time. Finally, with respect to other products there is a constant reduction, without significant changes as with the other variables.

The figure thus shows a structural transformation of the Chinese economy, having a strong specialization of manufacturing in the nineties. This behavior helps with China's industrialization and integration following accession to the World Trade Organization, representing China as one of the world's leading exporting powers.

4.10 Imports by Different Sectors of China

Figure 10 presents percentage values of imports from China from 1994 to 2024, which made it possible to analyze the evolution of the country's external demand over time. The data comes from the World Bank.

Figure 10
Imports of Sectors from China



Source: Based on World Bank data (1994 – 2024)

It is observed that imports of manufactured products are the predominant ones throughout the period, with a downward trend. In the 1990s, it can be accounted for around 80%, while in recent years, levels decreased to 40%, indicating a relative reduction with manufactured goods, due to the strengthening of China's domestic production.

On the contrary, with fuel imports there is an upward trend, from 10% in the 1990s to values of 20% in recent years. Reflecting an energy demand associated with the country's economic growth and industry. At the same time with food imports, they had low but stable levels, almost below 5%, so it is suggested that China does not rely significantly on imports.

As for imports of metals and minerals, they increased over time, the most significant in the 2000s, having a share of close to 15% in certain years. Referring to the strong demand for inputs from industry and construction.

The category of other products has a growing share, which shows a greater diversification with respect to imports.

Overall, it is evident that the transformation in China's imports reduces the share of manufactures and increases in fuels and minerals. This helps to make the process of industrialization and integration consistent with international trade after accession to the World Trade Organization, stabilizing itself as an economy that imports resources that sustain domestic productivity.

4.11 Analyzed GDP Regression Model

The regression model will be analyzed by comparing GDP with Foreign Direct Investment and the trade surplus. The period of time analyzed is from 1994 to 2024, this being an annual time, which helped to analyze the evolution over time, to find temporal dynamics of economic variables as structural tests.

In relation to the econometric analysis, we worked with the logarithms of the variables of GDP, foreign direct investment and trade surplus. The use of logarithms allows you to reduce the dispersion of data. A graph of the variables in logarithms will also be presented, observing the trend, behavior and possible structural changes over time.

In Table 1, you can see the number of observations, which were 31, which shows that the model is statistically significant with respect to the logarithm of GDP with the logarithms of Foreign Direct Investment and the logarithms of the trade surplus. As for the coefficient of

determination, it indicates that 80.68% of the variation in GDP is explained by the model, which shows a better fit compared to the model estimated in levels.

Table 1
Regression of GDP logarithms with FDI and trade surplus

logpib	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Number of obs	31	
						F(2, 28)	145.75	
logied	0.217	0.201	1.08	0.29	-0.195	0.630	Prob > F	0
logsuperavit	0.752	0.129	5.81	0.000	0.487	1.018	R-squared	0.8068
_cons	1.910	1.066	1.79	0.084	-0.274	4.096	Adj R-squared	0.22938
							Root MSE	31

As for the coefficients, they will be interpreted as elasticities because the model is expressed in logarithms. That is why it is evident that foreign direct investment has a non-significant coefficient, which implies that, although there is an increase of 1% in FDI, this is associated with an approximate increase of 0.22% in GDP, this effect is not statistically relevant. On the contrary, the trade surplus shows a significant coefficient, which shows a 1% increase in the surplus with a 0.75% growth in GDP. In terms of elasticity, GDP is more sensitive to changes in the trade surplus than to FDI.

Subsequently, to validate the model, a test of the model with respect to multicollinearity was used. In Annex 2 the values of the FIV (Variance Inflation Factor) are observed, which are low, which indicates that there are no problems of multicollinearity between the variables analyzed. However, when checking with the Breusch-Godfrey tests as seen in Appendix 2. The results show a statistic, which leads to reject a null hypothesis of autocorrelation, evidencing the existence of autocorrelation of the model. As a result, it was necessary to correct the model, already modified to support the efficient and consistent estimates, which are presented above.

Next, it will be analyzed if there are strong changes in the behavior of the variables; for this purpose, the structural break that exists in Table 2 is estimated, it assesses whether the relationship between GDP, foreign direct investment and trade surplus remains constant over time.

Table 2
Structural Breakdown in the Logarithm Model

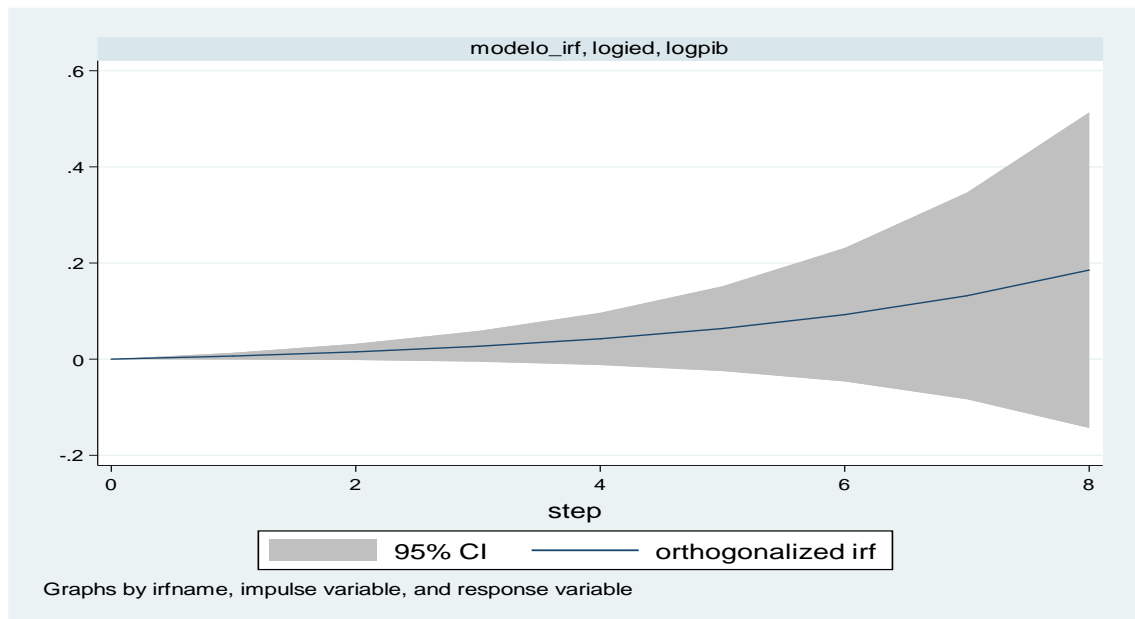
estat sbsingle		
Test for a structural break: Unknown break date		
Number of obs	=31	
Full sample:	1994 - 2024	
Trimmed sample:	1999 - 2020	
Estimated break date:	2014	
Ho:	No structural break	
Test	Statistic	p-value
swald	191.6179	0
Exogenous variables:	logied logsuperavit	
Coefficients included in test:	logied logsuperavit _cons	

The model has 31 observations for the period from 1994 to 2024, but having a possible breaking point within the interval from 1999 to 2020, so the test identifies a break in 2014, with a statistic that shows a relationship between GDP with FDI and trade surplus with a change from 2014. In other words, the way in which foreign direct investment and the trade surplus affect GDP is different before and after 2014. The model with respect to logarithms shows that the effect of the trade surplus on GDP differs before and after 2014, evidencing a structural change in that year and suggesting that economic behavior has not been homogeneous over time. However, it is important to note that no structural break is identified in 2001 after China's entry into the WTO, which indicates that this event did not generate a sudden change in the relationship analyzed.

4.12 Impulse Response of Logarithms

The impulse-response model of Foreign Direct Investment with respect to GDP is shown below. To do this, figures are added that help identify and analyze the impulse-response function, as shown in Figure 11.

Figure 11
Boost Response with FDI to GDP

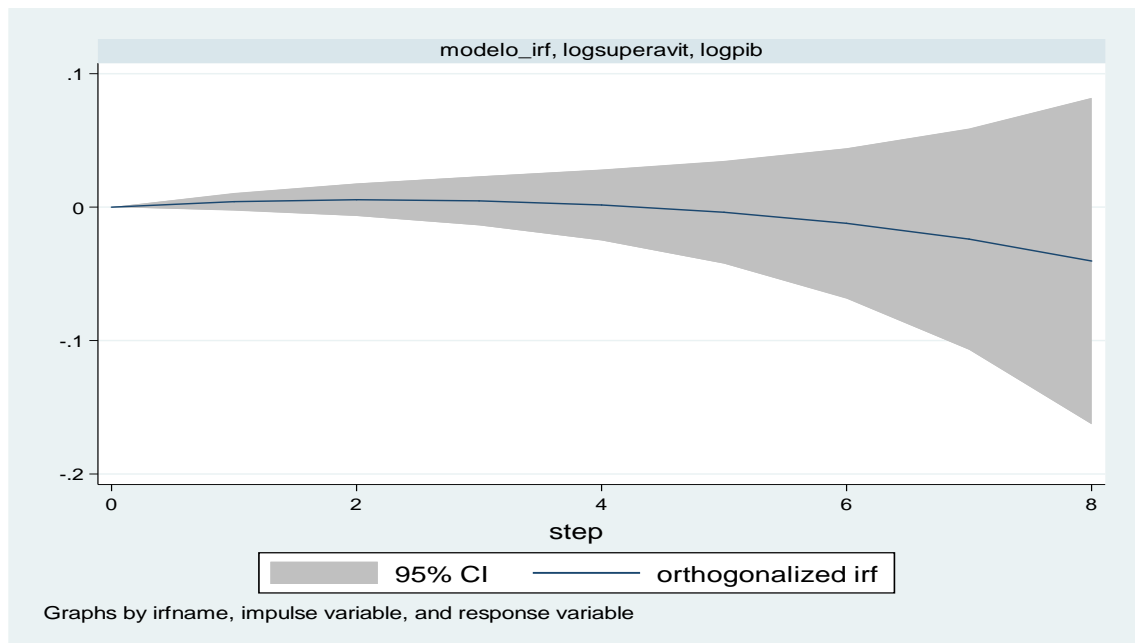


Source: Based on Stata econometric software (1994 – 2024)

It is observed that the effect starts near zero in the short term, but as the periods go by, the impact is positive and dominant, towards the last periods, the effect shows that FDI generates a positive effect on GDP, and this gradually increases over time. Although FDI appears to have a positive impact in the long term, its influence cannot be said with certainty.

Figure 12 shows the GDP before the trade surplus over time, it is observed that the initial effect, like the previous figure, is close to zero, that in the first periods, the impact is slightly negative or very low, as time goes by, the effect is variable and uncertain.

Figure 12
Impulse Response with Trade Surplus over GDP



Source: Based on Stata econometric software (1994 – 2024)

With this, it can be seen that the trade surplus does not generate a clearly positive effect on GDP in the short term. The interval includes zero in all periods and that this also becomes wider over time, indicating that it is not statistically significant.

Although the regression model was significant, in the impulse-response function an unstable behavior can be evidenced, seeing that the surplus is significant in regression, its dynamic effect is not robust in IRF.

5. Discussion

With this, the estimated models can be confirmed. In the tiered model, the trade surplus thus shows a positive and significant coefficient, while FDI is not significant. According to the R² of 0.6811 indicates that there is considerable capacity. In the logarithm model, the improvement adjustment or R² with 80.68%, which shows a better relationship between the variables, maintaining the significance of the trade surplus and the non-significance of FDI.

This is also in line with studies such as that of Gao et al. (2022), who demonstrated trade integration, generating significant impacts on global economic growth.

Ianchovichina (2004) also argues that China's entry into the WTO led to structural changes in trade flows, affecting the growth of economies, contextualizing the results obtained in relation to the importance of trade as an explanatory variable. The lack of significance of FDI can be interpreted with the approach of Rodrik (2017), who mentions that the effects of foreign investment depend on internal conditions that allow its adequate absorption.

Finally, structural breakdown tests identify changes in 2014 and 2016, so the relationship between variables is not stable over time. These breakdowns coincide with periods of transformation in the global economy, China's slowdown in growth, and changes in international trade. From a structural perspective, as Prebish (2012) argues, it shows that the dependence in economic growth is on the external sector, with fluctuations with direct effects on the economy.

Taken together, the evidence helps us conclude that the trade surplus is a strong determinant of economic growth, while foreign direct investment is not of notable importance. In addition, rates of change and structural breakdowns show dynamic relationships subject to changes in the global economic context, highlighting the importance of an analysis that considers both evolution and external factors.

6. Conclusions

The relationship between economic growth and the variables of the external sector, specifically Foreign Direct Investment (FDI) and the trade surplus, for the period 1994 – 2024. Based on the evidence, it is concluded that the behavior of economic growth does not depend uniformly on these variables, but that there are significant differences both in their stability and in their impact over time. Analysing the economic performance of the People's Republic of China and the evolution of its trade policy, since its accession to the WTO. The results obtained show that the integration of China has had significant effects on both economic growth and international trade.

China's economic performance as a partner in the multilateral system has been dynamic, evidencing sustained growth and participation in global trade flows. They also show that foreign trade is reflected in the trade surplus as a key determinant of economic growth, which affirms an important presence as an engine of development.

However, these dynamic faces important challenges, such as trade tensions and competitiveness in the global context. That is why the results reflect that, although trade is a key factor, its impact is not entirely stable, as evidenced in the structural breakdowns analyzed in 2014 and 2016.

Structural changes show that the relationship between economic growth and the external sector is not constant, but responds to transformations in the global context. It is also argued that, with China within the multilateral system, it generated changes in the dynamics of international trade. Affecting not only developed economies but also development.

It is concluded that foreign direct investment does not have a significant impact with respect to the period analyzed, which suggests that its benefits depend on internal factors and the absorption capacity of the economy. In terms of contribution, this allows us to comprehensively understand the relationship between trade, investment and economic growth in the context of China's integration into the multilateral system, seeing the importance of both the structural dimension and the temporal dynamics.

Finally, it is recommended to extend the analysis by incorporating longer periods, allowing the identification of new structural breaks. In addition, it would be important to add additional variables, such as institutional, technological or geopolitical indicators, having a greater depth in the explanation of economic growth. This would help if there are new existing structural changes with more recent periods, considering events such as economic crises, changes in supply chains and new visions of international trade.

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8. Appendices

Appendix 1

Data on Variables to Be Analyzed

PIB Nominal miles mill(\$)	log	Exports (\$)	log	FDI received (\$)	log	Trade surplus (\$)	log
566.93 MM	11.75	121.01 MM	11.08	33.79 MM	10.53	7.36 MM	9.87
738.19 MM	11.87	148.78 MM	11.17	35.85 MM	10.55	11.96 MM	10.08
868.52 MM	11.94	151.05 MM	11.18	40.18 MM	10.60	17.55 MM	10.24
967.75 MM	11.99	182.79 MM	11.26	45.44 MM	10.66	42.82 MM	10.63
1037.13 MM	12.02	183.71 MM	11.26	45.64 MM	10.66	43.84 MM	10.64
1103.84 MM	12.04	194.93 MM	11.29	41.01 MM	10.61	30.64 MM	10.49
1223.75 MM	12.09	249.20 MM	11.40	42.10 MM	10.62	28.79 MM	10.46
1355.04 MM	12.13	266.10 MM	11.43	47.05 MM	10.67	28.09 MM	10.45
1489.82 MM	12.17	325.60 MM	11.51	53.07 MM	10.72	37.38 MM	10.57
1683.90 MM	12.23	438.23 MM	11.64	57.90 MM	10.76	35.82 MM	10.55
1984.20 MM	12.30	593.33 MM	11.77	68.12 MM	10.83	51.17 MM	10.71
2317.55 MM	12.37	761.95 MM	11.88	104.11 MM	11.02	124.63 MM	11.10
2791.50 MM	12.45	968.98 MM	11.99	124.08 MM	11.09	208.92 MM	11.32
3604.06 MM	12.56	1220.46 MM	12.09	156.25 MM	11.19	308.04 MM	11.49
4667.35 MM	12.67	1430.69 MM	12.16	171.53 MM	11.23	348.83 MM	11.54
5189.58 MM	12.72	1201.61 MM	12.08	131.06 MM	11.12	220.13 MM	11.34
6192.56 MM	12.79	1577.75 MM	12.20	243.70 MM	11.39	222.40 MM	11.35
7671.76 MM	12.88	1898.38 MM	12.28	280.07 MM	11.45	180.90 MM	11.26
8673.66 MM	12.94	2048.71 MM	12.31	241.21 MM	11.38	231.86 MM	11.37
9743.12 MM	12.99	2209.01 MM	12.34	290.93 MM	11.46	234.87 MM	11.37
10674.53 MM	13.03	2342.29 MM	12.37	268.10 MM	11.43	221.55 MM	11.35
11280.81 MM	13.05	2273.47 MM	12.36	242.49 MM	11.38	358.84 MM	11.55
11456.02 MM	13.06	2097.63 MM	12.32	174.75 MM	11.24	255.48 MM	11.41
12537.56 MM	13.10	2263.35 MM	12.35	166.08 MM	11.22	215.70 MM	11.33
14147.77 MM	13.15	2486.70 MM	12.40	235.37 MM	11.37	91.49 MM	10.96
14560.17 MM	13.16	2499.46 MM	12.40	187.17 MM	11.27	132.79 MM	11.12
14996.41 MM	13.18	2589.95 MM	12.41	253.10 MM	11.40	355.15 MM	11.55
18201.70 MM	13.26	3316.02 MM	12.52	344.07 MM	11.54	460.83 MM	11.66
18316.77 MM	13.26	3544.43 MM	12.55	190.20 MM	11.28	577.85 MM	11.76
18270.36 MM	13.26	3379.04 MM	12.53	51.34 MM	10.71	383.63 MM	11.58
18743.80 MM	13.27	3576.65 MM	12.55	18.56 MM	10.27	533.71 MM	11.73

Appendix 2

Multicollinearity Test

Variable	VIF	1/VIF
logied	1.78	0.563087
logsuperavit	1.78	0.563087
Mean VIF	1.78	

Appendix 3

Autocorrelation Test

Breusch- Godfrey	LM	test for autocorrelation	
lags(p)		chi2 df	Prob > chi2
	1	19.113 1	0
H0: no serial correlation			