Master Thesis

M.A. International Management & Finance (Double Degree)

Economic Vulnerabilities and Trade Dependencies: An Analysis of Key Industries in Mexico-USA Bilateral Trade

Prof 1: Ludger Birkendorf

Prof 2: Martin Dutto

Hochschule Kaiserslautern University of applied sciences /Universidad Nacional del Litoral

Table of Contents

List of Figures

Student´s Declaration

I hereby declare that we have prepared this Master Thesis.

„ *Economic Vulnerabilities and Trade Dependencies: An Analysis of Key Industries in Mexico-USA Bilateral Trade* “

independently and without any outside help. We have only used the sources and aids specified in the bibliography.

In addition, we assure that we have not submitted or will not submit this or any related work as an examination paper in other subjects.

Berlin, 15.01.2025 Eduardo Hernandez Urbano

List of Abbreviations

BOP	Balance of Payments
COVID19	Coronavirus Disease of 2019
CPTPP	Progressive Agreement for Trans-Pacific Partnership
DT	Downtown
EV	Electric Vehicle
FDI	Foreign Direct Investment
FRED	Federal Reserve Economic Data
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GM	Genetically Modified
GVCs	Global Value Chains
IIT	Intra-Industry Trade
IMF	International Monetary Fund
IMMEX	Manufacturing, Maquila and Export Service Industry
MEUFTA	Mexico-European Union Free Trade Agreement
MNC	Multinational Corporations
MXN	Mexican peso
NAFTA	North American Free Trade Agreement
OECD	The Organization for Economic Cooperation and Development
PEMEX	Mexican Petroleum
PPPs	Public-Private Partnerships
R&D	Research and Development
SPS	Stringent Sanitary and Phytosanitary
US	The United States
USA	The United States of America
USD	The United States Dollar
USMCA	U.S. – Mexico – Canada Agreement
WTO	The World Trade Organization (WTO)
YTD	Year to Date

Abstract

The trade relationship between Mexico and the United States is one of the most significant economic partnerships globally, deeply interwoven through decades of trade agreements and shared supply chains. This thesis explores the economic vulnerabilities and trade dependencies inherent in this bilateral relationship, with a particular focus on key industries such as automotive, electronics, and agriculture. By analyzing trade patterns, industry interdependencies, and the impact of global disruptions, the study seeks to uncover critical risks that may threaten the stability of this partnership.

The research highlights Mexico's reliance on the United States as its dominant export destination and examines how this dependence exposes its economy to external shocks, policy changes, and market volatility. Conversely, it investigates the United States' dependence on Mexican exports, especially in supply chains for essential goods, and the potential vulnerabilities this reliance creates. Furthermore, the study assesses the effects of recent global crises, including the COVID-19 pandemic, on the resilience of Mexico-USA trade flows, shedding light on structural weaknesses in both economies.

Through a combination of quantitative analysis and industry-specific case studies, this thesis provides actionable insights for policymakers and industry leaders. It emphasizes the need for strategies to mitigate risks, diversify trade relationships, and strengthen the resilience of critical supply chains. By addressing these challenges, the study contributes to a deeper understanding of the interdependent nature of Mexico-USA trade and offers a pathway toward a more sustainable and balanced economic partnership.

Chapter 1: Introduction

The economic relationship between Mexico and the United States represents one of the most significant and intricate trade partnerships globally. During the last 30 years, Mexico became the largest trading partner of the United States, illustrating the critical role it plays in shaping North American trade dynamics. The proximity between the two nations, combined with their broad economic integration under the United States-Mexico-Canada Agreement (USMCA), which came into force on July 1, 2020, previously known as (NAFTA) (Chatzky, McBride, & Aly Sergie, 2020), has created a deep interdependence, particularly within key industries such as automotive, electronics, energy and agriculture. This relationship, while fostering growth, has also exposed both countries—especially Mexico—to substantial economic vulnerabilities and trade dependencies, making it vital to understand the impact of this interconnection on regional and global scales.

The United States and Mexico have cultivated robust trade ties, yet this interconnectedness carries inherent risks. Any disruption in trade flows or investment between the two nations could adversely affect industries, employment, and overall productivity, not only within their own borders but also for North America's global competitiveness.

Mexico, as the second-largest economy in Latin America and the third-most populous country in the Western Hemisphere, holds a unique position in this bilateral trade relationship. Its economy, with a gross domestic product (GDP) of $1.79 trillion in 2023 (The GlobaLEconomy, 2024), is heavily intertwined with that of the United States. Approximately 63% of Mexico's total trade is with the United States, and an overwhelming 81% of its exports are destined for its northern neighbor (Banco de Mexico, s.f.). Such heavy reliance on a single market creates both opportunities and vulnerabilities. Mexico's economic growth, which generally follows U.S. economic trends, is often subject to higher fluctuations, further emphasizing the necessity of addressing the risks inherent in such trade dependencies.

This thesis aims to explore the economic vulnerabilities and trade dependencies between Mexico and the United States, with a specific focus on key industries that dominate bilateral trade, including automotive manufacturing, electronics, and agriculture. Since the implementation of the North American Free Trade Agreement (NAFTA) in 1994, and more recently with the USMCA in 2020, trade between the two countries has flourished. However, Mexico's reliance on the U.S. as a primary export destination has shifted the trade balance, from a deficit of $2.38 billion in 1993 to a surplus of $234.7 billion in 2023 (Banco de Mexico, s.f.). U.S. imports from Mexico have increased substantially, particularly in sectors such as motor vehicles and parts, electronics, machinery and oil and gas (Latinometrics , 2024), while U.S. exports to Mexico, although significant, have not matched this exponential growth. Understanding this trade imbalance is crucial to identifying both countries' economic strengths and vulnerabilities.

Foreign direct investment (FDI) also plays a central role in U.S.-Mexico trade relations, contributing to the development of key industries. The liberalization of Mexico's foreign investment regulations in the late 1980s and the provisions within NAFTA attracted significant investment, particularly from the United States (M. Loser & Kalter, 1992), which remains Mexico's largest investor. In 2023, U.S. FDI in Mexico reached $13.75 billion, further solidifying the economic ties between the two nations (Government of Mexico, s.f.). This cross-border investment has enhanced production sharing and supply chain integration, particularly in the manufacturing of motor vehicles and electronics. However, the reliance on such integrated supply chains presents risks, as disruptions in one country can reverberate across borders, affecting production and economic stability in both nations (Romero & López Cabrera, 2024).

Moreover, the USMCA, which replaced NAFTA in 2020, introduced important changes to trade regulations, including new provisions on digital trade, worker rights, and environmental standards (Meltzer, Wayne, & Marroquín Bitar, 2023). While it retained many of NAFTA's original elements, the USMCA's updated rules of origin for motor vehicles and more enforceable worker rights provisions reflect the evolving

nature of U.S.-Mexico trade relations (OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE , 2022). These changes aim to modernize and strengthen the economic partnership between the two countries, yet challenges remain. Ongoing disputes, particularly regarding Mexico's energy sector and worker rights protections, illustrate the complexities of maintaining a mutually beneficial trade agreement.

The COVID-19 pandemic further highlighted the need for resilience within North American supply chains. The disruption of global trade during this period underscored the importance of strengthening regional supply networks, particularly in essential sectors such as semiconductors and electric vehicle production. As both countries continue to recover from the pandemic's economic impacts, there is an increasing focus on enhancing collaboration in workforce development, infrastructure modernization, and technological innovation.

This thesis seeks to provide a comprehensive analysis of the economic vulnerabilities and trade dependencies within key industries in U.S.-Mexico bilateral trade. By examining trade imbalances, the role of imports and exports, and the evolving regulatory landscape under the USMCA, this research will contribute to a deeper understanding of the challenges and opportunities inherent in this complex economic relationship. Ultimately, the findings will offer insights into how both countries can strengthen their trade ties while addressing the risks that accompany such deep economic integration.

As policymakers in both nations continue to navigate the evolving trade landscape, this research will also explore potential strategies for enhancing supply chain resilience, promoting sustainable economic growth, and ensuring that both Mexico and the United States can continue to benefit from their interdependent economies. By focusing on the shared vulnerabilities and dependencies in key industries, this thesis aims to contribute to the broader discourse on the future of North American trade and competitiveness.

1.1 Background and Context of U.S.-Mexico Bilateral Trade

The economic relationship between the United States and Mexico has evolved through significant historical milestones, policy shifts, and strategic imperatives that have shaped bilateral trade over the past several decades. U.S.-Mexico trade reflects the complex interplay of economic, geographic, and geopolitical factors unique to the North American region. This relationship is rooted in the geographic proximity of the two countries, the economic compatibility that allows the integration of supply chains, and strategic policies established through trade agreements that have both encouraged and restricted trade at different points in history.

The U.S.-Mexico trade relationship formally began to develop in the mid-20th century with the establishment of the Bracero Program in 1942, which enabled Mexican laborers to legally work in the United States to fulfill agricultural labor demands (Library of Congress, s.f.). Although the Bracero Program ended in 1964, it laid the groundwork for cross-border economic engagement, especially regarding labor exchanges. When the program ended, Mexico faced a sudden economic and social challenge as thousands of displaced Mexican workers sought new opportunities along the U.S.-Mexico border. The Mexican government, in coordination with the United States, introduced the maquiladora program in 1965, encouraging American manufacturers to establish assembly plants in Mexico (NAPS, s.f.). This policy not only mitigated the labor crisis but also established the beginnings of a cross-border production network that persists today. Over the years, maquiladoras have evolved to include high-value manufacturing and assembly for a wide range of industries, from automotive to electronics, illustrating the adaptability and enduring relevance of this model in supporting U.S.-Mexico economic ties.

The signing of NAFTA in 1994 marked a watershed moment for U.S.-Mexico trade, catalyzing a surge in bilateral trade and FDI (Bondarenko, 2024). By removing tariffs and reducing trade barriers, NAFTA facilitated the integration of production networks across North America, allowing U.S. companies to take advantage of lower labor

costs in Mexico. This agreement laid the structural foundation for nearshoring practices, as it established stable, long-term trade rules between the U.S., Mexico, and Canada. NAFTA also introduced investor protections, dispute resolution mechanisms, and intellectual property safeguards that reassured foreign investors, creating an appealing business environment for American companies and international investors alike. The resulting economic integration allowed both nations to benefit from shared production processes, particularly in industries requiring assembly-line work, labor-intensive manufacturing, and rapid logistical support from Mexico's border states to U.S. markets.

During NAFTA's tenure, trade between the United States and Mexico expanded significantly, with bilateral trade volume growing from $88.2 billion in 1993 to over $745 billion by 2023 (Banco de Mexico, s.f.). However, the advantages of low labor costs in Mexico were not enough to counteract the trend of offshoring to China, which gained momentum in the early 2000s when China joined the World Trade Organization (WTO) (Peters, 2005). With cheaper production costs, including subsidies and low wages, China became an attractive alternative for many U.S. companies. This shift strained Mexico's export industries, but rising Chinese wages, supply chain vulnerabilities, and recent geopolitical tensions have renewed interest in Mexico as a nearshoring destination (Tordjman, León, McAdoo, Pulido, & Thiebaud, 2024). The 2020 enactment of the USMCA, which updated NAFTA's framework, reinforced trade ties within North America and addressed issues such as labor standards, intellectual property protections, and digital trade, making it a vital component of nearshoring resurgence (International TRADE Administration , s.f.).

Recently, a variety of converging factors are accelerating the trend of nearshoring to Mexico, among these is the ongoing U.S.-China trade war, where tariff barriers and policy shifts have disrupted global supply chains and prompted companies to reconsider their reliance on Chinese manufacturing. The need to enhance supply chain resilience, highlighted by disruptions from the COVID-19 pandemic, has underscored the risks of distant and single-source supply chains. Mexico's proximity to the United States offers significant logistical advantages, allowing companies to

bypass ocean transport, reduce carbon footprints, and ensure faster, more flexible delivery times (Stringer & Ramírez-Melgarejo, 2023). Furthermore, as companies adopt "just-in-case" inventory strategies, proximity to U.S. markets has become a compelling competitive advantage for Mexican-based production.

In addition to geographical proximity, Mexico offers a young and skilled labor force, especially in border states like Nuevo León and Chihuahua (PRODENSA, 2024). However, challenges exist, such as occasional labor shortages, infrastructure deficits, and regulatory hurdles. The last Mexican administration under President Andrés Manuel López Obrador has pursued policies that, in some cases, discourage foreign investment, including efforts to reverse energy sector reforms that initially liberalized the market for foreign investment in power generation (U.S. DEPARTMENT of STATE, 2024). Despite these challenges, the economic fundamentals of nearshoring remain strong, with Mexico's accessible labor market, established industrial infrastructure, and logistical benefits sustaining its attractiveness as a production hub.

While Mexico has benefited from the recent nearshoring trend, several challenges continue to shape the outlook for U.S.-Mexico trade. Structural issues such as regulatory uncertainties, corruption, and deficiencies in infrastructure and education are areas of concern for foreign investors. Moreover, the recent political climate in Mexico and the new president raises questions about policy continuity, especially regarding FDI regulations and energy reforms (The CFO, 2024). The U.S., for its part, has contributed to trade complexities with immigration restrictions, border security measures, and shifts in trade policies that occasionally contradict the free-trade objectives championed under agreements like the USMCA (Chivvis, Carnegie Endowment for International Peace, 2023).

1.2 Problem Statement

Mexico and the United States share a deeply interconnected trade relationship that has become a defining feature of North American economic cooperation. Built over decades of trade agreements and mutual reliance, this partnership has fostered significant economic growth and regional integration. While this relationship has driven substantial growth, particularly in key industries such as automotive, electronics, and agriculture, it has also exposed both nations to economic vulnerabilities and trade dependencies. These dependencies create critical risks, particularly in times of global economic shocks, supply chain disruptions, and shifting geopolitical dynamics. For example, Mexico's reliance on the United States as its primary export destination leaves its economy highly susceptible to fluctuations in U.S. demand or protectionist trade policies. Conversely, the United States depends heavily on Mexico for vital supply chains and manufactured goods, making it vulnerable to disruptions in Mexican production capabilities.

Despite the scale and importance of this trade relationship, there is limited comprehensive research that dissects the economic vulnerabilities and dependencies embedded within specific industries. Addressing this gap is critical, as global crises such as the 2008 financial crisis and the COVID-19 pandemic have highlighted the fragility of global supply chains. Moreover, the rise of reshoring and decoupling trends in international trade adds urgency to understanding how these dynamics may evolve.

This thesis seeks to analyze the economic vulnerabilities and trade dependencies within key industries in Mexico-USA trade, with a focus on identifying potential risks and proposing strategies for mitigating their impact. By doing so, it aims to contribute to the broader discourse on sustainable trade relationships and economic resilience, ensuring that the mutual benefits of this vital partnership can be preserved in an increasingly uncertain global environment.

1.3 Research Questions

This thesis seeks to explore the complex dynamics of economic vulnerabilities and trade dependencies within the context of the Mexico-USA bilateral trade relationship. By focusing on key industries such as automotive, electronics, and agriculture, the research aims to address critical questions that contribute to a deeper understanding of the risks and interdependencies shaping this vital partnership. The following research questions will guide the study:

1. **What are the primary economic vulnerabilities faced by Mexico in its reliance on the United States as its dominant trading partner?**
   This question examines how Mexico's economic dependence on U.S. markets for exports creates risks related to demand fluctuations, trade policy changes, or global disruptions.

2. **What are the main trade dependencies that Mexico has when exporting its products to the United States, particularly in the supply chains of critical industries?**
   This focuses on identifying the industries where the United States is most reliant on Mexican production, such as automotive components and agricultural goods, and the potential implications of such dependencies.

3. **How have recent global crises, such as the COVID-19 pandemic, exposed vulnerabilities in the Mexico-USA trade relationship?**
   This question explores the ways in which external shocks disrupt bilateral trade flows, highlighting fragile areas in supply chains and the economic impacts on both nations.

4. **What strategies can be proposed to mitigate economic risks and foster a more resilient trade relationship between Mexico and the United States in a Trump era?**
   This question considers policy and industry-level solutions to address vulnerabilities, reduce dependencies, and strengthen economic resilience in both countries.

1.4 Limitations of the Study

While this thesis aims to provide a comprehensive analysis of economic vulnerabilities and trade dependencies in the Mexico-USA bilateral trade relationship, several limitations must be acknowledged. First, the study relies heavily on publicly available data, which may not capture the full complexity of informal trade dynamics or industry-specific nuances. Certain industries, particularly those with fragmented supply chains (divided across multiple locations or companies), might present challenges in accurately tracing dependencies and vulnerabilities due to data gaps or inconsistencies.

Second, the analysis is constrained by the dynamic and complex nature of global trade relationships, which are influenced by shifting economic conditions, policy changes, and geopolitical tensions. External factors such as emerging technologies, or sudden economic crises could alter the trade landscape during or after the research period, potentially limiting the generalizability of the findings to future contexts. For instance, while the study includes an analysis of disruptions caused by the COVID-19 pandemic, newer events may introduce unforeseen vulnerabilities that are not accounted for within the scope of this research.

Third, the study focuses on a subset of key industries, such as automotive, electronics, and agriculture, which are central to the Mexico-USA trade relationship. However, this focus inevitably excludes other sectors that may also contribute to economic vulnerabilities and trade dependencies. As a result, the findings may not provide a holistic representation of the entire trade ecosystem between the two nations.

Lastly, the analysis primarily emphasizes the economic dimensions of trade dependencies and possible risks, leaving environmental and social factors less explored. While these dimensions are important, their inclusion would require additional methodologies and data, which are beyond the scope of this thesis. Despite these limitations, the study provides valuable insights into the vulnerabilities

and dependencies within critical industries, offering a strong foundation for further research and policy discussion.

1.5 Objective of the Study

The primary objective of this study is to analyze the economic vulnerabilities and trade dependencies that characterize the bilateral trade relationship between Mexico and the United States, with a particular focus on key industries such as automotive, electronics, and agriculture. By examining these critical sectors, the study seeks to uncover the underlying dynamics that drive interdependence, identify areas of vulnerability, and assess the potential risks posed by disruptions in trade flows or changes in policy.

A key goal is to provide a detailed understanding of how Mexico's reliance on the United States as its principal trading partner influences its economic stability and development, while also exploring the extent to which U.S. industries depend on Mexican exports and supply chains. In doing so, the study aims to highlight the mutual benefits of this partnership, as well as the risks that could undermine its sustainability.

Additionally, this research aims to assess the impact of global challenges, such as the COVID-19 pandemic and shifts in international trade policies, on the resilience of this bilateral trade relationship. By addressing these factors, the study seeks to contribute actionable insights for policymakers and industry leaders to foster a more balanced and resilient trade framework.

Ultimately, the study aspires to bridge existing knowledge gaps and provide a foundation for crafting strategies that reduce economic vulnerabilities, mitigate trade dependencies, and promote long-term economic cooperation between Mexico and the United States.

Chapter 2: Review of Literature

2.1 Classical Theories of international Trade

The balance of payments (BOP) plays a pivotal role in understanding international trade, representing the macroeconomic side of economic relations between nations. Before delving into the intricacies of the balance of payments, it is essential to explore the classical theories of international trade, as they form the foundation of our understanding of international economic relations. These theories, evolving over centuries, have shaped the principles that guide the movement of goods and services across borders, the allocation of resources, and the establishment of economic policies.

The first formal theory of international trade, Mercantilism, dominated European economic thought in the 17th and 18th centuries. Pioneered by merchants, bankers, and government officials, mercantilism emphasized the accumulation of wealth through trade surpluses. According to mercantilist thinkers, a nation's prosperity was directly linked to its stock of precious metals—gold and silver—believed to be a measure of national wealth. Mercantilists focus on maximizing exports and minimizing imports to achieve a favorable balance of trade, essentially viewing trade as a zero-sum game where one nation's gain was another's loss.

Mercantilist policies encouraged governments to heavily regulate trade, imposing tariffs and restrictions on imports while providing incentives for exports. The core objective was to amass as much gold and silver as possible by maintaining a trade surplus. Although this doctrine laid the foundation for early discussions on trade and balance of payments, it suffered from several flaws. Economists such as Adam Smith and David Hume later criticized mercantilism for its misunderstanding of money and capital and its failure to recognize that trade could be mutually beneficial (Sturgeon, 2021).

The primary flaw in mercantilist thought was its zero-sum view of trade. In reality, as later classical economists demonstrated, trade could be a positive-sum game where all trading partners benefit. Despite its limitations, mercantilism introduced the idea

of balance of payments, albeit in a rudimentary form (Magnusson, 1994). The mercantilists' focus on maintaining a favorable balance of trade by maximizing exports and minimizing imports planted the seed for future economic theories regarding the balance of payments.

The development of classical trade theories began with Adam Smith's revolutionary ideas on free trade and his critique of mercantilism in his seminal work, *The Wealth of Nations* (1776). Smith introduced the concept of *absolute cost advantage*, proposing that nations should specialize in producing goods where they have an absolute advantage, meaning they can produce these goods more efficiently than other countries (Schumacher, 2012). By doing so, both trading partners would benefit from increased production and trade. Smith's theory rests on the assumption that labor is the primary factor in production and that countries should focus on the industries where they can produce the most output with the least input.

Smith's *absolute advantage* theory was further refined by David Ricardo, who introduced the concept of *comparative advantage*. In contrast to Smith, Ricardo argued that even if a country does not have an absolute advantage in any product, it can still benefit from trade by specializing in the production of goods where it has a comparative advantage—where it can produce goods at a lower opportunity cost relative to other countries. This insight, introduced in Ricardo's *Principles of Political Economy and Taxation* (1817), provided a more nuanced understanding of trade dynamics, highlighting that all nations could benefit from trade, even if one was more productive across all sectors (Rosenthal-Kay, 2023).

Ricardo's comparative cost advantage theory suggests that trade allows for greater efficiency in the allocation of global resources, as countries can focus on industries where they have a comparative advantage. This specialization leads to higher overall productivity and welfare gains. However, Ricardo's theory also operates under simplifying assumptions, such as the existence of two countries and two goods, and that labor is the only factor of production (Faccarello, 2015). Moreover, his model assumes constant opportunity costs and perfect mobility of resources within countries, which, in reality, is seldom the case.

While both Smith and Ricardo's theories laid a solid foundation for understanding the benefits of international trade, their models have faced criticism for oversimplifying the complexities of global trade relations. One significant limitation of Ricardo's model is that it does not account for why cost differences arise between countries. Later economists, such as John Stuart Mill, extended Ricardo's work by introducing the concept of *reciprocal demand*, which explains how the terms of trade—the relative prices at which goods are exchanged—are determined. Mill's theory helps to explain how the benefits of trade are distributed between nations, depending on their relative demand for each other's goods.

Despite their limitations, classical trade theories remain foundational in the study of international economics. They introduced the idea that nations benefit from trade, challenged the mercantilist view of trade as a zero-sum game, and laid the groundwork for more complex trade models that consider factors such as technology, capital, and resources.

2.2 New Theories of International Trade

International trade theory has evolved considerably over time, from classical models to more modern frameworks that incorporate complexities such as technological change, economies of scale, and imperfect competition. One of the most significant early advancements came with the Heckscher-Ohlin (H-O) theory, which was built on the foundations laid by Ricardo's comparative advantage theory. However, newer trade theories, developed post-1970, have significantly broadened our understanding of global trade dynamics, addressing the shortcomings of earlier models.

The Heckscher-Ohlin theory, formulated by Eli Heckscher and Bertil Ohlin, offered a more nuanced explanation of trade patterns than Ricardo's model of comparative advantage. The theory posits that international trade arises from differences in factor endowments "capital and labor" between countries. Countries rich in capital would export capital-intensive goods, while countries abundant in labor would export labor-intensive products. The theory defined this concept of abundance through two

primary criteria: the price criterion (where capital-rich countries have lower relative capital costs) and the physical criterion (where capital-to-labor ratios are higher) (Heckscher & Ohlin, 1991).

This approach brought forth two major theorems: the Heckscher-Ohlin theorem and the Factor Price Equalization theorem. The former argues that nations export goods that require intensive use of their relatively abundant and cheaper factors, whereas the latter suggests that free trade can lead to the equalization of factor prices across countries. In essence, global trade leads to a convergence of wages and returns on capital across borders (Heckscher & Ohlin, 1991).

Yet, despite its broad applicability, the H-O model has limitations, notably its static nature and assumption of constant technology. It also fails to account for the dynamic changes in production processes and the evolving global economy, which led economists to seek more adaptive theories that could explain trade patterns in the latter half of the 20th century.

By the mid-20th century, empirical data began to highlight the inadequacies of traditional trade theories like the Ricardian and H-O models. These classical frameworks assumed perfect competition, constant returns to scale, and static technology, assumptions that were increasingly unrealistic in a world characterized by technological innovation, product differentiation, and economies of scale. Consequently, economists began to formulate new theories of trade that could better explain the emerging complexities of global trade patterns. These contemporary frameworks offer a more nuanced understanding of global trade dynamics, integrating factors such as technological innovation, economies of scale, and strategic government policies. Theories within this paradigm can be broadly categorized into three main groups: Neo-Technological Theories, Intra-Industry Trade Models, and Strategic Trade Policy Models.

Neo-technological theories emphasize the pivotal role of technological innovation and the technological disparities between countries as core drivers of trade. Vernon's Product Cycle Model and Posner's Technological Gap Theory are among the key frameworks that explain how advancements in technology influence comparative

advantage. According to these theories, countries experience different stages in the lifecycle of products—ranging from innovation to standardization—that affect their trade patterns. For instance, Vernon's model suggests that as a product matures, production shifts from the innovating country to nations with lower production costs, reflecting the evolving comparative advantages driven by technology (Vernon, 1966). These models are particularly relevant in high-tech industries, where cutting-edge innovation drives early trade and eventually offshoring.

In contrast to the classical view, where countries specialize in different products due to their comparative advantage, Intra-Industry Trade (IIT) models highlight that countries often trade similar but differentiated goods. This phenomenon is especially prevalent among developed nations with similar economic characteristics. Paul Krugman's work on Monopolistic Competition and Economies of Scale introduced the idea that intra-industry trade arises because firms in similar countries benefit from economies of scale and can differentiate their products, leading to trade in similar goods (krugman, 1979). For example, countries like Germany and Japan may both export cars, but the brands and features differentiate the products. This model explains a large proportion of trade among advanced economies, particularly in sectors such as automobiles, electronics, and pharmaceuticals.

Strategic Trade Policy emerged as a response to the realization that governments can play a proactive role in shaping international trade outcomes. These models, developed by economists like Krugman and Brander-Spencer, argue that in industries characterized by economies of scale or oligopolistic competition, government intervention, such as export subsidies or tariffs, can enhance national welfare. For instance, the Brander-Spencer Model suggests that a government can help domestic firms gain a competitive edge in international markets by providing subsidies, thus allowing them to compete more effectively against foreign firms (Brander & Spencer, 1985). This approach is particularly relevant in industries like aerospace or advanced electronics, where a few large firms dominate the global market. The strategic interaction between governments and firms in these sectors shapes both national policies and international trade patterns.

The emergence of new trade theories marked a significant leap beyond classical models, such as Ricardo's Comparative Advantage and the Heckscher-Ohlin Model. These classical theories were grounded in the idea that trade occurs due to differences in resources or factors in endowments between countries. While foundational, these models failed to account for the complexities introduced by technological innovation, product differentiation, and government intervention in markets dominated by large firms. Modern theories offer a more comprehensive framework for understanding global trade, particularly in industries where technological change and scale economies play dominant roles. Today, Intra-Industry Trade between advanced economies accounts for a significant portion of global trade flows, underscoring the importance of these newer models (Grimwade, 2000).

The development of new trade theories marked a significant advancement over the classical models of international trade. They provide a more comprehensive explanation of the complexities of global trade, particularly in industries where economies of scale, product differentiation, and technological innovation play a crucial role. Intra-industry trade, where countries export and import similar goods, is now a significant part of global trade, particularly among developed nations.

2.3 Bilateral Trade and Economic Vulnerability: Key Concepts

The study of bilateral trade and its effects on economic integration is well-grounded in classical and modern economic theories. Early frameworks, such as Ricardian comparative advantage, provide a basis for understanding why countries engage in trade, suggesting that each country will benefit by specializing in producing goods where they have a relative efficiency advantage (Siddiqui, 2018). More recent theories emphasize the role of global supply chains and value-added trade, concepts that are particularly relevant to the U.S.-Mexico context, where industries such as automotive and electrical devices rely heavily on cross-border production networks (World Trade Organization, 2019).

U.S.-Mexico trade has grown substantially in recent decades, largely due to trade agreements like NAFTA and, more recently, USMCA. NAFTA facilitated economic integration by eliminating many trade barriers, enabling both countries to specialize in industries that play to their strengths. However, researchers argue that while these agreements have stimulated economic growth, they have also created structural dependencies that leave both countries—especially Mexico—vulnerable to economic shocks (Federal Ministry of Economy, 2024).

Economic vulnerability is a central theme in the study of trade relationships, especially when there is a pronounced power asymmetry, as is the case between the U.S. and Mexico. Vulnerability is often defined as a nation's susceptibility to external shocks due to dependencies on specific trade relationships (United Nations Development Programme , 2011). The literature distinguishes between natural vulnerabilities, such as economic reliance on commodity exports, and policy-induced vulnerabilities, such as reliance on a particular trade partner for economic stability (Combes & Guillamount, 2002|). Studies on U.S.-Mexico trade frequently highlight Mexico's vulnerability due to its high dependency on U.S. markets, with over 80% of Mexican exports destined for the United States (NewZealand Trade and Enterprise (NZTE), 2021).

Empirical studies suggest that such trade dependency can make Mexico highly susceptible to U.S. economic fluctuations. For instance, Mexican manufacturing is particularly vulnerable to U.S. recessions, given its reliance on U.S. consumer demand for industrial goods (Angulo, 2019). Similarly, that dependency on a single market limits the flexibility of Mexico's economic policy and complicates responses to crises (Gerber, 2024). Although the USMCA aims to alleviate some of these vulnerabilities by promoting diversification, analysts argue that the inherent dependency remains difficult to break (Flores-Macías & Sánchez-Talanquer, 2019).

Power asymmetries in trade relationships add another layer of complexity to bilateral trade and economic vulnerability. Research on asymmetric interdependence suggests that smaller or more economically dependent countries, like Mexico, are more susceptible to policy shifts by larger economies, such as the United States

(Shirk, 2018). This notion is relevant in the context of U.S.-Mexico relations, where the United States holds substantial bargaining power due to its larger economy and diversified export markets (International Trade Administration, 2023). For instance, studies show that Mexican industries that rely on U.S. imports, such as automotive manufacturing, face heightened economic risk if the United States alters its trade policies or imposes tariffs, especially with chines investments in automotive sector (Global Policy Watch, 2024).

In light of these vulnerabilities, resilience strategies could reduce Mexico's dependence on the United States and increase economic stability. One prominent strategy is trade diversification, expanding trade relationships beyond the U.S. to spread economic risk more evenly (The World Trade Report 2021, 2021). This concept has gained attention among Mexican policymakers who seek to establish stronger ties with other Latin American, European, and Asian markets However, several scholars caution that diversification is challenging to implement due to existing infrastructure and established supply chain networks that are highly integrated with the United States (Chivvis & Geaghan-Breiner, Carnegie Endowment for International Place , 2024).

In addition to diversification, the highlight the importance of supply chain resilience in key industries. For example, studies recommend the development of domestic industries to lessen dependency on imported goods, particularly in strategic sectors like electronics and automotive manufacturing (Moreno-Brid J. C., Gómez Tovar, Gómez Rodríguez , & Sánchez Gómez, 2021). In doing so, Mexico could reduce its vulnerability to U.S. market fluctuations while supporting local industry growth.

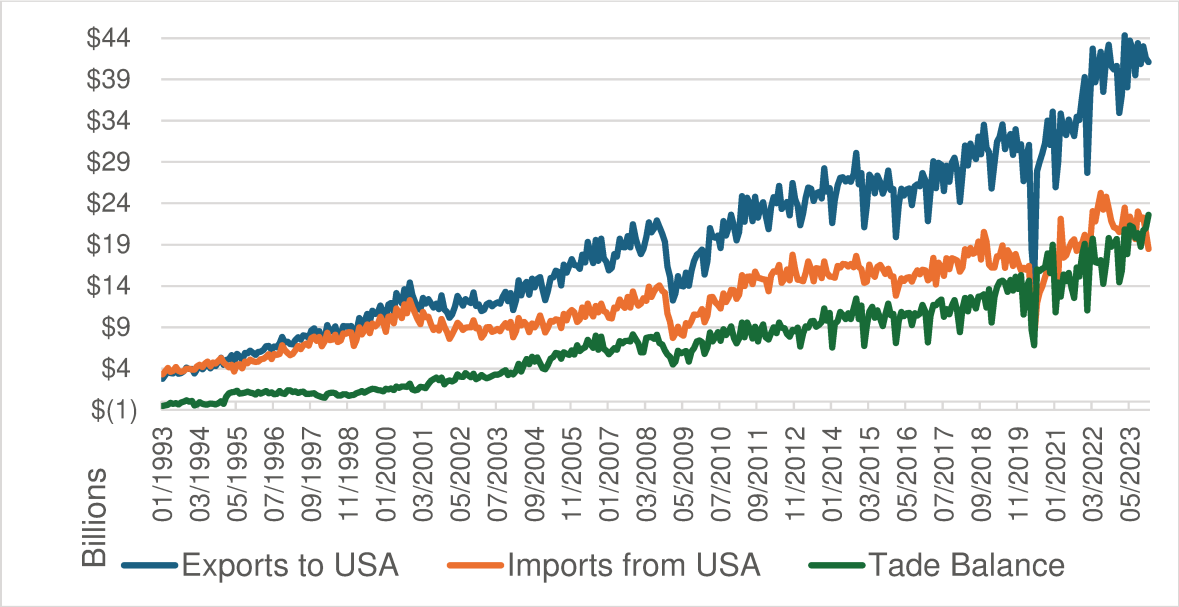
2.4 Overview of U.S.-Mexico Trade Relations

The trade relationship between Mexico and the United States has evolved into one of the most dynamic and interconnected economic partnerships in the world, the trajectory of trade between the two nations, highlighting exports from Mexico to the United States, imports from the United States to Mexico, and the resulting trade

balance. These data trends serve as a testament to the profound transformations that have occurred within the framework of regional trade agreements, technological advancements, and shifting global economic dynamics.

From 1993 to 2023, the trade relationship between Mexico and the United States has experienced exponential growth, as depicted in the Figure 1. In 1993, Mexico's monthly exports to the United States stood at under $5 billion. By 2023, this figure had surged to nearly $44 billion only during March, representing an eightfold increase over three decades. This remarkable growth is attributable to several structural changes in the bilateral relationship, notably the implementation of the North American Free Trade Agreement (NAFTA) in 1994.

Figure 1 Monthly Trade between Mexico-U.S. from 1993 to 2023



Source: Banco de Mexico; own illustration and calculations.

NAFTA served as a catalyst for trade liberalization, eliminating tariffs and reducing trade barriers across sectors, particularly in manufacturing and agriculture. This agreement provided Mexican industries with unparalleled access to the United States, which remains the largest consumer market globally. As a result, Mexico

solidified its position as a critical supplier of goods such as automobiles, electronics, and agricultural products. This export-oriented growth is prominently reflected in the steady upward trajectory of the blue line in the graph, which represents Mexico's exports to the United States.

On the other hand, U.S. exports to Mexico also witnessed substantial growth, albeit at a slower pace. In 1993, monthly imports from the United States were slightly above $4 billion, rising to approximately $25 billion in March by 2023. This increase underscores the growing demand for U.S.-produced goods in the Mexican market, including machinery, agricultural products, and intermediate goods for manufacturing. The orange line in the graph highlights this gradual but consistent increase in imports, emphasizing the complementary nature of the two economies.

A key takeaway from the graph is the persistent trade surplus Mexico has maintained with the United States since 1994. The green line, which represents the trade balance, remains consistently positive throughout the 30-year period. Notably, the surplus widened significantly after financial crisis in 2008, driven by the accelerated growth in Mexican exports relative to U.S. imports.

This widening surplus reflects structural factors in the bilateral trade relationship. Mexico’s competitive labor costs, geographic proximity to the United States, and integration into global supply chains have enabled it to outpace U.S. export growth. Additionally, the trade surplus aligns with Mexico’s position as a manufacturing hub for industries such as automotive, electronics, and textiles, where goods are often exported to the U.S. as finished products. This surplus indicates that Mexico plays a vital role in fulfilling U.S. consumer and industrial demands while benefiting from foreign direct investment and job creation.

This Trade relationship also reveals the resilience of U.S.-Mexico trade relations in the face of global economic disruptions. For example, during the 2008 financial crisis, trade volumes experienced a sharp contraction, reflecting the downturn in global economic activity. Similarly, the COVID-19 pandemic in 2020 caused significant declines in trade flows due to supply chain disruptions and reduced consumer demand. Despite these setbacks, trade volumes rebounded quickly in

both instances, underscoring the robustness and adaptability of the bilateral trade framework.

This resilience can be attributed to the deep economic integration between the two nations, underpinned by trade agreements like NAFTA and its successor, the United States-Mexico-Canada Agreement (USMCA). These agreements have institutionalized trade cooperation, creating a predictable environment for businesses on both sides of the border. Moreover, the rapid recovery of trade flows highlights the critical role of Mexico and the United States in each other's economic ecosystems, with industries such as automotive, agriculture, and electronics remaining integral to the relationship.

2.5 Sectoral Analysis of Trade Dependencies

Mexico's growth is directly linked to the performance of the United States economy and, despite the market diversification that the federal government has fostered through international trade agreements, it continues to be its main partner, maintaining an intense economic and commercial dependence, which can be seen from the evolution of the level of exports and imports and the United States' share of total foreign trade.

The manufacturing sector has been widely recognized as the pivot of Mexico-U.S. trade relations (Wilson, 2012). the North American Free Trade Agreement (NAFTA) significantly accelerated Mexico's integration into U.S.-centered manufacturing supply chains. Studies emphasize that Mexico's proximity to the U.S., coupled with NAFTA's tariff eliminations, created a conducive environment for export-led growth, particularly in automotive and electronics industries (Bandara, 2024).

Research highlights the maquiladora model as central to Mexico's manufacturing strategy. Maquiladoras, or export-oriented assembly plants, became critical nodes in the cross-border supply chain (NOVALINK, 2021) and rely heavily on imported components from the U.S., assembling them into finished goods for re-export. While this arrangement has driven job creation and foreign direct investment (FDI), it has

also locked Mexico into a subordinate role in the production process, specializing in low-value-added tasks (Saucedo, Ozuna Jr, & Zamora, 2020).

Scholars like Gallagher and Zarsky criticized this model for perpetuating dependency. They argue that Mexico's over-reliance on U.S. demand renders its manufacturing sector vulnerable to economic fluctuations north of the border (Alvarado E. , enero-junio 2008). For instance, the 2008 financial crisis exposed these vulnerabilities when a decline in U.S. consumption led to significant job losses in Mexican manufacturing hubs (Villarreal, The Mexican Economy After the Global Financial Crisis , 2010) and also during covid-19 crisis that collapsed Mexican exports to the USA, between the first and second quarter of 2020 (Villanueva & Jiang, 2022). Current literature suggests that fostering technological innovation and value-added production is vital for reducing dependency while enhancing competitiveness in global markets.

The agricultural trade relationship between Mexico and the U.S. exemplifies asymmetric interdependence, where Mexico's reliance on the U.S. market far outweighs U.S. dependency on Mexican imports. According to Wise (2010), NAFTA transformed Mexico's agricultural landscape, intensifying export-oriented production of fruits and vegetables while increasing dependency on imports of staples like corn and soybeans from the U. S (UNITED NATIONS, 2013).

Mexican agricultural exports to the U.S. have grown exponentially over the past three decades, fueled by comparative advantages such as climate, labor costs, and proximity. According to point out that Mexico is a dominant supplier of fresh produce, including tomatoes, avocados, and berries, to U.S. markets (Wilson Center, 2019). However, this success is tempered by risks associated with market concentration. Approximately 90% of Mexico's agricultural exports in 2023 were destined for the U.S., making Mexican farmers highly susceptible to changes in U.S. trade policies, consumer preferences, or economic conditions (Zahniser, Economic Research Service U.S. Department of Agriculture, 2024).

Conversely, Mexico's reliance on U.S. agricultural imports raises concerns about food sovereignty and rural inequality, the influx of subsidized U.S. corn under NAFTA

displaced small-scale Mexican farmers, exacerbating poverty in rural areas (Morris, 2024). Their research underscores the structural vulnerabilities created by dependence on U.S. imports of genetically modified (GM) crops, which now constitute a significant share of Mexico's staple grain supply. Efforts to mitigate this dependency, such as recent initiatives to ban GM corn imports, have sparked debates about trade policy, environmental sustainability, and agricultural innovation.

The electronics and electrical equipment sector in Mexico rose to prominence with NAFTA's implementation in 1994, which eliminated trade barriers between Mexico, the U.S., and Canada. Mexico's geographic proximity and competitive labor costs made it an attractive destination for multinational corporations (MNCs) seeking to optimize production while accessing the U.S. market. By the early 2000s, Mexico had become one of the largest exporters of electronics to the U.S., specializing in products like televisions, computers, and communication equipment. This growth was driven by the maquiladora system, where imported U.S. components were assembled in Mexico and re-exported, reinforcing Mexico's dependence on U.S. inputs (Dedrick, Kenneth L., & J. Palacios, 1999).

The sector is heavily reliant on foreign investment and integration into global value chains (GVCs) (Vidal & González Pandiella, 2024), with major U.S. companies like Molex and Honeywell operating manufacturing hubs in northern Mexico (The Nearshore Company, 2023). Key sub-sectors include consumer electronics, automotive electronics, and industrial equipment, all of which depend on imported components. While this integration fosters employment and economic gains, it also constrains Mexico's value-added potential and technological independence.

Mexico's dependence on the U.S. creates vulnerabilities, such as exposure to external shocks like the COVID-19 pandemic, which disrupted supply chains and reduced U.S. demand (R, R, & A. Sectoral, 2023). Furthermore, limited technological spillovers from foreign direct investment (FDI) have hindered Mexico's ability to develop a robust domestic electronics industry, leaving it reliant on low-value assembly processes.

To mitigate these challenges, scholars propose strategic reforms. Upgrading Mexico's position in GVCs through innovation and R&D, diversifying export markets beyond the U.S., and strengthening domestic supply chains are critical priorities (Vidal & González Pandiella, 2024). Additionally, leveraging emerging technologies like semiconductors and renewable energy devices could help Mexico reduce dependency and increase competitiveness. These strategies require long-term investment and collaboration among policymakers, academia, and industry stakeholders.

A recurring theme in the literature is the vulnerability created by Mexico's heavy reliance on the U.S. across key sectors. Studies by (Cañas & Smith, Federal Reserve Bank of Dallas, 2021) and (World Bank Group, 2019) emphasize that economic shocks in the U.S., such as the 2008 financial crisis or the COVID-19 pandemic, disproportionately affect Mexico due to its trade concentration. This vulnerability is further exacerbated by structural factors, including limited domestic innovation and the absence of robust policy frameworks to diversify export markets.

Scholars also highlight the importance of resilience and diversification in addressing these challenges. Mexico must leverage its extensive network of free trade agreements, including the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and its partnerships with the European Union, to reduce dependency on the U. S (International Trade Administration, 2023). However, the scale and depth of the Mexico-U.S. trade relationship make it difficult for alternative markets to fully substitute for U.S. demand.

Chapter 3: Methodology

The methodology of this thesis is designed to systematically explore the economic vulnerabilities and trade dependencies within the Mexico-USA bilateral trade relationship, focusing on critical industries. The approach combines qualitative and quantitative methods to ensure a comprehensive analysis that balances data-driven insights with contextual understanding, outlining the research design, data collection and analysis techniques, criteria for industry selection, the analytical framework employed, and the limitations inherent to the methodology.

3.1 Research Design

This study employs a mixed-methods research design to capture the multidimensional nature of trade dependencies and vulnerabilities. Quantitative data, such as trade flows, industry-specific output, and export-import patterns, is used to identify trends, measure dependencies, and highlight economic imbalances. Qualitative methods, including a review of policy documents, industry reports, and academic literature, provide context to the quantitative findings and explore underlying causes and implications.

The research adopts a case-study approach, focusing on three key industries, automotive, electric, and agriculture. These industries are central to the trade relationship between Mexico and the United States and represent varying levels of dependency and integration. This design ensures depth in analysis while enabling generalizable insights into broader trade dynamics.

3.2 Data Collection and Analysis

Data collection is grounded in secondary sources, including trade databases such as Bank of Mexico and government repositories from Mexico and the United States. These sources provide detailed, sector-specific trade flow data, including export and import volumes, trade balances, and market shares. Additional data is gathered from reports by international organizations, such as the World Bank and WTO, and academic studies on trade dependencies and vulnerabilities.

The analysis follows a structured process, beginning with the identification of trade flows, trade agreements and key dependencies in each industry. Quantitative metrics, such as trade concentration ratios and supply chain interconnectivity, are calculated to measure the extent of reliance between the two nations. This data is then contextualized through qualitative analysis, which examines industry-specific policies, historical trade trends, and some external factors such as global economic disruptions or policy shifts.

3.3 Industry Selection and Analytical Framework

The selection of industries is based on their economic significance, trade volume, and susceptibility to external disruptions. The automotive industry is chosen due to its highly integrated supply chains, where components are manufactured across borders before the final assembly. The electric industry represents another deeply interconnected sector, characterized by high-value trade and reliance on just-in-time manufacturing processes. The agriculture sector, while differing in structure, highlights the importance of primary goods and the impact of seasonal trade patterns.

An analytical framework is developed to evaluate vulnerabilities and dependencies. The framework consists of three core components:

1. **Trade Dependency Metrics**: These include export-import ratios, market concentration indices, and reliance on specific trading partners.
2. **Supply Chain Vulnerability Analysis**: This examines the complexity, resilience, and potential points of failure in supply chains.

3. **Impact Assessment**: This evaluates how external disruptions, such as global crises or trade policy changes, affect industry performance and bilateral trade flows.

This integrated approach allows for a detailed examination of both the structural and dynamic aspects of trade dependencies.

3.5 Limitations of Methodology

While the methodology is robust, several limitations must be acknowledged. First, the study relies on publicly available data, which may not fully capture the nuances of informal trade dynamics or proprietary industry information. This could result in an incomplete representation of certain vulnerabilities, particularly in less transparent sectors.

Second, the focus on three key industries, while providing depth, limits the scope of the findings to these sectors. Other industries that contribute to the Mexico-USA trade relationship are not analyzed in detail, potentially excluding relevant insights.

Third, the rapidly evolving nature of global trade relationships and policies presents a challenge. Changes in trade agreements, geopolitical shifts, or emerging technologies could alter trade dynamics during or after the research period, limiting the applicability of findings to future contexts.

Despite these limitations, the methodology provides a framework for analyzing trade dependencies and vulnerabilities, contributing valuable insights to the discourse on economic resilience and sustainable trade relationships.

Chapter 4: Economic Vulnerabilities in Mexico-USA Bilateral Trade

4.1 Impact of Economic Policies and Fluctuations

Economic policies serve as the backbone of a nation's development, shaping its ability to weather fluctuations and sustain growth. In the case of Mexico, successive administrations have implemented diverse strategies to address persistent challenges such as inequality, trade dependency, and underinvestment in infrastructure. However, the impact of these policies has often been amplified or undermined by external economic fluctuations and global events. Understanding how these dynamics interact provides critical insight into Mexico's current economic position and the pathways it might pursue to foster resilience.

Mexico's economic liberalization in the late 20th century marked a turning point in its economic policies. During the 1980s and 1990s, Mexico adopted structural reforms aimed at stabilizing its economy and integrating it into global markets (Valenzuela, 2016). Trade liberalization, privatization, and fiscal discipline formed the core of these reforms, setting the stage for the country's accession to the General Agreement on Tariffs and Trade (GATT) in 1986 (World Trade Organization , 1997) and the implementation of the North American Free Trade Agreement (NAFTA) in 1994.

While these reforms boosted export growth and foreign direct investment (FDI), they also entrenched vulnerabilities (Cuevas, Messmacher, & Werner, 2005). For instance, Mexico's reliance on the U.S. market for more than 80% of its exports left its economy exposed to external shocks. The 2008 financial crisis illustrated this dependency when a contraction in U.S. demand caused Mexico's GDP to shrink by 6.7% (Anderson & Valdés, 2009). Similarly, Mexico's fiscal austerity policies often limited public investment in critical sectors such as education and infrastructure, exacerbating inequality and impeding long-term development (Moreno-Brid, Pérez-Benítez, & J. Villarreal, Austerity in Mexico: Economic impacts and unpleasant choices ahead, 2016).

Over the past two decades, Mexican administrations have grappled with the interplay between domestic policy decisions and global economic fluctuations. Under President Felipe Calderón (2006–2012), efforts to mitigate the impact of the global financial crisis included countercyclical fiscal policies and targeted stimulus measures. These policies cushioned the immediate economic shock but left Mexico with a growing fiscal deficit and limited capacity for long-term investment (Sidaoui, Ramos Francia, & Cuadra, The global financial crisis and policy response in Mexico, 2010).

Enrique Peña Nieto's presidency (2012–2018) emphasized structural reforms in energy, telecommunications, and education, aiming to enhance Mexico's competitiveness. However, while these reforms attracted foreign investment, their implementation often faced resistance from vested interests and local stakeholders, diluting their long-term impact (U.S. Embassy, 2014). Peña Nieto's reforms also coincided with a decline in global oil prices, undermining revenues from Mexico's state-owned oil company, PEMEX, and constraining fiscal space (Barrera & Graham, 2018).

Andrés Manuel López Obrador (AMLO) brought a starkly different approach during his administration (2018–2024). His policies prioritized social programs, infrastructure projects, and energy sovereignty, often at the expense of private-sector confidence (The Business Year , 2024). While initiatives like "Sembrando Vida" and the Mayan Train project aimed to address inequality and stimulate regional development, critics argued that AMLO's policies deterred foreign investment and strained public finances. Additionally, his focus on state control in the energy sector clashed with global trends toward renewable energy and sustainability, raising concerns about Mexico's competitiveness (L. O'Sullivan, 2022).

Mexico's economic policies have frequently been shaped by external factors, including commodity price volatility, trade disputes, and global financial cycles. For example, fluctuations in oil prices have historically had a disproportionate impact on Mexico's economy, given its reliance on petroleum exports and revenues from PEMEX. During periods of high oil prices, such as the early 2000s, Mexico

experienced revenue windfalls that supported public spending (Duclau & García, 2011). Conversely, price declines, like those in 2014 and 2020, constrained fiscal resources and highlighted the need for economic diversification (Ribando Seelke, Ratner, Villarreal , & Brown , September 28, 2015).

The COVID-19 pandemic represented one of the most significant global economic shocks in recent history. For Mexico, the pandemic exposed the fragility of its public health system and underscored its dependence on global supply chains (Alvarado, González, Rangel, Salcedo, & Torre, February 2022). While AMLO resisted implementing large-scale fiscal stimulus measures, remittances from Mexican workers abroad reached record levels during the crisis, providing a crucial lifeline for many households (Cañas & Pranger, Federal Reserve Bank of Dallas, 2023). However, the uneven recovery from COVID-19 has left lasting scars, with small businesses and informal workers bearing the brunt of the economic fallout.

The U.S.-China trade war has also had significant implications for Mexico. While the conflict created opportunities for nearshoring and attracting investment, it also intensified competition among emerging markets for a share of global supply chains. Mexico's ability to capitalize on these shifts has been hindered by infrastructure bottlenecks and regulatory inefficiencies, emphasizing the need for strategic investments and institutional reforms (Internal Monetary Fund , 2023).

U.S. economic policies have long been a decisive factor influencing Mexico's economic trajectory. Under President Joe Biden, the emphasis on labor rights, environmental sustainability, and nearshoring has created both opportunities and challenges for Mexico. On the one hand, Biden's policies align with global trends, potentially positioning Mexico as a key player in regional supply chains (McNeece , September 2023). On the other hand, compliance with stricter labor and environmental standards under the United States-Mexico-Canada Agreement (USMCA) has increased costs for Mexican industries, particularly in sectors like automotive manufacturing (NOVALINK, 2024).

The potential return of Donald Trump to the presidency poses additional risks. Trump's protectionist rhetoric and previous threats to withdraw from NAFTA highlight

the volatility of Mexico's trade relationship with the U.S. A second Trump administration could bring renewed pressure on Mexico to tighten immigration controls and accept unfavorable trade terms, further complicating its economic policies.

Mexico's experience highlights the interplay between domestic economic policies and external fluctuations. While structural reforms and targeted interventions have driven growth and modernization, they have also revealed vulnerabilities stemming from dependency on global markets and commodities.

To navigate these challenges, Mexico must adopt a forward-looking approach that prioritizes diversification, innovation, and sustainability. Strengthening domestic value chains, investing in education and infrastructure, and fostering collaboration between public and private stakeholders are critical steps. Furthermore, aligning Mexico's policies with global trends such as renewable energy, digital transformation, and sustainable development can enhance its resilience and competitiveness in an increasingly interconnected world.

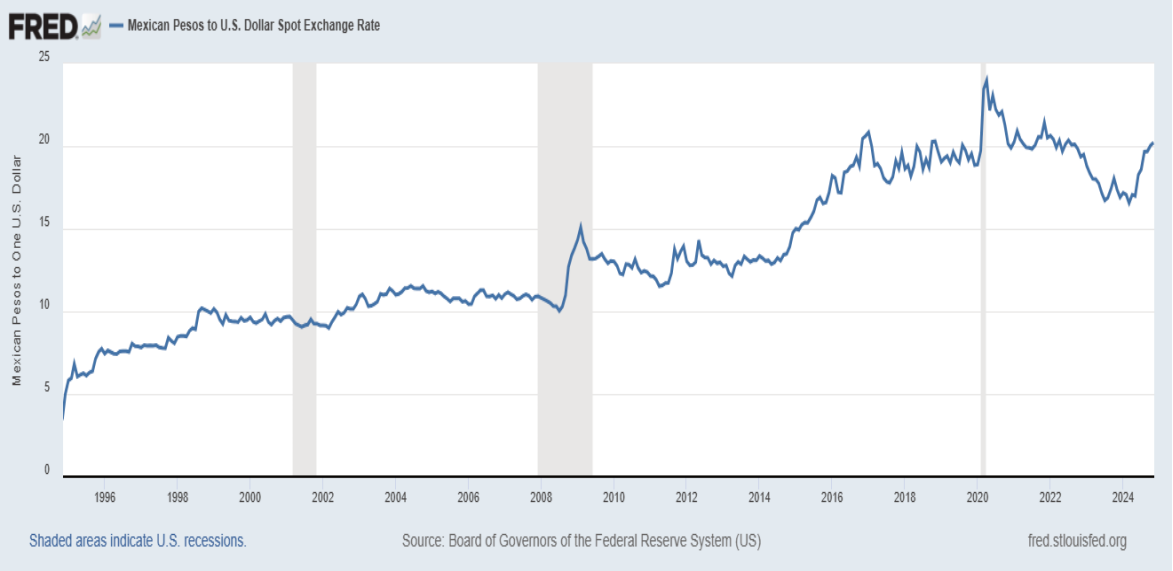
4.2 Exchange Rate Volatility and Its Effects

The relationship between Mexico and the United States is marked by a robust and strategic trade exchange. However, this interaction faces significant challenges arising from exchange rate volatility between the Mexican peso (MXN) and the U.S. dollar (USD), a critical variable that profoundly influences the competitiveness and stability of productive sectors on both sides of the border. Currently, Mexico is going through a complex moment due to the volatility of the peso against the dollar, a situation that diverse consequences, especially in sectors dependent on foreign trade

In the early 1990s, Mexico's economy underwent significant transformation with the implementation of the North American Free Trade Agreement (NAFTA). Prior to NAFTA, the peso operated under a controlled exchange rate, valued at

approximately 3.1 MXN per USD, as shown in Figure 2. The agreement marked a turning point, driving economic integration and boosting trade between Mexico and the United States, as mentioned in previous chapter. However, structural weaknesses in Mexico's financial system culminated in the peso crisis of December 1994 (Kalter & Ribas, 1999). The abrupt devaluation of the peso, exacerbated by capital flight and a plummeting currency, saw the exchange rate soar to nearly 7 MXN per USD by 1995. U.S. intervention, including a $20 billion loan package, stabilized the peso and reinforced trade commitments (Boughton, 2012).

Figure 2 Mexican Pesos to U.S. Dollar Spot Exchange Rate from 1990 to 2024.



Source: Data from FRED Economic Data DT. Louis Fed, 2024.

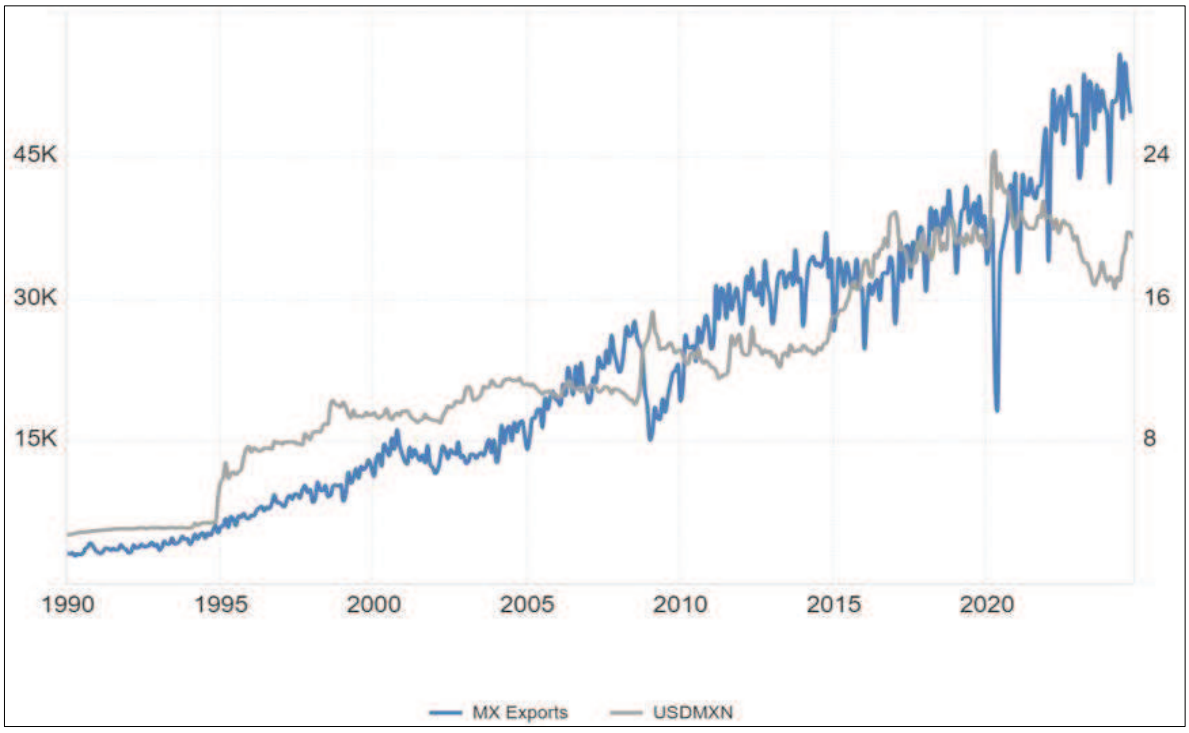
This crisis highlighted the vulnerabilities of Mexico's financial system while underscoring the importance of bilateral economic ties. The weaker peso initially spurred an export boom, as mentioned in previous chapter, leveraging Mexico's cost advantages in sectors such as manufacturing and agriculture (Teichman, 2001). However, it also exposed the economy's susceptibility to external shocks and the limitations of a fixed exchange rate system.

Following the crisis, Mexico adopted a floating exchange rate regime, allowing market forces to determine the peso's value (Cano, Gallardo, & Acosta, 2019). This shift provided greater flexibility in responding to economic pressures and enhanced

resilience against speculative attacks. By 2000, the peso stabilized at 9-10 MXN per USD, supported by improved fiscal discipline and increased foreign investment (Gurría, 2000). During this period, trade with the United States flourished under NAFTA, with notable growth in the automotive and agricultural sectors.

Between 2001 and 2008, the peso experienced moderate depreciation, trading between 11-13 MXN per USD. Global factors, including rising oil prices and competition from China in manufacturing, influenced the currency's performance (Garcia, Saucedo, & Velazco, 2018). The 2008 global financial crisis marked a period of sharp depreciation for the Mexican peso, accompanied by reduced demand for exports, particularly from the United States, Mexico's largest trading partner. Key sectors such as automotive, manufacturing, and oil were severely impacted (Villarreal, The Mexican Economy After the Global Financial Crisis , 2010), reflecting the profound economic disruptions of the time. This depreciation was triggered by significant capital outflows as investors sought the perceived safety of the U.S. dollar, pushing the exchange rate to 15 MXN per USD and disrupting trade flows amid heightened economic uncertainty as shown in Figure 3.

Figure 3 Mexico export and U.S. - Mx Exchange Rate from 1990 to 2024.



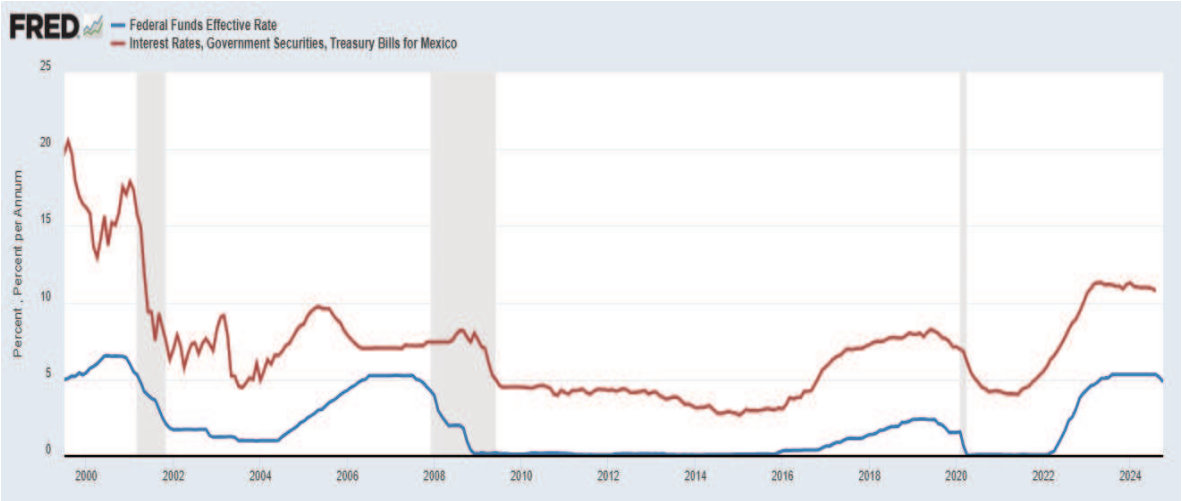
Source: TradingEconomics.com.

From 2010 to 2019, the peso's exchange rate fluctuated between 12-20 MXN per USD, reflecting a period of high volatility specially 2016 where Donald Trum won the Presidential election focusing on renegotiation of NAFTA into the United States-Mexico-Canada Agreement (USMCA) temporarily introduced uncertainty but ultimately reinforced bilateral trade relations (Malaver-Vojvodic, 2017). Peso depreciation during this period bolstered export competitiveness in industries such as automotive manufacturing, electronics, and agriculture, though it raised the cost of imports for Mexican consumers (P. Meltzer, Wayne, & Marroquín Bitar, Brookings , 2023).

The COVID-19 pandemic in 2020 represented a major stress test for the peso and the broader trade relationship. The peso sharply depreciated to nearly 25 MXN per USD, driven by supply chain disruptions, reduced remittances, and plummeting oil prices (Carrillo & García, 2021). Inflationary pressures appeared due to the effects of COVID-19 pandemic, mounted as consumer purchasing power declined and businesses faced rising input costs. However, Mexico's manufacturing sectors recovered, leveraging nearshoring trends and recovery in global trade to stabilize the peso within a range of 17-20 MXN per USD by 2021 (Sadovi, 2024).

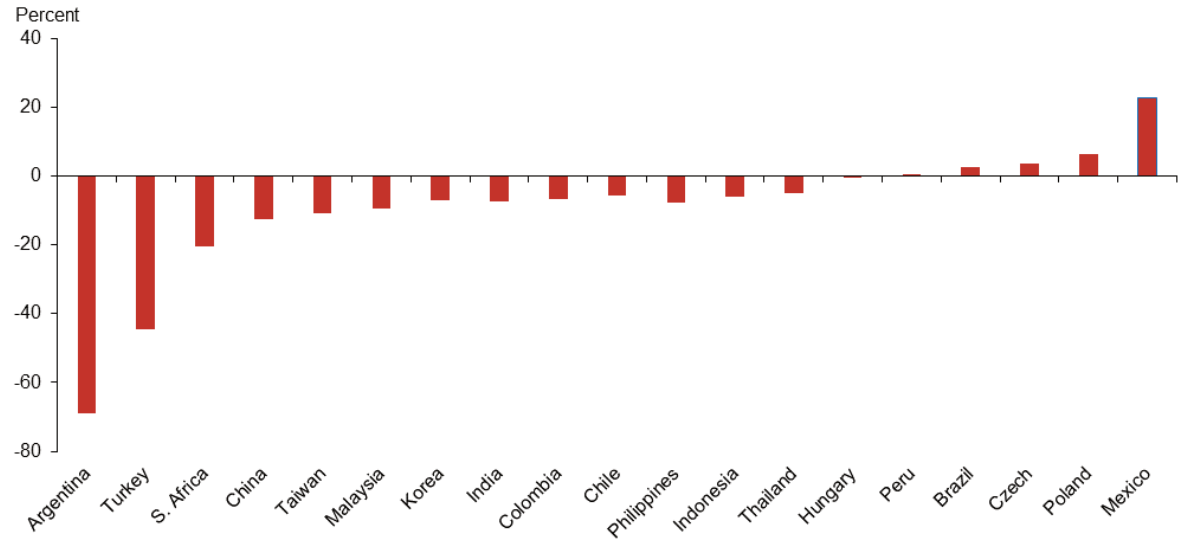
Starting from 2023, the peso's performance has been shaped by high interest rates and external economic factors such as the Fed's monetary policy of raising its interest rate to reduce the inflation experienced. The Bank of Mexico's decision to maintain historically high interest rates, such as 11.25%, has attracted capital inflows, bolstering the peso's value as shown in Figure 4. Meanwhile, the U.S. Federal Reserve's monetary tightening, which raised rates above 5%, has strengthened the dollar but also created opportunities for peso appreciation due to the interest rate differential. Consequently, the peso has appreciated significantly, outperforming many emerging-market currencies and rising by approximately 20% against the dollar since 2022 as shown in Figure 5.

Figure 4 U.S. /Mexico interest rate differential (%) from 2000 to 2024



Source: Data from FRED Economic Data DT. Louis Fed, 2024.

Figure 5 Mexican peso appreciates sharply against dollar during Fed tightening cycle

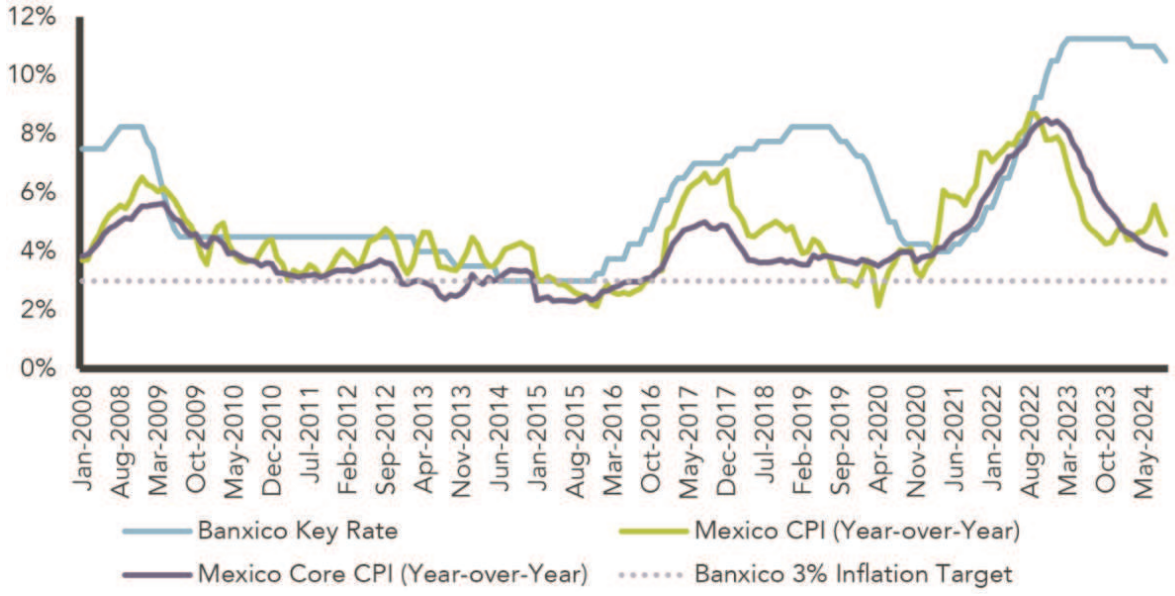


Source: Bloomberg

Inflation remains a critical factor influencing the exchange rate dynamics. In mid-2023, Mexico's general inflation rate decreased to 5.06%, but underlying inflation persisted at 6.89%, driven by rising food and basic goods prices as shown in Figure 6. In the United States, aggressive interest rate hikes aimed at curbing inflation have

strengthened the dollar, affecting trade relations. While a strong dollar enhances the competitiveness of Mexican exports, it simultaneously increases the cost of dollar-denominated imports and debt.

Figure 6 Mexico Consumer Price Index and Rates from 2008 to 2024



Source: Bloomberg.

The peso's appreciation has multifaceted implications for the Mexican economy and its trade relationship with the United States. On one hand, a strong peso reduces the competitiveness of Mexican exports (Murguía, 2023), particularly in sectors like automotive manufacturing, agro-industry, and electronics. On the other hand, it lowers the cost of imports, benefiting consumers and businesses reliant on foreign goods.

The Bank of Mexico confronts a dilemma in its monetary policy decisions. Maintaining high interest rates supports the peso and controls inflation but exacerbates challenges for export-oriented sectors. Conversely, reducing rates could stimulate exports but risk undermining the fight against inflation. This tension highlights the delicate balance required to navigate the current economic landscape.

The third quarter of 2024, marked by the intensification of the U.S. presidential election campaigns, has brought heightened volatility to the MXN/USD exchange rate. Campaign rhetoric, particularly surrounding trade and immigration policies, often generates significant market uncertainty, reflecting fears of potential disruptions to the deep economic ties between Mexico and the United States (Sabatini, 2024). Investors closely monitor candidates' positions on bilateral trade agreements, tariffs, and border policies, which can influence the peso's performance against the dollar. Historically, such electoral periods have made the peso a proxy for market sentiment about U.S.-Mexico relations, with negative rhetoric or protectionist proposals triggering depreciations (Teletrade, 2024). These dynamic underscores the sensitivity of Mexico's economy to external political developments and the ripple effects these have on currency stability.

The election of Donald Trump in 2016 highlighted how U.S. political outcomes could profoundly reshape trade relations and exchange rate dynamics. During his presidency, the renegotiation of NAFTA into the United States-Mexico-Canada Agreement (USMCA) created prolonged uncertainty, challenging the stability of cross-border trade. The imposition of tariffs on key Mexican exports, coupled with threats to close the border, strained the bilateral relationship, dampening investor confidence and introducing volatility into the peso. While the USMCA ultimately reaffirmed the importance of the partnership, the process revealed vulnerabilities in Mexico’s economic reliance on the U.S. market, especially on 2026 specifically, in 2026, which will be the first revision of the USMCA treaty (Covington , 2024). As the 2024 campaigns unfold, echoes of similar protectionist rhetoric reignite concerns, keeping the peso under pressure and raising questions about the future trajectory of one of the world’s most integrated trade partnerships.

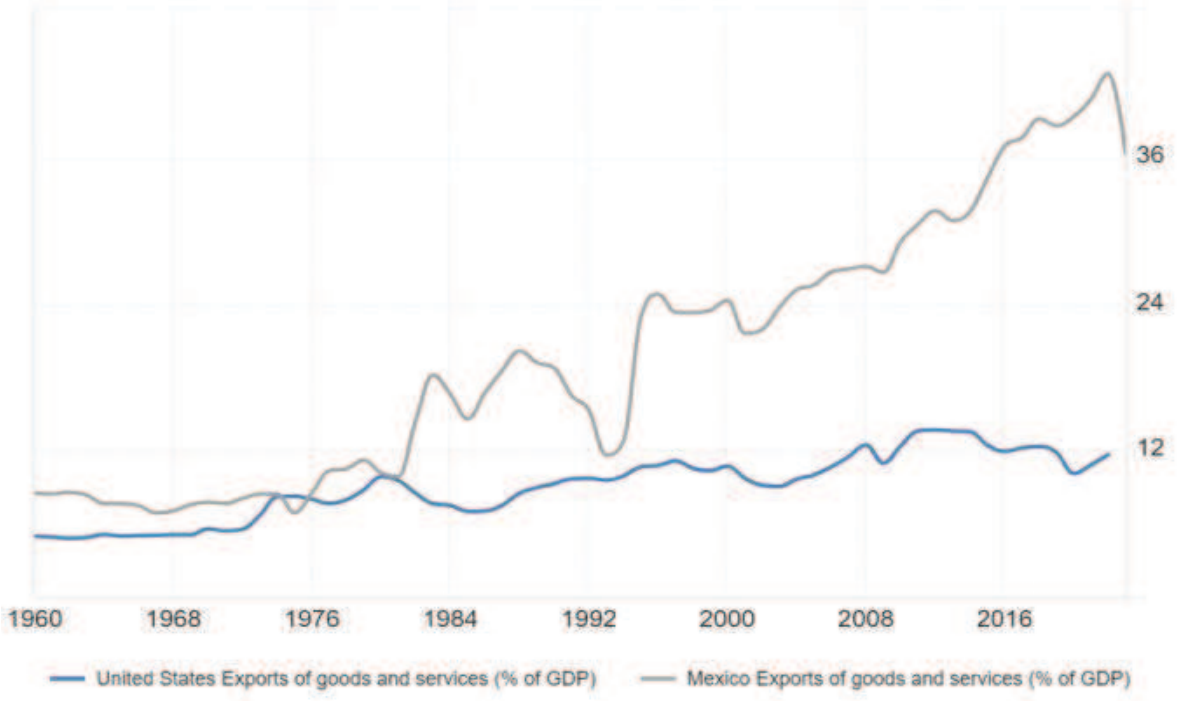
4.3 Supply Chain Challenges and Nearshoring to Mexico

Global trade networks have profoundly shaped economic progress, unlocking vast opportunities for growth and industrial innovation. However, the inherent

interconnectedness of these networks has also exposed vulnerabilities to external shocks. Over the past decade, disruptions such as the U.S.-China trade war, the COVID-19 pandemic, the Suez Canal blockage, and the Russia-Ukraine conflict have laid bare the fragility of global supply chains. These disruptions have pushed companies to reassess their traditional sourcing and production strategies, prioritizing resilience and efficiency over cost optimization. In this context, nearshoring—relocating production closer to key markets—has emerged as a promising strategy to address supply chain disruptions.

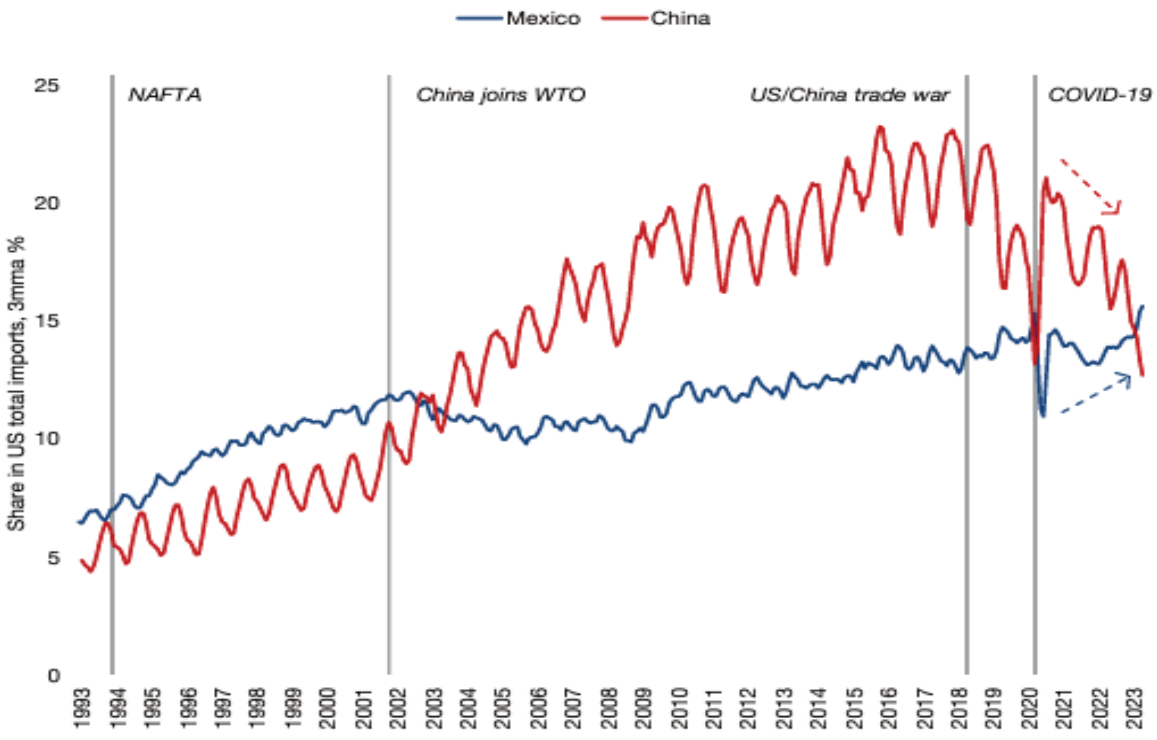
Mexico's journey as a global trade participant began in earnest with its accession to the General Agreement on Tariffs and Trade (GATT) in 1986 (Worl Trade Organization , 1997). This trajectory accelerated with the signing of the North American Free Trade Agreement (NAFTA) in 1994, fostering closer economic ties with the United States and Canada. By 2022, exports accounted for 42.6% of Mexico's GDP, compared to 12.7% in 1994 according to the Figure 7. This growth underscores the country's integration into GVCs, driven largely by its manufacturing exports to the United States, which accounted for over 80% of non-oil exports in 2023 according to chapter 1. Additionally, according to current data from the U.S. Census Bureau, Haver Analytics, and Bank of America, Mexico has been gaining market share in recent quarters, surpassing China for the first time since 2003. China's year-to-date import share dropped to 13.3% (from 17.0% in YTD 2022), while Mexico's percentage of U.S. imports increased to 15.4% from January to April 2023 (up from 13.8% in 2022) as shown in Figure 8.

Figure 7 U.S. /Mexico exports as percentage of GDP from 1960 to 2024



Source: Tradingeconomics.com

Figure 8 Share of U.S. Total imports: Mexico versus China from 1993 to 2023



Source: Bank of America, Haver, U.S. Census Bureau.

Nearshoring has gained traction as a strategic response to supply chain vulnerabilities. By relocating production to locations closer to end markets, companies can mitigate the risks inherent in long, complex, and geographically dispersed value chains (R., August 2024). For industries like automotive, electronics, and consumer goods, nearshoring to Mexico offers distinct advantages, including reduced transportation costs, shorter transit times, and quicker responsiveness to market demand (Berger, 2024).

The U.S.-Mexico economic relationship underscores the appeal of nearshoring. Mexico's proximity to the United States allows companies to integrate operations more seamlessly while capitalizing on shared time zones, cultural familiarity, and logistical efficiencies. For sensitive sectors such as medical devices and electronics, nearshoring translates into faster delivery cycles, enhancing competitiveness in dynamic markets (licence, 2024).

Mexico's geographical and economic attributes position it as a central hub in restructured GVCs (Global value chains). The USMCA, for example, has eliminated tariffs on most traded goods and streamlined customs processes (Villarreal, The United States-Mexico-Canada Agreement (USMCA) , 2024), enabling frictionless cross-border trade. Moreover, nearshoring aligns with global sustainability goals by reducing carbon emissions from long-distance transportation, an increasingly critical factor for companies striving to meet regulatory and consumer expectations for environmentally responsible practices (Reddish, 2024).

Mexico's proximity to the United States provides unparalleled logistical advantages. Efficient shipping routes reduce transportation times and costs, while access to both the Pacific and Atlantic coasts enhances Mexico's connectivity with European and Asian markets. These advantages are amplified by trade agreements like the USMCA, which ensures preferential market access and strong legal protections for intellectual property and foreign investments.

These factors have encouraged the diversification of Mexico's industrial base into high-value sectors such as medical devices, electric vehicle (EV), and green technologies. Mexico's industrial ecosystems are further supported by extensive

supply chain networks and a robust infrastructure base, including industrial parks, highways, and rail systems (JUSDA Supply Chain Management International Co, 2024).

Mexico's workforce is a cornerstone of its nearshoring appeal. With a young and skilled labor pool trained, it is well-positioned to meet the demands of high-tech industries (CO-Production International , 2024). Despite recent wage increases, labor costs in Mexico remain significantly lower than in developed economies, preserving the country's cost competitiveness (IVEMSA, 2024). Programs like IMMEX, which exempt imported raw materials from tariffs, enhance cost efficiencies further (Secretary of Economy, 2016).

The potential return of a Trump presidency raises substantial challenges for Mexico's nearshoring ambitions, particularly in light of the possibility of reviewing the United States-Mexico-Canada Agreement (USMCA) in 2026 (E. Bond, de Rosenzweig, & Spak, 2024). Former President Trump's approach to trade often emphasized protectionist policies, and his administration renegotiated NAFTA into the USMCA with stricter provisions benefiting the U.S. economy. A renewed focus on revising the agreement could impose additional restrictions, such as tighter rules of origin, increased labor enforcement measures, or new tariff structures (BDO, 2024). These changes would likely increase operational costs for Mexican exporters and complicate supply chain logistics, making Mexico less competitive as a nearshoring destination. The ripple effects of such policies could deter foreign direct investment (FDI) at a critical juncture when Mexico seeks to solidify its role in reconfigured global value chains (GVCs).

Another risk stems from the heightened scrutiny on Chinese investment in Mexico, a focal point of concern for U.S. policymakers. Over recent years, Chinese firms have increased their presence in Mexico's manufacturing, infrastructure, and logistics sectors, driven by the strategic benefits of proximity to the U.S. market (SiiLA News, 2023). However, the United States, particularly under Trump's administration, has portrayed these investments as efforts to circumvent U.S. tariffs and expand China's geopolitical influence. A future Trump presidency could intensify

pressure on Mexico to restrict Chinese investments, potentially forcing Mexican policymakers into a delicate balancing act between maintaining diplomatic relations with the U.S. and securing much-needed capital for industrial development (Vasquez, 2024). This could lead to regulatory barriers and delays for projects financed by Chinese entities, slowing Mexico's progress in building the infrastructure critical to nearshoring.

Beyond U.S. scrutiny of Chinese investments, a revisionist approach to U.S.-Mexico trade relations could amplify supply chain vulnerabilities. The U.S. might impose stricter regulations on Mexican exports containing Chinese components, which are prevalent in industries such as electronics, machinery, and renewable energy (VERZA, 2024). Such measures could disrupt production timelines, increase costs, and reduce Mexico's appeal as a manufacturing hub. Mexico's reliance on imported inputs, particularly from China, compounds these risks, as any trade restrictions could create bottlenecks and limit the ability of firms to deliver goods efficiently to U.S. markets. These dynamics underscore the interconnected nature of nearshoring, highlighting the challenges of navigating geopolitical tensions while fostering economic growth.

To address these risks, Mexico must adopt a multifaceted strategy to safeguard its nearshoring potential. Strengthening domestic supply chains and reducing dependency on Chinese imports would mitigate vulnerabilities stemming from U.S.-China trade frictions (Stevenson & Verza, 2024). Diversifying foreign investment sources, particularly through partnerships with European and Asian countries beyond China, could create a more balanced economic ecosystem. Moreover, Mexico should proactively engage with the U.S. to demonstrate its commitment to fair trade practices under the USMCA, emphasizing its strategic importance to North American competitiveness. By taking these steps, Mexico can position itself to weather potential disruptions and sustain its growth as a critical node in the evolving global supply chain landscape.

4.4 Tariffs and Trade Barriers

The period from 1994 to 2020 was a transformative era for the Mexico-U.S. trade relationship, shaped significantly by the implementation of the North American Free Trade Agreement (NAFTA). This trade accord sought to dismantle tariffs and trade barriers among Mexico, the United States, and Canada, promoting economic integration within the region. However, the path to realizing these objectives was far from linear, as various U.S. policies and actions highlighted tensions between domestic protectionism and the broader goals of liberalized trade. The tariffs and non-tariff barriers imposed during this period had profound implications for the economic interdependence of the two nations.

When NAFTA took effect in 1994, it represented a bold commitment to reducing trade barriers, fostering a seamless flow of goods, services, and investments across borders (INC., 2021). By phasing out tariffs over time, the agreement sought to create a competitive trade bloc where industries could specialize and expand. For Mexico, NAFTA offered access to the world's largest consumer market, while for the U.S., it promised lower production costs and a robust supply chain with its southern neighbor.

Despite NAFTA's provisions, the U.S. government faced supporters and detractors to full trade liberalization. Many industries, particularly agriculture and manufacturing, expressed concerns about losing market share to Mexican competitors. In response, the U.S. government implemented safeguard measures and non-tariff barriers, including stringent sanitary and phytosanitary (SPS) standards and subsidies for domestic producers (Johnson, 2017). While framed as protective actions for domestic industries, these measures undermined the spirit of NAFTA, leading to disputes that tested the resilience of the agreement.

Agriculture emerged as a flashpoint in the Mexico-U.S. trade relationship. Under NAFTA, Mexican farmers were expected to gain expanded access to the U.S. market, particularly for fruits, vegetables, and sugar (Vorhaben , 2021). However, the U.S. government, influenced by powerful agricultural lobbies, frequently enacted countervailing duties and safeguards to shield domestic producers. For example,

U.S. tariffs on Mexican sugar sparked contention, as they directly contradicted NAFTA's commitment to tariff elimination (Haley & Suarez , 1999).

The manufacturing sector also experienced friction as the U.S. imposed non-tariff barriers that complicated Mexico's access to its markets. Rules of origin requirements, designed to ensure that NAFTA's benefits applied only to goods produced within the trade bloc, often imposed significant administrative and financial burdens on Mexican exporters. Additionally, the U.S. leveraged anti-dumping measures to limit the influx of goods perceived as unfairly priced, targeting Mexican steel and cement, among other products.

The imposition of tariffs and trade barriers by the U.S. government during this period had ripple effects on the broader economic relationship between the two nations. For Mexico, these policies created obstacles to achieving its full export potential, constraining economic growth and deepening regional disparities. The uncertainty surrounding U.S. trade policies also discouraged long-term investments, particularly in sectors reliant on cross-border supply chains (Floyd, 2024).

For the U.S., these barriers had mixed outcomes. While they provided short-term relief to domestic industries, they also undermined NAFTA's goal of fostering a competitive and efficient trade bloc. Protectionist policies increased costs for American consumers and businesses reliant on Mexican imports, highlighting the interconnectedness of the two economies. Over time, these actions fueled criticism of U.S. trade practices, both domestically and internationally, questioning the country's commitment to fair and open trade.

When Barack Obama assumed the presidency in 2009, the United States was grappling with the fallout of the global financial crisis. This economic downturn tested the resilience of trade relations between Mexico and the U.S., as declining demand in the American market significantly impacted Mexican exports (Sidaoui, Manuel Ramos, & Cuadra, The global financial crisis and policy response in Mexico, 2010). Despite the crisis, Obama's administration focused on maintaining stability within the framework of the North American Free Trade Agreement (NAFTA), which had been a cornerstone of the bilateral trade relationship.

Under President Barack Obama, tariffs were not a primary tool for managing economic challenges. Instead, the administration prioritized policies aimed at economic recovery through stimulus measures, which indirectly benefited Mexico as a critical trading partner. Initiatives such as investments in clean energy and infrastructure along the U.S.-Mexico border reflected a commitment to regional integration, fostering collaboration and stability. However, these efforts did not fully address underlying tensions, such as trade imbalances and job losses in certain U.S. industries. These unresolved issues laid the groundwork for more aggressive trade measures in subsequent administrations.

One prominent example of trade-related tensions during the Obama era was the U.S.-Mexico cross-border trucking dispute. Stemming from a NAFTA provision requiring Mexican trucks to access U.S. highways by 2000, the issue remained contentious due to concerns over safety, environmental compliance, and domestic industry competitiveness (Klint W. & J. Soukup, 2010). A pilot program initiated under the Bush administration attempted to address these concerns but faced significant opposition. In 2009, the Obama administration, under pressure from labor unions and advocacy groups, terminated the program, prompting Mexico to retaliate with $2.4 billion in tariffs on U.S. goods (Congressional Research Service , 2017). These standoff strained economic relations and underscored the fragility of trade agreements when domestic political pressures conflict with international commitments. Ultimately resolved in 2011 with a revised pilot program that addressed safety and environmental standards, the dispute highlighted the ongoing challenges of balancing trade liberalization with domestic interests and the necessity of trust, regulatory alignment, and effective mechanisms for dispute resolution.

Donald Trump's election in 2016 marked a significant shift in U.S. trade policy. His administration's "America First" agenda was characterized by aggressive use of tariffs and trade barriers, which profoundly affected the Mexico-U.S. economic relationship. Trump frequently criticized NAFTA, claiming it had contributed to job losses and trade deficits in the United States, and pledged to renegotiate the agreement to prioritize American interests (Chatham House Report, 2017).

One of the most contentious moments in Trump's presidency came with the renegotiation of NAFTA into the United States-Mexico-Canada Agreement (USMCA) in 2020. While the USMCA retained many of NAFTA's original provisions, it introduced stricter rules on labor standards and automotive content, as well as a sunset clause requiring periodic review. These changes aimed to level the playing field for American workers but created uncertainty for Mexican industries, particularly in the automotive and manufacturing sectors (Villarreal, NAFTA and the United States-Mexico-Canada Agreement (USMCA) , 2020).

Trump also imposed tariffs on Mexican steel and aluminum imports in 2018 under Section 232 of the Trade Expansion Act, citing national security concerns (Bureau of Industry and Security, 2024). Mexico retaliated with tariffs on U.S. agricultural products, escalating trade tensions and disrupting supply chains (Attaché Report (GAIN), 2018). These measures disproportionately affected industries on both sides of the border.

In 2019, Trump further threatened to impose sweeping tariffs on all Mexican imports as leverage to address immigration concerns (Paletta, Miroff , & Dawsey, 2019). While these tariffs were ultimately avoided through a last-minute agreement, the episode highlighted the volatility of the trade relationship under Trump's leadership. Businesses in both countries were forced to navigate an unpredictable environment, delaying investments and reconsidering cross-border operations.

Joe Biden's presidency brought a shift in tone and strategy, with an emphasis on restoring stability and predictability to U.S. trade policy. Biden's administration sought to rebuild relationships with key trading partners, including Mexico, and to address global challenges such as climate change and supply chain resilience. While Biden's approach was less confrontational than Trump's, it did not signal a full retreat from protectionist measures.

The Biden administration maintained many of the tariffs imposed during Trump's tenure, including those on steel and aluminum, arguing that they were necessary to protect U.S. industries (White & Case , 2024). However, Biden worked to de-escalate tensions, focusing on collaboration rather than confrontation. For instance, the

administration prioritized resolving disputes under the USMCA's new enforcement mechanisms, addressing issues such as labor rights violations in Mexico while ensuring compliance with trade obligations (Office of the United States Trade Representative , 2024).

Biden also faced significant challenges related to the COVID-19 pandemic and its aftermath. The pandemic exposed vulnerabilities in global supply chains, prompting calls for reshoring and nearshoring strategies to reduce dependence on foreign suppliers. This trend presented both opportunities and challenges for Mexico, which positioned itself as a key partner for U.S. industries seeking to relocate production closer to home. While these developments strengthened bilateral ties, they also underscored the continued risk of protectionist policies that could disrupt trade flows.

As the 2024 U.S. presidential election unfolded, trade policy once again became a central issue, with Donald Trump's return to the political stage raising concerns about a potential resurgence of protectionism. Trump's campaign rhetoric included renewed threats to impose tariffs on Mexican imports, citing ongoing trade imbalances and concerns over border security. These statements created significant uncertainty for Mexican businesses, which rely on the U.S. market for over 80% of their exports as mentioned before.

If Trump were to follow through on his campaign promises, the economic implications could be severe. New tariffs on Mexican goods would disrupt supply chains, increase costs for U.S. consumers, and strain industries that depend on cross-border integration, such as automotive manufacturing and agriculture. Moreover, retaliatory measures by Mexico could further escalate tensions, harming sectors that have historically benefited from open trade, such as U.S. agriculture.

The risk of trade disruptions under a Trump presidency also raises broader questions about the future of the USMCA, especially in 2026 where the treaty will be reviewed again (P. Meltzer & Verheul, Brookings, 2024). While the agreement has provided a framework for cooperation, its sunset clause requires periodic renegotiation, creating an opportunity for more aggressive changes. Trump's emphasis on bilateralism over

multilateralism could undermine the stability of the agreement, further complicating the trade relationship.

Both countries must prioritize dialogue and collaboration to mitigate the risks of economic disruption and to foster a partnership that balances competitiveness with shared prosperity. By addressing the root causes of trade tensions and leveraging the opportunities presented by regional integration, Mexico and the United States can build a more resilient and equitable trade relationship for the future.

4.5 Risk Mitigation Strategies in Bilateral Trade

Amid a manufacturing boom and expanding infrastructure between Mexico and the United States, Mexico has become a pivotal player in nearshoring strategies for U.S. companies seeking alternatives to China (SHIPPEO, 2024). However, this progress is accompanied by risks that require careful mitigation, particularly as the United States' political landscape influences trade policies. Under President Biden, Mexico has benefited from stable, cooperative relations. However, a potential Trump presidency raises concerns about protectionism, unilateral trade measures, and shifts in the United States-Mexico-Canada Agreement (USMCA) (The Trade Agenda for the 46th U.S. President Advancing Global Economic Order?, 2021). Addressing these complexities requires robust strategies tailored to the policy approaches of both administrations.

Under President Biden's leadership, the U.S.-Mexico trade dynamic has emphasized multilateral cooperation and adherence to the provisions of the USMCA. U.S. imports from Mexico have grown significantly, reflecting the increasing integration of supply chains across the two nations (United States Trade Representative, 2024). However, challenges remain, including compliance with labor and environmental standards, addressing infrastructure deficiencies, and mitigating supply chain risks such as cargo theft and corruption.

Mexico's infrastructure expansion under President Claudia Sheinbaum has presented a unique opportunity to enhance bilateral trade. Projects such as the

Interoceanic Corridor of the Isthmus of Tehuantepec and the development of renewable energy hubs align with U.S. priorities on clean energy and efficient logistics. These initiatives could further integrate Mexican and U.S. industries, particularly in sectors like semiconductors, pharmaceuticals, and electronics (Global Business Report, 2024). To maximize these opportunities, Mexico must focus on aligning infrastructure development with U.S. demands, ensuring that energy supply, skilled labor, and transportation networks meet the expectations of North American manufacturers.

Despite its advantages, Mexico faces considerable risks, including bribery, corruption, and cargo theft. These challenges threaten supply chain stability, which is vital for U.S. companies reliant on nearshoring (FTI Consulting, 2023). Enhancing security in high-crime regions and developing anti-corruption frameworks compliant can reduce these vulnerabilities. By addressing such issues proactively, Mexico can reinforce its position as a secure and reliable trade partner for U.S. businesses.

Once, Donald Trump elected us president returns to the presidency in 2025, the trade relationship between Mexico and the U.S. could shift dramatically, marked by increased protectionism and a potential renegotiation of the USMCA. During his previous term, Trump's administration-imposed tariffs, challenged multilateral agreements, and heightened scrutiny of foreign investments, particularly from China **as previous seen in chapter x**. A resurgence of these policies would create new challenges for Mexico, necessitating preemptive measures.

One significant risk of a Trump presidency is the potential revision or withdrawal from the USMCA in 2026, which underpins duty-free trade between Mexico and the U.S. To mitigate this, Mexico must actively engage in diplomacy, emphasizing the mutual economic benefits derived from the agreement (UC San Diego, 2021). By highlighting the interconnected nature of North American supply chains, particularly in industries like automotive and agriculture, Mexico can align its interests with those of influential U.S. stakeholders. Collaboration with U.S. businesses and trade associations will be critical in advocating for the continuity of the agreement (Williams, 2024).

The risks associated with unilateral actions by the U.S. highlight the need for Mexico to diversify its trade relationships. While the U.S. remains its largest trading partner, over-reliance exposes Mexico to policy shifts and economic disruptions. Strengthening trade agreements with other regions, such as the European Union and Asia-Pacific nations, can mitigate these risks (Salcedo, 2023). By reducing dependence on U.S. markets, Mexico can create a more resilient economy capable of weathering changes in U.S. trade policy.

To prepare for potential trade restrictions or increased tariffs under a Trump administration, Mexico must invest in its domestic production capabilities. Expanding industries such as renewable energy, specialized manufacturing, and semiconductors can reduce reliance on foreign inputs and enhance competitiveness (Campos, 2024). Additionally, workforce development initiatives tailored to emerging industries will ensure that Mexico remains an attractive destination for nearshoring, regardless of U.S. political changes.

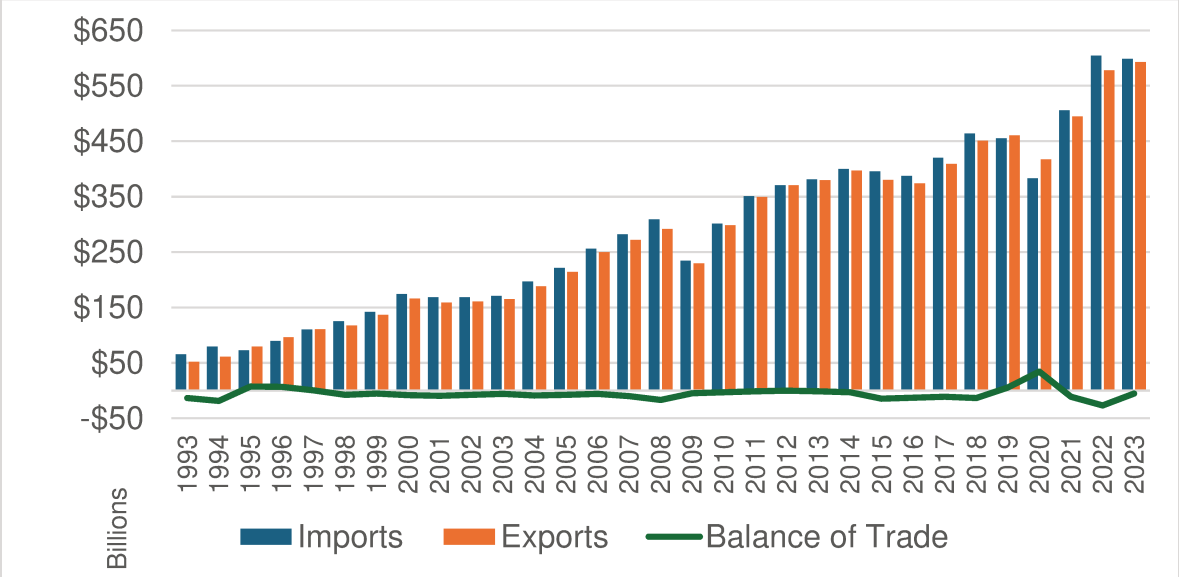
A potential Trump presidency could also intensify scrutiny of Chinese investments in Mexico, given the geopolitical tensions between the U.S. and China. Mexico must navigate this challenge by transparently managing foreign investments and aligning its trade strategies with U.S. security priorities (Inman, 2024). This could involve diversifying foreign partnerships and promoting transparency in joint ventures to avoid potential conflicts with U.S. interests.

Chapter 5: Trade Dependencies in Key Mexican Industries

5.1 Mexico's Trade Overview

Mexico's trade performance over the last three decades underscores the country's remarkable economic transformation and pivotal role in international commerce. This period is characterized by robust growth in both imports and exports, as well as notable fluctuations in the trade balance, reflecting the interplay between domestic policies, global economic shifts, and Mexico's integration into global markets. As shown in Figure 9**,** from 1993 to 2023, Mexico's trade flows demonstrated a dramatic increase in volume, underscoring its deepening ties to the global economy. Exports, a testament to Mexico's productive output and global competitiveness, surged from approximately $50 billion in 1993 to nearly $600 billion by 2023, representing a remarkable 12-fold increase over this period. Similarly, imports expanded significantly, growing from under $60 billion in 1993 to over $600 billion in the same period. These trends reflect the profound economic liberalization that Mexico embraced, beginning with the implementation of the North American Free Trade Agreement (NAFTA) in 1994, which evolved into the United States-Mexico-Canada Agreement (USMCA) in 2020.

Figure 9 Mexico International Trade between 1993 to 2023



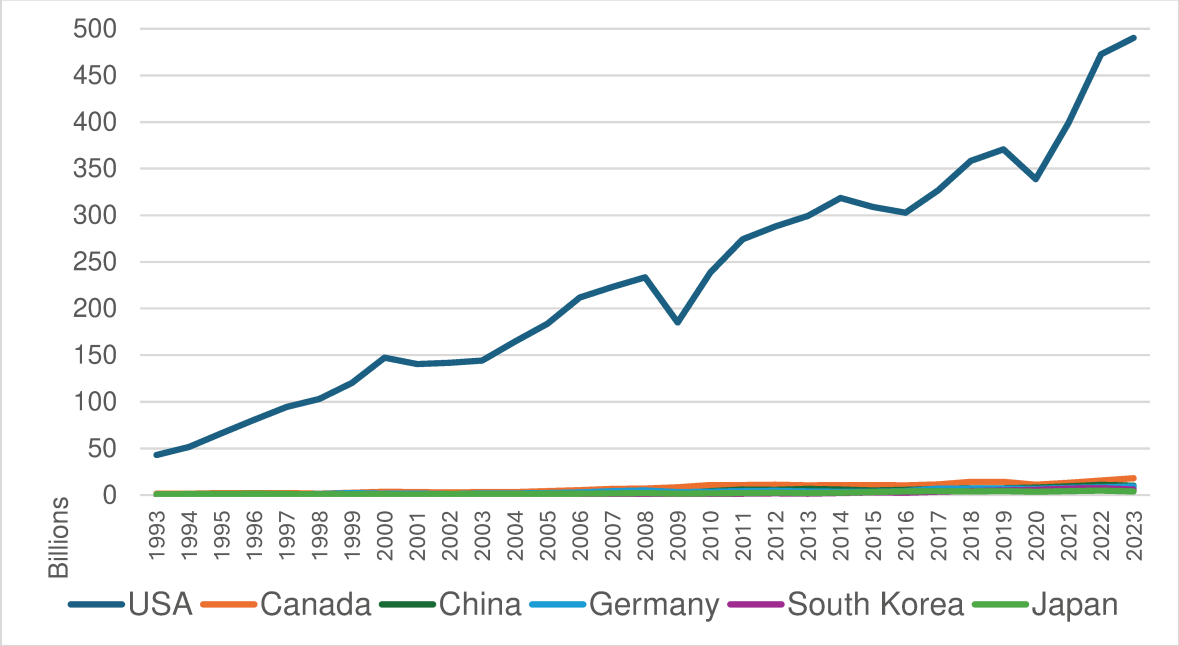
Source: Banco de Mexico; own illustration and calculations.

The NAFTA era marked a pivotal shift in Mexico's trade patterns, as the country capitalized on its comparative advantages in manufacturing, particularly in the automotive, electric and electronics sectors. Exports surged during this period, bolstered by increased market access and competitive production costs. However, despite this growth, Mexico's trade balance displayed moderate deficits due to the need for importing capital goods to fuel industrial expansion. The agreement set the foundation for Mexico’s integration into global markets, creating jobs and expanding export-driven industries.

A key feature of this era was the strengthened trade relationship with the world but specially with United States, Mexico's largest trading partner. As shown in Figure 10 from 1993 to 2023 U.S. has been the main commercial partner of Mexican exports, far ahead of other countries such as Canada, China or even Germany. Throughout these 30 years, global events have occurred that have affected trade between both nations, such as the dot.com boom that took place in 2000, going from 147.4 million to 140.5 in 2001, a decrease of almost 5%, affecting Mexican exports to the United States in subsequent years, surpassing exports from the year 2000 only until 2004 with 164.5 million. Exports after 2004 had an upward trend marking historical highs in 2008 reaching a total value of 233.5 million, however, in that same year there was another event that marked the American financial system, the financial crisis who had a profound impact on Mexico, as its economy is deeply tied to that of the United States. With U.S. demand contracting, Mexico experienced a sharp drop in exports, particularly in the automotive and manufacturing sectors, decreasing them in 2009 to 195.1 million, being 21% lower than the previous year, but with the stimulus package presented by the President of the United States Barack Obama and the rescue of the automotive sector (CBS NEWS, 2009), exports were again strengthened, generating new highs of 238.6 million in 2010. From 2010 to 2019 the trend has been upward except for 2 years that were 2015 and 2016 that had a downward trend but almost imperceptible. It was not until another global event took place that would shake the markets once again, which was the spread of covid-19. 2019 marked another historical high for Mexican exports of 370.6 million, but it was in 2020 when exports collapsed due to the covid-19 lockdown, reducing by around

9% to 338.7 million, but with President Joe Biden's stimulus plan to the American economy, it recovered again, reaching new highs of around 399 million in 2021, and this trend continued to rise until reaching highs of 490.1 million once again in 2023. This integration into the North American market laid the groundwork for the manufacturing hubs that define Mexico's economic landscape today, focusing on U.S. market.

Figure 10 Mexico Top Trade Export Partners from 1993 to 2023

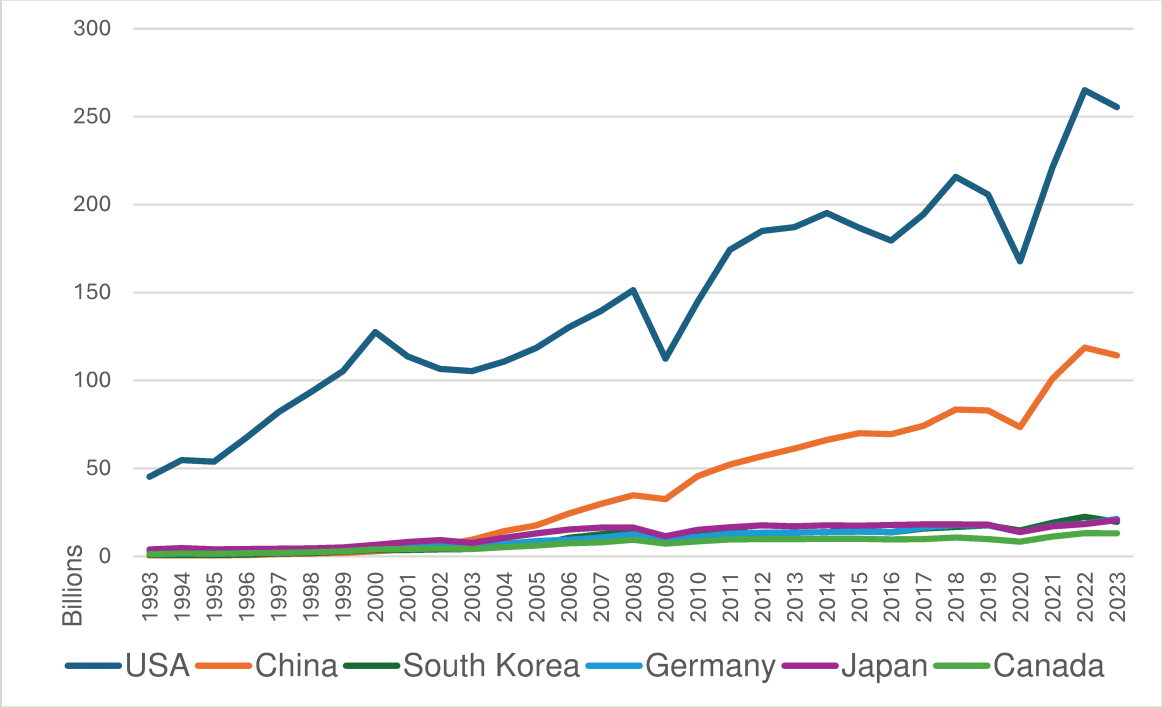


Source: Banco de Mexico; own illustration and calculations.

On the contrary, on the side of imports by Mexico, there are only 2 countries that maintain a clear upward trend, which are the United States as the main partner and China as the second partner, as shown in Figure 11, leaving the rest of the countries such as Canada, South Korea and Germany far behind. with respect to imports from the united states to Mexico, a clear upward trend is seen that has been maintained since 1993 with its respective ups and downs generated by both the dot com crisis of 2000, the financial crisis of 2008 and covid-19 that affected the world mainly in 2020, on the other hand, China since 1993 had an upward trend but this was

accentuated, leaving the rest of the countries behind with the exception of the united states, with the entry of China to the world trade organization (WTO) officially in December 2001, Mexico being the last country to vote in favor of China's accession to the WTO. Chinese imports were affected, just as American imports were affected by global events that occurred after 2001, such as the financial crisis of 2008 and the Covid-19 crisis in 2020.

Figure 11 Mexico Top Trade Imports Partners From 1993 to 2023



Source: Banco de Mexico; own illustration and calculations.

Mexico's trade performance over the past three decades reflects its significant strides toward economic integration and globalization. The country has demonstrated remarkable resilience and adaptability in the face of global events, from the dot-com crash and the 2008 financial crisis to the disruptions caused by the COVID-19 pandemic. The United States has remained Mexico's most critical trade

partner, shaping the country's economic landscape through robust export and import flows.

Simultaneously, the emergence of China as a dominant trade partner for imports has underscored the shifting dynamics of global trade and Mexico's ability to navigate complex relationships, especially with the new elected President Donald Trump (Swanson, Stevis-Gridneff , & Romer, 2024). Despite challenges, Mexico has managed to leverage its manufacturing capabilities, strategic location, and trade agreements to sustain growth and strengthen its position in global markets.

As Mexico continues to deepen its ties with key partners, particularly the United States and China, the focus on fostering trade balance and diversifying export markets will be essential. These efforts will not only bolster economic resilience but also position Mexico as a central player in the evolving global trade environment, ensuring its competitiveness and prosperity in the decades to come.

5.2 Dependency on the U.S. Market

Mexico’s economic trajectory over the past three decades has been fundamentally shaped by its relationship with the United States. As two countries bound by geographic proximity, historical ties, and robust trade agreements, the dependency of Mexico on the U.S. market has remained a pivotal force in its economic framework. From the inception of the North American Free Trade Agreement (NAFTA) in 1994 to the implementation of its successor, the United States-Mexico-Canada Agreement (USMCA) in 2020, Mexico’s reliance on the U.S. has both driven growth and exposed vulnerabilities across various industries.

The formalization of NAFTA in 1994 marked a transformative era in Mexico’s economic relationship with the U.S. The agreement eliminated trade barriers and facilitated the integration of industries, particularly manufacturing, agriculture, and energy (United States International Trade Commission Office of Economics, February/March 1997). As a result, U.S. demand became a cornerstone of Mexico’s

export-driven economy. By 2000, around 88% of Mexico's exports were destined for the U.S. (WITS World Trade Integrated Solution, s.f.), with industries such as machines and electrical equipment, vehicles and parts leading the charge, and manufactured products and food industry as second level (Castillo & J. de Vries, July 18-19, 2013).

This growth highlights the deeply intertwined nature of the U.S.-Mexico trade partnership, emphasizing its mutual benefits while simultaneously exposing Mexico's vulnerabilities arising from over-reliance on its northern neighbor.

The repercussions of such dependency could extend well beyond immediate economic turbulence. Mexico's capacity to remain an attractive destination for foreign investment could be undermined if the U.S. (Arenas, Segovia, & Aguilar Benignos, 2024) enforces more stringent provisions under the United States-Mexico-Canada Agreement (USMCA) (COVINGTON, 2024). These include elevated labor standards or stricter environmental regulations, which would inevitably raise production costs. For industries heavily reliant on the U.S. market, such as manufacturing and agriculture, these changes could erode Mexico's comparative advantage, compelling multinational companies to reassess their regional operations (Mexico cómo vamos , 2024).

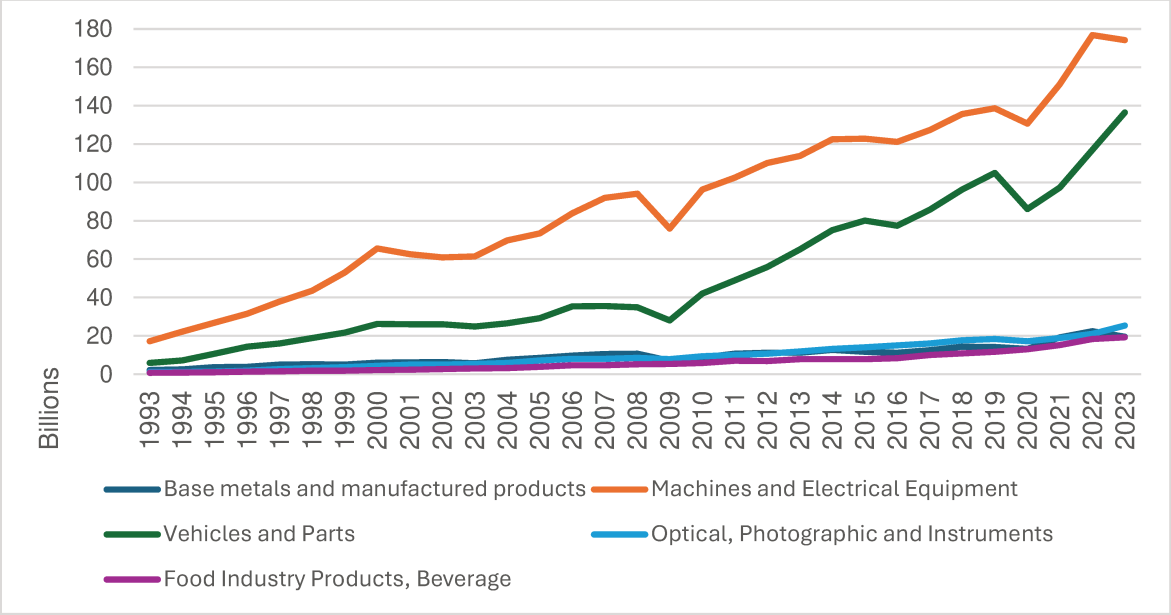
Nevertheless, U.S. policy evolution could also create strategic opportunities for Mexico. The ongoing trend of nearshoring, driven by global supply chain realignments, positions Mexico as an ideal alternative for firms relocating production from Asia. To harness these opportunities, Mexico must prioritize trade diversification, modernize its regulatory frameworks, and invest in infrastructure improvements (Coutino, April 2024). Such initiatives could strengthen its position as a reliable partner within the global value chain. However, achieving this equilibrium will require thoughtful and proactive policymaking, particularly in addressing Mexico's persistent dependency on U.S. demand as the cornerstone of its economic growth.

The automotive sector, in particular, flourished under NAFTA. U.S. automakers, incentivized by lower production costs, established extensive supply chains within

Mexico (Carreto Sanginés, Russo, & Simonazzi , 2021). Cities like Monterrey and Guadalajara emerged as industrial hubs, attracting foreign direct investment (FDI) and creating jobs (CPI , 2023). Similarly, the electronics industry witnessed exponential growth, with Mexico becoming a leading exporter of televisions and consumer electronics to the U.S. (TACNA , 2021) However, this growing dependency came at a cost, as Mexico's economic performance became intricately tied to fluctuations in U.S. consumer demand and industrial output.

The 2008 global financial crisis served as a stark reminder of this vulnerability. As the U.S. economy contracted (Casselman, 2020), Mexico's GDP shrank by 6.7% in 2009 (NU. CEPAL, 2009), marking one of its worst recessions in decades as shown in Figure 12. The downturn disproportionately impacted industries' reliance on exports, such as automotive manufacturing and electronics. This period underscored the inherent risks of over-reliance on a single market.

Figure 12 Mexico´s Top Exports to US



Source: Banco de Mexico; own illustration and calculations.

In the aftermath of the financial crisis, Mexico embarked on a gradual recovery, leveraging its trade relationship with the U.S. to regain economic stability. The

automotive industry and equipment rebounded, buoyed by strong demand and increased U.S. consumer confidence.

In 2017, growing political and economic tensions, particularly under the Trump campaign and later under his administration, prompted the renegotiation of NAFTA (Reyes & Fernández , 2017). The resulting USMCA sought to modernize trade provisions while addressing concerns about labor rights, environmental standards, and intellectual property. While the agreement provided continuity for Mexico's export-driven sectors, it also heightened scrutiny on labor practices in industries such as automotive manufacturing (Moreno-Brid J. , Gómez Tovar, Gómez Rodríguez , & Sánchez Gómez, 2021). Nevertheless, the economic interdependence between Mexico and the U.S. remained unshaken, with U.S. demand continuing to drive Mexico's industrial output, reaching a peak in 2019 specially in industries such as machine, electrical equipment and vehicles and parts, the rest such as food industry, optical instruments and base products were far behind.

The onset of the COVID-19 pandemic in 2020 posed unprecedented challenges for Mexico's economy. As the U.S. struggled with lockdowns, economic uncertainty, and a contraction in consumer spending, Mexico's export sectors faced significant disruptions. Automotive production and parts, for example, plummeted as U.S. plants temporarily shuttered and supply chain bottlenecks emerged (Bustillos, 2023). Similarly, the electronics industry faced shortages of critical components, exacerbating production delays (Sourcengine, 2022).

However, the pandemic's long-term impact on the Mexico-U.S. economic relationship extended beyond immediate disruptions. The crisis accelerated shifts in global supply chains, prompting both nations to prioritize nearshoring initiatives. U.S. companies began relocating production closer to home to reduce reliance on Asian suppliers, presenting opportunities for Mexico to strengthen its manufacturing base especially given the Biden administration's tense trade relations with China (Lopez-Vivas, 2023). This trend underscored the enduring importance of the U.S. market for Mexico's economic recovery.

As the global economy transitioned out of the pandemic, Mexico faced a dual challenge: recovering from the economic shock while adapting to evolving trade dynamics. The automotive and electronics industries regained momentum, driven by robust U.S. demand and the resumption of cross-border supply chains (Warburton, 2024). At the same time, Mexico positioned itself as a key player in the emerging trend of regionalization, leveraging its proximity to the U.S. and its established industrial base.

Nevertheless, new challenges emerged in the post-pandemic landscape. Rising geopolitical tensions, particularly between the U.S. and China, created opportunities for Mexico to capture a larger share of U.S. imports (Hanson, 2024). However, this shift also exposed infrastructure bottlenecks, labor shortages, and regulatory inefficiencies within Mexico. Additionally, debates over labor rights and environmental sustainability intensified under the USMCA framework, prompting Mexican industries to adopt more rigorous standards.

The energy sector, meanwhile, remained a focal point of contention. Mexico's policies under President Andrés Manuel López Obrador, which prioritized state control over energy resources, occasionally clashed with U.S. interests and created friction within the bilateral relationship (Rousseau, 2021). Despite these tensions, the mutual dependency between the two economies persisted, with U.S. capital and technology playing a crucial role in Mexico's energy transition efforts.

The potential return of Donald Trump to the U.S. presidency represents a significant source of uncertainty for Mexico's economic future. Trump's first term was marked by a protectionist stance that strained bilateral relations, particularly through the renegotiation of NAFTA into the USMCA (Ruxer Franklin , 2024). While the updated trade agreement ensured continuity in key industries, it also introduced stricter rules on labor, content sourcing, and environmental standards that increased compliance costs for Mexican businesses.

A second Trump presidency could revive contentious trade policies, including the threat of tariffs on Mexican exports. Trump's past rhetoric on border security and his emphasis on reducing the U.S. trade deficit suggest that Mexico could face renewed

pressure to curb its trade surplus with the U.S. (Morgenstern, 2024). Such measures would disproportionately affect industries like automotive manufacturing, which rely on seamless cross-border supply chains to maintain competitiveness.

Moreover, Trump's energy policies could exacerbate tensions with Mexico, particularly given President López Obrador's prioritization of state-owned energy enterprises (Damer-Salas, 2022). A renewed focus on U.S. energy dominance and fossil fuel exports might clash with Mexico's efforts to assert sovereignty over its energy resources. This dynamic could deter foreign investment in Mexico's energy sector, further complicating its path toward economic diversification.

Another critical risk lies in the potential escalation of immigration-related disputes. Trump's hardline approach to immigration previously led to threats of tariffs unless Mexico took steps to curb migration flows (IISS, 2024). While Mexico's compliance mitigated immediate economic repercussions, a recurrence of such pressures could strain diplomatic relations and undermine investor confidence. This uncertainty underscores the need for Mexico to fortify its economic resilience through strategic partnerships and diversification beyond the U.S. market.

5.3 Risks of Over-Dependence on U.S. Trade

Mexico's trade policy over the past three decades has demonstrated a strong inclination toward openness, allowing it to integrate into global supply chains. While its relationship with the U.S. has remained central, Mexico has diversified its sources of imports, reflecting a broader strategy to access advanced technologies, intermediate goods, and raw materials from other regions. For example, Mexico has increasingly sourced machinery and equipment from Europe and Asia, complementing its imports from the U.S. and fostering resilience in key sectors. This diversification aligns with the global trend of regionalized supply chains and mitigates risks associated with over-dependence on a single partner.

Despite these diversification efforts, Mexico's reliance on the U.S. remains pronounced, particularly in strategic industries. Over 40% of Mexico's total imports still originate from the U.S., a testament to the depth of their industrial interconnection. However, this dependence poses a significant risk, as shifts in U.S. policy or economic conditions can have immediate and far-reaching impacts on Mexico's manufacturing and industrial performance. For instance, U.S. tariffs imposed during the Trump administration disrupted supply chains and increased production costs for Mexican industries reliant on U.S. inputs. Such disruptions underscore the need for Mexico to balance its openness with more robust domestic capabilities.

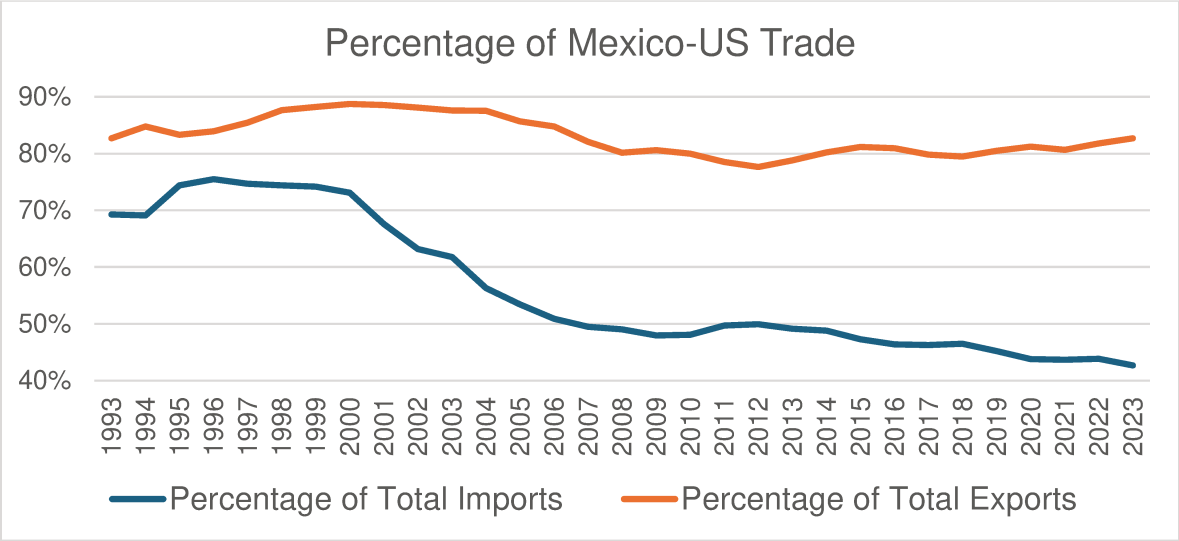
Moreover, focusing heavily on U.S. imports limits Mexico's capacity to fully benefit from emerging global markets. Asia, particularly China, has become a dominant player in global trade, offering competitive prices for raw materials and technological components. Yet, Mexico's historical and geographic ties to the U.S. have constrained its ability to pivot toward these markets effectively. This limitation not only restricts Mexico's options during periods of U.S. economic downturns but also narrows its competitive positioning in industries where Asian economies have outpaced North America.

To navigate these challenges, Mexico must enhance its trade infrastructure and policies to encourage greater integration with non-U.S. markets. Strengthening trade relations with Europe, Asia, and Latin America could reduce dependency on the U.S., fostering resilience against geopolitical and economic fluctuations. Additionally, investing in domestic industries to reduce reliance on imported high-value goods can bolster Mexico's economic autonomy while maintaining its role as a vital partner in the North American trade bloc.

According to the Figure 13, depicts the percentage of Mexico-U.S. trade provides a striking visualization of Mexico's over-dependence on the U.S. market over the past three decades. The data illustrates a consistent pattern: a high percentage of Mexico's total exports are directed to the United States, peaking at over 80% during certain periods. On the other hand, the percentage of total imports from the U.S. has

steadily declined, reflecting shifts in Mexico's trade dynamics and diversification efforts. This dual trend underscores a fundamental risk: while Mexico has become an indispensable supplier for the U.S., its economy remains disproportionately tied to U.S. demand, leaving it vulnerable to external shocks.

Figure 13 Percentage of Mexico-US Trade



Source: Banco de Mexico; own illustration and calculations.

Mexico's reliance on the U.S. for the majority of its exports creates a significant economic vulnerability. The decline in the percentage of total U.S. imports from Mexico, now hovering around 40%, suggests a gradual diversification in sourcing by U.S. industries. However, the fact that Mexico's export dependency on the U.S. remains exceedingly high highlights an asymmetry. When U.S. economic conditions falter, such as during the 2008 financial crisis or the COVID-19 pandemic, Mexico experiences pronounced economic downturns. This unbalanced relationship leaves critical industries such as automotive, agriculture, and electronics highly exposed to fluctuations in U.S. consumer demand, interest rates, and trade policies.

The decreasing proportion of Mexico's imports from the U.S., though indicative of some diversification, points to a different set of challenges. Mexico still relies on U.S. imports for high-value goods, such as machinery, vehicles, and chemicals, essential

for its industrial and manufacturing sectors. This reliance reinforces Mexico's position as a subordinate player in the North American trade ecosystem, dependent on U.S. technology and capital for maintaining its competitive edge. Additionally, the import dependency limits Mexico's ability to respond effectively to U.S. policy shifts. For example, protectionist measures or disruptions in cross-border supply chains, such as those witnessed during the Trump administration and the pandemic, create ripple effects that hamper Mexico's industrial output.

The graphic also underscores the urgency for Mexico to pursue a more balanced trade portfolio. While proximity and economic integration with the U.S. offer undeniable advantages, over-reliance on a single partner heightens systemic risks. To mitigate this, Mexico must invest in enhancing trade ties with other global markets, such as Europe, Asia, and Latin America. Programs aimed at strengthening domestic industries, improving infrastructure, and fostering innovation are critical for reducing dependency on U.S. imports. Furthermore, leveraging regional trade agreements like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) could provide Mexico with avenues to expand its export base while maintaining its role within the U.S.-centered North American trade bloc.

The data in the graphic is a compelling reminder of the challenges and opportunities embedded in Mexico's economic dependence on the U.S. While this relationship has fostered significant growth, it has also exposed structural vulnerabilities that require urgent and strategic redress. Mexico's path forward will hinge on its ability to balance its historical reliance on the U.S. with the need for greater economic resilience and diversification.

Chapter 6 Strategic Industry Insights: Trade Policies and Agreements

6.1 The Role of NAFTA/USMCA in Shaping Trade Dependencies

The implementation of the North American Free Trade Agreement (NAFTA) in 1994 and its eventual replacement by the United States-Mexico-Canada Agreement

(USMCA) in 2020 marked two defining moments in the evolution of Mexico's economic ties to the United States (E. Burfisher, Lambert, & Matheson, March 2019). These agreements played a transformative role in shaping Mexico's industrial growth, fostering trade integration, and redefining its economic identity. However, they also deepened Mexico's dependency on the U.S. market, solidifying an asymmetrical relationship that has simultaneously propelled growth and exposed vulnerabilities.

NAFTA's introduction in 1994 ushered in an era of economic liberalization and regional integration that significantly benefited Mexico's export-driven economy. By eliminating most tariffs on goods traded among Mexico, the U.S., and Canada, the agreement enabled Mexico to integrate itself deeply into North American value chains. U.S. demand for Mexican goods became the backbone of this relationship (U.S. Customer and Border Protection , 2024), particularly in industries such as automotive manufacturing, electronics, and agriculture. Within a decade of NAFTA's implementation, more than 80% of Mexico's exports were directed to the United States as mentioned in previews chapter, cementing its status as Mexico's primary trading partner.

The automotive sector became emblematic of this trade partnership. American automakers, attracted by Mexico's lower production costs and proximity to the U.S., established sprawling manufacturing operations across the country (International Trade Administration , s.f.). Cities such as Monterrey, Puebla, and Guanajuato emerged as industrial hubs, supporting complex supply chains that spanned the continent. Similarly, the electronics industry experienced exponential growth under NAFTA, with Mexico becoming a leading exporter of consumer electronics such as televisions and computers to the U.S. (Global SMT & Packaging, 2024). The agricultural sector also flourished, particularly in fresh produce exports, with products like avocados, tomatoes, and berries enjoying tariff-free access to American markets (Zahniser, Economic Research Service U.S. DEPARTMENT OF AGRICULTURE, 2023).

Despite these successes, NAFTA's benefits came with significant risks. The agreement entrenched Mexico's reliance on the U.S. as its dominant trading partner, leaving the Mexican economy highly sensitive to shifts in U.S. demand, economic cycles, and policy changes. The 2008 global financial crisis underscored these vulnerabilities. As the U.S. economy contracted, Mexican exports plummeted, particularly in sectors like automotive and electronics, where integration with American supply chains was most pronounced.

The transition from NAFTA to USMCA in 2020 reflected evolving economic realities and political pressures, particularly under the Trump administration. While USMCA retained the core principles of tariff-free trade, it introduced updated provisions aimed at addressing labor, environmental, and intellectual property concerns. For Mexico, these updates presented both opportunities and challenges, further embedding its economic dependency on the U.S.

One of the most significant changes under USMCA was the introduction of stricter labor and regional content requirements for the automotive industry. The agreement mandated that 75% of a vehicle's components must originate from North America (up from 62.5% under NAFTA) to qualify for tariff-free trade. Additionally, 40-45% of these components must be manufactured by workers earning at least $16 per hour, a provision designed to reduce labor cost disparities (Goldman, Kronby, Barutciski, & Mantle, 2018). While these rules were aimed at protecting American and Canadian jobs, they placed new pressures on Mexican manufacturers, forcing them to adapt to higher costs while maintaining their competitive edge.

Beyond the automotive sector, USMCA included provisions to enforce stricter labor protections across Mexican industries. These measures required Mexico to improve worker conditions, reform labor laws, and allow greater union representation, particularly in export-oriented industries. While these reforms were essential for addressing long-standing labor inequities, they also increased compliance costs for Mexican businesses, potentially eroding their cost advantages in global markets. Additionally, heightened environmental standards introduced under USMCA

required Mexico to align its regulatory frameworks with more stringent sustainability practices, further complicating its trade landscape.

While NAFTA and USMCA have bolstered Mexico's industrial development and positioned it as a vital partner in North America's economy, they have also deepened its dependency on the U.S. market. Today, over 80% of Mexico's exports continue to flow northward, tying its economic fortunes to the health and stability of the U.S. economy. This dependency exposes Mexico to several risks, including economic disruptions stemming from U.S. recessions, political shifts, and trade policy changes.

For instance, the Trump administration's frequent threats of tariffs and demands for renegotiating NAFTA created significant uncertainty for Mexico's export sectors. Similarly, future policy shifts under the Biden administration—or a potential return of protectionist policies under a new administration—could disrupt cross-border trade, particularly if labor and environmental standards are further tightened. These dynamics highlight the inherent vulnerabilities of relying on a single trading partner for the majority of economic activity.

At the same time, USMCA has opened avenues for Mexico to capitalize on emerging trends, such as nearshoring. Rising geopolitical tensions between the U.S. and China have prompted American companies to relocate production closer to home, creating opportunities for Mexico to solidify its role as a manufacturing hub. However, realizing these opportunities requires significant investments in infrastructure, regulatory streamlining, and workforce development to address bottlenecks that could hinder Mexico's ability to attract foreign investment.

6.2 Industries Impacts and Supply Chain Vulnerabilities

Mexico's economic integration into North American markets, facilitated through trade agreements such as NAFTA and USMCA, has fostered significant industrial growth. Key sectors, including automotive, electronics, and equipment and metal manufacturing, have benefitted from access to the U.S. market, establishing Mexico

as a crucial hub in global supply chains. However, this success has come with significant vulnerabilities, as these industries remain heavily dependent on U.S. demand, exposed to external shocks, and constrained by supply chain inefficiencies.

The automotive industry has been a cornerstone of Mexico's manufacturing sector, accounting for nearly 20% of its GDP and employing millions of workers (Campos Vázquez & Campos Ortiz, 2023). As a key participant in the North American supply chain, Mexico has become the world's seventh-largest vehicle producer and the fourth-largest exporter, with U.S. automakers relying on Mexico for cost-effective production, assembly, and supply of components. Cities such as Monterrey, Querétaro, and Puebla have emerged as industrial powerhouses, attracting billions in foreign direct investment (FDI) (Gonzalez Henrichsen, 2024).

Under NAFTA and later USMCA, the integration of the automotive supply chain flourished. Mexican factories became pivotal in producing affordable vehicles for U.S. consumers while benefiting from advancements in manufacturing technology and workforce specialization. The sector's growth has had far-reaching economic impacts, including job creation and regional development. For instance, rural communities near industrial hubs have seen increased economic activity, improving access to education, healthcare, and infrastructure.

However, the sector's success has also laid bare its vulnerabilities. Mexico's automotive industry is heavily reliant on U.S. demand, making it susceptible to economic downturns and shifts in trade policy. During the 2008 financial crisis, for example, the collapse in U.S. consumer spending triggered a sharp contraction in Mexico's vehicle production, leading to widespread layoffs and plant closures. Similarly, the COVID-19 pandemic exposed supply chain bottlenecks, as semiconductor shortages and border restrictions disrupted manufacturing.

Furthermore, stricter labor and content requirements under USMCA pose additional risks as seen in the previous chapter. While the agreement incentivizes higher wages and improved labor conditions in Mexican factories, it also increases production costs, potentially deterring investment. In a renewed era of U.S. protectionism, led

by potential political shifts such as another Trump presidency, the imposition of tariffs or tighter regulations could further destabilize the sector.

Mexico's electronics industry is a key driver of its export economy, accounting for approximately 30% of total exports (TACNA , 2022). Over the years, the country has become a global leader in the production of consumer electronics, semiconductors, and telecommunication equipment (NewZealand Trade and Enterprise (NZTE), October 2021).

Mexico's proximity to the U.S., coupled with cost advantages, has enabled the country to play a critical role in global supply chains for electronics. Factories in Mexico produce a wide range of goods, from televisions and computers to critical components for smartphones and medical devices. The trade agreements have not only facilitated technological transfer but also supported job creation and skill development in high-tech industries.

Despite its growth, the electronics sector remains highly vulnerable to supply chain disruptions and shifts in U.S. trade policies. The COVID-19 pandemic revealed the fragility of global supply chains, as shortages of microchips and other critical inputs severely disrupted production. Similarly, the ongoing geopolitical tensions between the U.S. and China have added layers of uncertainty, as Mexico faces pressure to adjust to shifting trade dynamics (Ramani, Ghosh, & S Sodhi , 2022).

Furthermore, Mexico's reliance on imported components for electronics production weakens its supply chain resilience. The lack of domestic suppliers for key inputs increases dependency on international markets, exposing the industry to price volatility and logistical delays. To mitigate these risks, Mexico must invest in developing a robust local supply chain, fostering innovation, and reducing dependency on U.S.-centric demand.

The equipment and metal manufacturing industry are another critical pillar of Mexico's export economy, providing inputs for a wide range of sectors, including automotive, aerospace, and construction. The country has leveraged its abundant

natural resources, skilled labor, and proximity to the U.S. to become a key supplier of machinery, industrial equipment, and fabricated metals.

Under NAFTA, the equipment and metal manufacturing industry benefitted from tariff-free access to the U.S. market, enabling Mexico to attract FDI and establish itself as a major production hub. U.S. companies, driven by cost advantages, have relied heavily on Mexican suppliers for components used in construction machinery, industrial tools, and specialized equipment. The sector's growth has created jobs and fostered regional economic development, particularly in northern states such as Nuevo León and Coahuila.

However, this industry faces significant challenges related to supply chain vulnerabilities and evolving trade dynamics. The heavy reliance on U.S. demand exposes Mexican manufacturers to economic cycles in the U.S., where downturns can lead to reduced orders and production cuts. Additionally, rising labor costs and stricter regulations under USMCA, including environmental standards, may impact Mexico's cost competitiveness in this sector.

The equipment and metal industry are also constrained by infrastructure bottlenecks and logistical inefficiencies. Mexico's transportation networks, particularly railways and ports, often struggle to meet the demands of high-volume exports. This increases lead times and raises costs, undermining the industry's competitiveness (Aritua, 2019). To address these issues, Mexico must prioritize investments in infrastructure, streamline regulatory frameworks, and promote sustainable practices to align with USMCA's requirements.

The interconnectedness of Mexico's industries with U.S.-centric supply chains has exposed significant vulnerabilities. Crises such as the 2008 financial downturn and the COVID-19 pandemic underscored the fragility of these linkages, as disruptions in the U.S. ripple across Mexico's economy. Semiconductor shortages, factory shutdowns, and transport delays during the pandemic highlighted the urgent need for greater supply chain resilience.

Moreover, geopolitical shifts and protectionist trends in U.S. policy amplify these risks. Mexico's reliance on U.S. demand leaves it vulnerable to sudden changes in trade agreements, tariffs, or regulatory standards. For instance, U.S. environmental and labor requirements under the USMCA have placed added pressure on Mexican manufacturers to comply with stringent standards, increasing production costs and straining smaller businesses.

6.3 Global Trade Shifts and Industry Risks

In recent decades, global trade has undergone profound transformations, driven by shifting economic policies, geopolitical tensions, and disruptive global events. These shifts have not only redefined trade patterns but also exposed industries to significant risks, particularly in regions like Mexico, where economic stability is closely tied to global supply chain dynamics. The COVID-19 pandemic, the China-U.S. trade war, and evolving U.S. policy under the Biden administration have amplified vulnerabilities in global trade systems. Additionally, the potential for a second Trump administration raises concerns about renewed protectionism. Amid these challenges, opportunities such as nearshoring offer avenues for resilience, though their realization requires deliberate policy measures and strategic planning.

The Biden administration has sought to recalibrate U.S. trade policy, emphasizing labor rights, environmental standards, and domestic manufacturing (Schropp & Center, 2024). This approach, while distinct from the overt protectionism of the Trump administration, has nonetheless presented challenges for Mexico and other trade partners. For instance, the enforcement of labor provisions under the United States-Mexico-Canada Agreement (USMCA) has compelled Mexican manufacturers to address wage disparities and workplace conditions, increasing production costs.

At the same time, Biden's emphasis on reshoring and reducing dependence on foreign production has raised concerns about U.S. demand for Mexican goods (Moser & Kelley, 2021). The administration's push for green technologies, such as

electric vehicles, presents a dual-edged sword for Mexico's automotive industry. On one hand, it opens opportunities for Mexico to position itself as a hub for EV component manufacturing. On the other hand, stricter environmental standards and the prioritization of U.S.-based production could reduce Mexico's competitive edge (González Ormerod, 2023).

The COVID-19 pandemic marked a moment in global trade, revealing the fragility of interconnected supply chains and exacerbating pre-existing vulnerabilities. Mexico, deeply embedded in North American supply chains, experienced significant disruptions as border restrictions, factory closures, and logistical delays crippled production. Industries such as automotive and electronics, heavily reliant on the seamless flow of parts and components, were particularly hard-hit.

One of the pandemic's most pronounced effects was the global semiconductor shortage, which exposed the dangers of overconcentration in supply chains. Mexico's automotive sector, for example, faced prolonged production halts due to a lack of microchips, resulting in job losses and revenue declines. This highlighted the need for diversification and greater investment in local production capabilities.

The trade war between the United States and China, which escalated during the Trump administration and has continued to influence global trade under Biden, has reshaped supply chain strategies. Tariffs on Chinese goods, coupled with restrictions on technology exports, have prompted companies to diversify their sourcing and production locations (Freund, Mattoo, Mulabdic, & Ruta , October 2023). For Mexico, this shift has created opportunities to capture manufacturing operations relocating from China, particularly in industries such as electronics, machinery, and textiles.

However, the China-U.S. trade war has also introduced risks. Rising tensions between the two largest economies have contributed to global economic uncertainty, disrupting trade flows and investment patterns. For Mexico, the challenge lies in balancing its role as a key U.S. trade partner while maintaining diversified trade relationships with other global players, including China.

Mexico's reliance on U.S. demand makes it vulnerable to policy shifts that prioritize domestic production over imports. For example, the Biden administration's emphasis on "Made in America" policies could limit Mexico's ability to capitalize on the nearshoring trend. Additionally, any escalation in the China-U.S. trade war could lead to further supply chain disruptions, complicating efforts to stabilize Mexico's manufacturing sector (The White House , June 2021).

The supply chain shortages that emerged during the pandemic have persisted, underscoring systemic weaknesses in global trade networks. Beyond semiconductors, industries have faced shortages of raw materials such as steel, aluminum, and plastics, as well as critical components like batteries and sensors. These shortages have had a cascading effect, delaying production, increasing costs, and reducing profitability across multiple sectors.

For Mexico, these challenges are particularly acute due to its integration into North American supply chains. The automotive and electronics industries, which rely heavily on just-in-time manufacturing, have been forced to adapt to supply chain disruptions by building buffer inventories or seeking alternative suppliers. However, these measures come with trade-offs, such as higher costs and reduced flexibility.

The structural reliance on global supply chains also raises concerns about future disruptions, whether due to geopolitical tensions, climate-related disasters, or policy changes. To mitigate these risks, Mexico must prioritize the development of local supply chains and invest in advanced manufacturing technologies. Strengthening domestic production capabilities not only enhances resilience but also creates opportunities for economic diversification.

The nearshoring trend has emerged as a response to the vulnerabilities exposed by global trade shifts. For Mexico, nearshoring presents a unique opportunity to attract investment and expand its role in supply chains serving North American markets. The country's geographic proximity to the U.S., coupled with competitive labor costs and existing trade agreements, positions it as a prime destination for companies seeking to relocate production from Asia.

Nearshoring could have transformative impacts on Mexico's economy, particularly in regions that have historically lagged in industrial development. By attracting new manufacturing operations, nearshoring can create jobs, stimulate regional growth, and reduce the country's dependency on imports. Sectors such as automotive, electronics, and medical devices stand to benefit the most, as companies seek to shorten supply chains and reduce transportation costs.

However, realizing the full potential of nearshoring requires addressing structural challenges. Mexico's infrastructure, including roads, railways, and ports, must be modernized to support higher volumes of trade. Additionally, the country must streamline regulatory processes and improve security to attract foreign investors. Without these measures, Mexico risks losing out to other emerging markets, such as Vietnam or India, which are also vying for nearshoring opportunities.

The possibility of a second Trump administration introduces further uncertainty into global trade dynamics. Trump's first term was characterized by aggressive protectionist policies, including tariffs on key trading partners and a renegotiation of NAFTA into USMCA. While USMCA provided continuity in North American trade, it also introduced stricter labor and environmental standards, increasing compliance costs for Mexican manufacturers.

A second Trump presidency could bring renewed pressure on Mexico to align with U.S. priorities, such as tighter immigration controls and increased security at the border. Additionally, the reimposition of tariffs or the renegotiation of trade agreements could disrupt cross-border supply chains, particularly in industries like automotive and agriculture. For Mexico, these risks underscore the importance of diversifying its trade relationships and reducing its dependency on the U. S (Estefan, 2024).

Chapter 7: Risk Mitigation Strategies for Mexico

7.1 Diversifying Trade Partners and Markets

Globalization has underscored the importance of interconnected economies while simultaneously revealing the risks of overreliance on a single trading partner. For countries like Mexico, which heavily depend on the United States as its dominant trading partner, this dependency poses significant economic vulnerabilities. While the North American Free Trade Agreement (NAFTA) and its successor, the United States-Mexico-Canada Agreement (USMCA), have brought undeniable economic benefits, they have also entrenched structural trade imbalances. As global trade dynamics evolve, Mexico must prioritize diversifying its trade partners and markets to build a more resilient and sustainable economy. Such diversification requires strategic efforts to expand global partnerships, foster regional cooperation, and strengthen domestic industries.

Mexico's economic trajectory has been largely shaped by its proximity to the United States and its integration into North American supply chains. As seen in previews chapter, more than 80% of Mexico's exports are directed toward the U.S., making it one of the most concentrated trade relationships globally. While this dependency has driven industrial growth and foreign investment, it also exposes Mexico to external shocks stemming from U.S. economic cycles, policy changes, and geopolitical decisions.

Economic disruptions caused by global events further exacerbate these risks. The COVID-19 pandemic disrupted supply chains and highlighted the fragility of Mexico's reliance on a single market. By diversifying its trade partners and markets, Mexico can mitigate the impact of such shocks and ensure greater stability in the face of global uncertainty.

Diversifying trade partners requires deliberate efforts to strengthen Mexico's engagement with regions beyond North America. Key opportunities lie in expanding

trade with Europe, Asia, and Latin America, leveraging existing agreements and exploring new partnerships.

One such opportunity is the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a trade pact that includes key economies in Asia and the Pacific. Mexico's participation in the CPTPP provides access to fast-growing markets such as Japan, Vietnam, and Australia, offering new avenues for export growth (World Economic Forum, 2023). By increasing trade with these nations, Mexico can reduce its reliance on North American markets and tap into sectors such as electronics, machinery, and agricultural products.

Similarly, the modernization of the Mexico-European Union Free Trade Agreement (MEUFTA) has opened doors for deeper economic ties with Europe (European Comission , s.f.). The agreement simplifies trade processes, reduces tariffs, and enhances access to European markets for Mexican products. Strengthening these ties not only diversifies trade but also positions Mexico as a bridge between European and American markets, attracting foreign investment and fostering economic resilience.

Latin America also holds untapped potential for Mexico's trade diversification. Strengthening regional cooperation through organizations such as the Pacific Alliance can deepen trade ties with countries like Chile, Colombia, and Peru (Alianza del Pacífico, 2025). This regional focus allows Mexico to capitalize on geographic proximity, cultural affinity, and shared economic interests while fostering greater integration within the Latin American market.

While expanding trade partners is crucial, diversification also requires addressing structural challenges within Mexico's economy to enhance its global competitiveness. Building a more robust and diversified industrial base can attract international investors and support the country's ability to compete in a wider range of markets.

Key to this effort is investment in infrastructure. Modernizing ports, railways, and highways is essential for facilitating efficient trade with global partners. By reducing

logistical bottlenecks and improving connectivity, Mexico can position itself as a reliable hub for international trade (PROTRANS, s.f.).

Additionally, fostering innovation and advancing manufacturing capabilities are critical to competing in high-value industries. Mexico has the potential to expand its presence in emerging sectors such as renewable energy, medical devices, and advanced electronics. These industries not only diversify export offerings but also align with global trends, such as the shift toward green technologies and digital transformation.

Improving labor standards and workforce training is another cornerstone of diversification. As global trade agreements increasingly incorporate labor and environmental provisions, Mexico must prioritize compliance to attract partners and retain its competitive edge. By enhancing skills in technology-driven industries, Mexico can ensure that its workforce meets the demands of a changing global economy (Patterson, 2024).

The recent shift toward nearshoring presents a unique opportunity for Mexico to diversify its trade relationships while strengthening its role within global supply chains. Companies are increasingly seeking to relocate production closer to end markets to reduce costs, minimize risks, and improve supply chain resilience. Mexico's proximity to the United States, competitive labor costs, and robust manufacturing sector make it a prime candidate for nearshoring.

However, nearshoring should not be viewed solely as an extension of Mexico's reliance on the U.S. market. Instead, it provides a platform for engaging with multinational companies and fostering trade relationships with a broader range of countries. For example, European and Asian firms seeking access to the U.S. market may choose to invest in Mexico, creating new trade linkages and diversifying economic partners.

To fully capitalize on nearshoring, Mexico must address persistent challenges such as security concerns, regulatory inefficiencies, and infrastructure gaps. By creating a more favorable business environment, Mexico can attract a wider array of investors

and ensure that nearshoring contributes to its broader diversification strategy (Alarcón, 2024).

Diversifying trade partners is not merely about reducing reliance on the United States; it is also about fostering sustainable economic growth within Mexico. Trade diversification must go hand in hand with domestic policy reforms that promote equitable development, reduce regional disparities, and strengthen local industries.

Investing in education, research, and development is critical to fostering innovation and supporting industries with high growth potential. By encouraging entrepreneurship and supporting small and medium-sized enterprises (SMEs), Mexico can expand its economic base and reduce its dependence on export-oriented sectors.

Furthermore, promoting regional development can ensure that the benefits of trade diversification are distributed more evenly across the country. Industrial hubs in northern Mexico have traditionally benefited from proximity to the U.S., but diversification offers an opportunity to stimulate growth in central and southern regions.

7.2 Strengthening Domestic Value Chains

The development and fortification of domestic value chains are critical to achieving sustainable economic growth, reducing dependency on external markets, and enhancing a nation's global competitiveness. For Mexico, whose economy is deeply integrated into global supply chains, strengthening domestic value chains represents both an opportunity and a necessity. By fostering interconnected industries within the country, Mexico can create jobs, add value to its raw materials, and reduce vulnerabilities to external shocks, such as the COVID-19 pandemic, trade disputes, and geopolitical uncertainties.

Domestic value chains represent the interconnected processes that transform raw materials into finished goods within a country’s borders. By developing robust value

chains, Mexico can retain a greater share of the economic value generated by its industries. For example, rather than exporting raw minerals or basic agricultural products, Mexico could focus on processing these materials domestically into higher-value goods, such as refined metals, packaged food products, or advanced industrial components.

Currently, many of Mexico's industries, particularly in manufacturing and agriculture, rely heavily on imported inputs and foreign technology (International Trade Administration, 2023). This dependency limits the country's ability to fully capitalize on its resources and makes its economy vulnerable to disruptions in global supply chains. Strengthening domestic value chains allows for greater control over production processes, mitigates risks from external shocks, and enhances the resilience of local industries. Furthermore, well-integrated value chains can foster innovation, support small and medium-sized enterprises (SMEs), and create high-quality employment opportunities across regions.

Building robust domestic value chains in Mexico is not without its challenges. One of the primary obstacles is the lack of infrastructure, particularly in regions outside the industrial hubs of the northern and central parts of the country. Poorly developed transportation networks, insufficient energy resources, and limited access to technology constrain the ability of businesses to connect and operate efficiently within the value chain (OECD, February 2024).

Additionally, Mexico faces structural issues such as an uneven distribution of economic activity. While states like Nuevo León and Querétaro have established themselves as centers for manufacturing and technology, southern states such as Oaxaca and Chiapas lag in industrial development. This regional disparity weakens the overall cohesiveness of domestic value chains and leaves certain areas excluded from economic benefits (The World Bank , 2022).

Another key challenge is the limited availability of skilled labor in certain industries. While Mexico boasts a young and dynamic workforce, gaps in education and training hinder the country's ability to fully leverage its human capital.

Policy and regulatory inefficiencies also pose significant hurdles. Bureaucratic red tape, unclear regulations, and inconsistent enforcement deter investment in value chain development. Businesses often face delays in obtaining permits, navigating trade rules, or accessing financing, further limiting their ability to scale operations and contribute to domestic value chains.

Strengthening Mexico's domestic value chains requires a multi-pronged approach that combines infrastructure investment, policy reforms, workforce development, and innovation.

1.- Infrastructure Development: Investment in transportation, energy, and digital infrastructure is fundamental to connecting businesses and enabling efficient production processes. Improved road and rail networks can reduce logistics costs, while expanding access to reliable and affordable energy sources can enhance productivity. Digital infrastructure, such as broadband internet and e-commerce platforms, is equally crucial for integrating SMEs into broader value chains.

2.- Fostering Regional Integration: Promoting industrial development in underrepresented regions is essential to creating a more balanced and inclusive economy. Special economic zones, industrial parks, and targeted incentives can attract investment to southern and rural areas. By integrating these regions into domestic value chains, Mexico can unlock untapped economic potential and reduce regional disparities.

3.- Strengthening SMEs: Small and medium-sized enterprises play a critical role in domestic value chains as suppliers, manufacturers, and distributors. Supporting SMEs through access to financing, technical assistance, and market linkages can enhance their capacity to participate in value-added activities. For example, programs that provide subsidies for adopting advanced machinery or training workers in digital skills can help SMEs improve their competitiveness and integrate into larger value chains.

4.- Investing in Workforce Development: Closing the skills gap is essential to strengthening value-added industries in Mexico. Investments in education,

vocational training, and partnerships with the private sector can equip workers with the technical skills needed for high-growth industries such as aerospace, renewable energy, and advanced manufacturing. Programs that link universities with industries can also promote innovation and ensure that the workforce is aligned with market demands.

5.- Promoting Innovation and Technology Transfer: Encouraging research and development (R&D) and facilitating the transfer of technology are key to advancing domestic value chains. Public-private partnerships can foster innovation by providing funding and resources for startups and research institutions. Additionally, collaboration with multinational companies can bring advanced technology and expertise to Mexico, allowing local industries to upgrade their capabilities and compete in global markets.

6.- Streamlining Regulations and Reducing Bureaucracy: Simplifying regulatory processes and improving transparency can create a more business-friendly environment for value chain development. Policies that reduce barriers to entry, streamline permitting processes, and enhance enforcement of trade rules can encourage investment and support the growth of domestic industries.

The global shift toward nearshoring presents a unique opportunity for Mexico to strengthen its domestic value chains while deepening its role in regional supply chains. As companies seek to relocate production closer to end markets, Mexico's strategic location, skilled workforce, and established industrial base position it as an attractive destination.

However, to fully capitalize on nearshoring trends, Mexico must focus on creating synergies between foreign investment and local businesses. By ensuring that domestic suppliers are integrated into the supply chains of multinational companies, Mexico can maximize the economic benefits of nearshoring. Policies that incentivize the use of local inputs, encourage knowledge transfer, and support SME participation can help strengthen domestic value chains and build long-term economic resilience.

7.3 Policy Recommendations and Strategic Adaptartion

Mexico's economic growth and resilience depend significantly on its ability to navigate domestic and international challenges while capitalizing on opportunities presented by global shifts in trade and industry. Over successive administrations, Mexico has pursued policies aimed at fostering growth, reducing inequality, and strengthening its integration into global markets. However, structural challenges—such as overdependence on the U.S. market, regional disparities, and insufficient infrastructure have persisted. As Mexico transitions toward a new presidency under Claudia Sheinbaum, the country stands at a pivotal moment to redefine its economic strategies and respond to external pressures such as the Biden administration's policies and the possibility of a second Trump presidency.

Mexico's economic trajectory has been shaped by successive governments' efforts to address pressing challenges. Under Andrés Manuel López Obrador (AMLO), the focus shifted toward reducing inequality, strengthening state control over strategic sectors, and promoting social welfare. Initiatives such as "Sembrando Vida" aimed to address rural poverty (The World Bank , 2020), while energy reforms emphasized the role of state-owned enterprises like PEMEX. However, these policies often came at the expense of private sector investment and strained relationships with international partners.

Claudia Sheinbaum's presidency offers an opportunity to build upon AMLO's foundations while addressing gaps in execution and enhancing collaboration with private and foreign stakeholders. Policies that combine state-led initiatives with market-driven approaches can help Mexico balance its social and economic goals. For example, while maintaining a focus on social welfare, Sheinbaum could prioritize infrastructure development and regulatory reforms to attract investment in high-growth sectors such as renewable energy, technology, and advanced manufacturing.

1.- Diversifying Trade Partners and Markets: Reducing Mexico's reliance on the U.S. market is critical to mitigating risks associated with political and economic shifts in its northern neighbor. Expanding trade agreements with regions such as the

European Union, Asia-Pacific, and Latin America can open new markets for Mexican exports and reduce vulnerability to U.S. policy changes. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) offers a valuable platform for Mexico to deepen its trade relations with Asian economies, particularly Japan, South Korea, and Vietnam.

Additionally, fostering closer ties with Latin American neighbors through regional cooperation frameworks like the Pacific Alliance can help Mexico leverage its geographic and cultural proximity. Policies that encourage Mexican businesses to explore non-U.S. markets such as export financing, trade missions, and technical assistance can accelerate diversification efforts.

2.- Enhancing Domestic Infrastructure and Regional Development: Addressing regional disparities is essential to creating a more balanced and inclusive economy. While industrial hubs like Monterrey and Querétaro have thrived, southern states such as Oaxaca and Chiapas continue to face underdevelopment. Infrastructure investment is crucial to integrating these regions into national and global value chains (Council Economic Institute, June 2021).

Sheinbaum's administration could prioritize large-scale infrastructure projects, such as expanding rail and port facilities, enhancing energy distribution networks, and building digital infrastructure to support e-commerce and technology industries. Public-private partnerships (PPPs) can play a key role in financing these projects, ensuring that both public and private interests are aligned.

3.- Investing in Innovation and Technology: To remain competitive in the global economy, Mexico must strengthen its innovation ecosystem. Policies that incentivize research and development (R&D), support startups, and facilitate technology transfer can help Mexico advance in high-growth sectors like renewable energy, biotechnology, and artificial intelligence.

Partnerships with universities, research institutions, and foreign companies can accelerate innovation while equipping the workforce with skills for the future.

Incentives for multinational corporations to establish R&D centers in Mexico could further enhance the country's technological capacity and global competitiveness.

4.- Strengthening Labor and Environmental Standards: As global trade shifts increasingly focus on sustainability and equitable practices; Mexico must align its policies with international expectations. The Biden administration's emphasis on labor rights and environmental standards under the USMCA underscores the need for Mexico to adapt.

Policies that promote fair wages, improved working conditions, and environmental sustainability can enhance Mexico's reputation as a reliable trade partner while addressing domestic inequalities. For example, Sheinbaum could introduce programs that support small and medium-sized enterprises (SMEs) in adopting sustainable practices and meeting international compliance standards.

5.- Leveraging Nearshoring Opportunities: The global trend toward nearshoring presents a unique opportunity for Mexico to deepen its integration into North American supply chains. Policies that enhance Mexico's attractiveness as a nearshoring destination such as reducing regulatory hurdles, offering tax incentives, and addressing infrastructure bottlenecks can help the country capture a larger share of manufacturing and investment relocating from Asia.

Ensuring that nearshoring benefits are distributed across regions is equally important. Programs that connect SMEs to multinational companies' supply chains can enhance local economic development and reduce regional inequalities.

Mexico's economic policies must also account for the external pressures posed by the Biden administration and the potential return of Donald Trump to the presidency.

The Biden administration's focus on clean energy and sustainability offers opportunities for collaboration, particularly in renewable energy projects. Mexico could align its energy policies with U.S. priorities by fostering partnerships in solar, wind, and geothermal energy development. Additionally, enhancing labor and environmental standards can strengthen Mexico's trade relationship with the U.S.

A second Trump presidency would likely bring renewed protectionism and trade tensions. Policies aimed at reducing dependency on the U.S. market, such as diversifying trade partners and strengthening domestic value chains, would be essential to mitigating risks. Mexico must also prepare for potential tariff increases or stricter enforcement of USMCA provisions, which could impact its export-driven industries.

Proactive diplomacy and open communication channels with the U.S. administration could help Mexico navigate these challenges while safeguarding its economic interests.

Finally, Mexico must enhance its institutional capacity to design and implement effective policies. Transparent governance, efficient regulatory frameworks, and robust enforcement mechanisms are critical to building investor confidence and ensuring policy success.

Sheinbaum's administration could prioritize reforms that streamline bureaucracy, improve public sector efficiency, and enhance coordination between federal, state, and local governments. Initiatives to combat corruption, promote transparency, and engage stakeholders in policy-making processes can further strengthen Mexico's institutional foundations.

Chapter 8: Conclusions

The bilateral trade relationship between Mexico and the United States represents one of the most significant examples of economic integration in the modern global economy. This partnership has spanned decades and reshaped North America into a region defined by shared prosperity, deeply interconnected industries, and mutual economic dependencies. However, as demonstrated throughout this thesis, this integration brings with it pronounced vulnerabilities, particularly for Mexico. While the country has reaped substantial benefits from its trade ties with the U.S., its reliance on this single trading partner creates risks that threaten its long-term economic resilience.

The core of this analysis lies in the examination of three critical industries: automotive manufacturing, electrical and electronics. These sectors exemplify the mutual benefits of the U.S.-Mexico trade relationship, while also illustrating the structural imbalances that define it. Mexico's automotive and electronics industries, for example, thrive on their integration into U.S. supply chains, benefiting from foreign direct investment and export-driven growth. Yet, this same reliance exposes these industries to external shocks, including changes in U.S. trade policy, supply chain disruptions, and broader global economic trends, as Mexico's export success is intricately tied to U.S. demand and the regulatory landscape under frameworks such as the USMCA.

These dynamics were starkly illuminated during the COVID-19 pandemic, which disrupted global supply chains and revealed the fragility of deeply integrated economies. The vulnerabilities experienced by Mexico's key industries underscored the need for diversification and resilience, both in terms of trade partners and domestic capabilities. Moreover, the pandemic amplified existing challenges, including regulatory uncertainties, infrastructure deficiencies, and regional disparities within Mexico's economic landscape. This thesis has shown that addressing these vulnerabilities is not only an economic imperative but also a strategic necessity for maintaining the sustainability of the U.S.-Mexico trade relationship.

While vulnerabilities exist, the evolving global trade environment presents new opportunities for Mexico to enhance its role in international markets. The rise of nearshoring, driven by businesses seeking to reduce the risks associated with distant supply chains, offers a significant advantage to Mexico. Its geographic proximity to the United States, competitive labor market, and established industrial base position it as a prime destination for companies looking to relocate production closer to North American markets. Capitalizing on this trend, however, requires deliberate investments in infrastructure, workforce development, and regulatory reform. The ability to address these internal challenges will determine whether

Mexico can fully harness the potential of nearshoring and strengthen its economic position within North America.

A central theme of this thesis is the need for Mexico to diversify its trade relationships. While the United States will undoubtedly remain its largest and most important trading partner, overreliance on a single market leaves Mexico vulnerable to policy shifts and economic fluctuations beyond its control. Expanding trade ties with regions such as Europe, Asia, and Latin America can provide new growth opportunities and mitigate risks associated with market concentration. Mexico's participation in agreements like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and its engagement with the Pacific Alliance demonstrate its commitment to diversification. However, achieving meaningful diversification will require overcoming structural barriers, such as limited export readiness in certain sectors and logistical constraints.

This thesis also highlights the importance of collaboration between Mexico and the United States in navigating shared challenges. The USMCA provides a framework for addressing issues such as labor rights, environmental standards, and trade disputes, but its success depends on transparency, trust, and mutual accountability. Both nations have a vested interest in strengthening this partnership to ensure long-term economic stability and competitiveness. By embracing innovation, fostering regional resilience, and addressing asymmetries within their trade relationship, Mexico and the U.S. can build a more balanced and equitable economic future.

In conclusion, the bilateral trade relationship between Mexico and the United States is both a source of immense opportunity and a point of considerable vulnerability. This thesis has underscored the interconnected nature of their economies, where mutual benefits are tempered by structural dependencies and external risks. The path forward requires a strategic approach that prioritizes diversification, domestic resilience, and collaborative policymaking. By addressing these challenges with foresight and determination, Mexico and the United States can transform their trade partnership into a model of sustainable and equitable economic integration. This dynamic relationship, if nurtured with care, has the potential to not only strengthen

North America but also serve as a blueprint for navigating the complexities of global trade in the 21st century.

8.1 Summary of Findings

The bilateral trade relationship between Mexico and the United States is characterized by a profound level of economic interdependence, underpinned by robust industrial collaboration in key sectors such as automotive, electronics, and agriculture. This thesis explored the vulnerabilities and dependencies inherent in this relationship, shedding light on critical structural challenges while emphasizing opportunities for enhanced resilience and sustainable growth.

Key Findings:

1. **Structural Asymmetries and Economic Dependencies:** Mexico's reliance on the United States as its dominant trading partner is a cornerstone of its economic model. Over 80% of Mexican exports are directed to the U.S., reflecting a deep integration of supply chains, particularly in manufacturing. However, this dependency exposes Mexico to external shocks such as changes in U.S. trade policies, demand fluctuations, and global disruptions. The analysis demonstrates that these structural asymmetries heighten Mexico's economic vulnerability, while also emphasizing the mutual reliance of U.S. industries on Mexican exports, particularly in sectors like automotive manufacturing.
2. **Industry-Specific Vulnerabilities:** The research highlights sector-specific risks, especially in industries that form the backbone of bilateral trade:
    - Automotive Industry: Highly integrated cross-border production networks have driven economic growth but leave both countries exposed to disruption supply. The adoption of stringent USMCA labor and content requirements has added complexity to this critical sector.

- Electronics Sector: Mexico has emerged as a significant player in electronics assembly, yet its reliance on imported components and U.S. demand underscores its limited upstream capacity and dependence on external markets.

3. **Impact of Global Disruptions:** The analysis reveals that global crises, such as the COVID-19 pandemic and geopolitical tensions (e.g., the U.S.-China trade war), have exposed the fragility of existing trade networks. Supply chain bottlenecks heightened logistical costs, and shifts in global trade priorities underscored the need for regional diversification and investment in supply chain resilience.
4. **Nearshoring Opportunities and Challenges:** Recent trends in nearshoring have positioned Mexico as an attractive destination for U.S. companies seeking to reduce reliance on distant manufacturing hubs like China. Mexico's geographic proximity, competitive labor market, and evolving industrial capacity offer significant opportunities. However, challenges such as infrastructure deficiencies, regulatory uncertainty, and political dynamics remain barriers to fully leveraging these opportunities.
5. **Role of the USMCA Framework:** The USMCA has introduced both opportunities and constraints for the bilateral trade relationship. Enhanced provisions on labor rights, environmental standards, and dispute resolution mechanisms aim to foster a more balanced and equitable trade environment. However, compliance with stricter regulations, particularly in the automotive and agricultural sectors, has created additional pressures for Mexican industries, underscoring the need for capacity-building initiatives.
6. **Policy Recommendations for Greater Resilience:** The study identifies actionable strategies to address vulnerabilities and dependencies. Key recommendations include:
    - Diversifying Mexico's export markets to reduce reliance on the U.S. and enhance resilience to external shocks.

- Strengthening domestic industries through investment in infrastructure, workforce development, and technological innovation to support inclusive and sustainable growth.
- Enhancing regional supply chain integration under the USMCA framework, focusing on high-growth sectors such as semiconductors and renewable energy.

7. **Power Asymmetries in Bilateral Trade:** The research underscores the influence of power asymmetries in shaping the bilateral trade dynamic, with the United States holding leverage due to its larger economy and diversified export base. Addressing these imbalances requires cooperative policymaking that prioritizes mutual benefits and long-term sustainability.

Broader Implications:

This thesis highlights the complexities of managing a deeply interdependent trade relationship. While economic integration fosters growth and innovation, it also necessitates a deliberate focus on addressing vulnerabilities and imbalances. The findings underscore the importance of policy interventions that promote diversification, innovation, and equitable trade practices, offering lessons not only for the U.S. and Mexico but for other trade relationships worldwide.

By synthesizing these insights, this study contributes to the broader discourse on sustainable trade, emphasizing the need for adaptive strategies to navigate the challenges of an increasingly interconnected global economy.

8.2 Further Research

This thesis has provided a comprehensive analysis of economic vulnerabilities and trade dependencies within the Mexico-U.S. bilateral relationship, but several critical areas merit further exploration to enhance understanding and inform policymaking. The following recommendations highlight five key areas for future research:

1. **Implications of a Second Trump Presidency**

   Future research should explore the potential trade and economic ramifications of a second Trump administration. A deeper analysis of protectionist policies, tariff strategies, and their effects on Mexican exports and industrial sectors could provide valuable insights. Additionally, examining the long-term implications for bilateral relations and regional trade agreements, particularly within the USMCA framework, would help policymakers prepare for potential disruptions in North American trade.

2. **Canada's Role in the Evolving USMCA Landscape**

   Investigating Canada's growing influence under the USMCA could shed light on its implications for Mexico's trade competitiveness. Comparative analyses of how Canada and Mexico leverage the trade agreement's provisions, such as labor and environmental standards, would help identify areas where Mexico may need to adapt. Furthermore, exploring Canada's strategic positioning in the automotive and energy sectors could highlight new dynamics in North American trade competition.

3. **The Rise of Chinese Investment in Mexico**

   The expanding presence of Chinese investment in Mexico, particularly in manufacturing, infrastructure, and technology, warrants closer scrutiny. Future research could examine the implications of these investments on Mexico's industrial capacity, trade diversification, and competitiveness. Additionally, analyzing the potential tensions between U.S. geopolitical interests and China's growing influence in Mexico would offer valuable perspectives on how this dynamic could affect bilateral trade relations.

4. **U.S. Economic Vulnerabilities Linked to Mexican Supply Chains**

   Research should further explore the risks that the United States faces due to its dependence on Mexican supply chains in key industries such as automotive and electronics. This includes examining how disruptions in these supply chains—whether due to regulatory changes, geopolitical tensions, or global crises—could impact U.S. industries and economic stability. Identifying

strategies to enhance supply chain resilience and regional integration would contribute to the broader discourse on sustainable trade practices.

5. **Trade Diversification Strategies for Mexico**

   While this thesis underscores Mexico's dependence on the U.S. market, future research could delve deeper into viable trade diversification strategies. Examining potential partnerships with regions such as Europe, Asia, and Latin America, as well as the challenges of reducing dependency on the U.S., would provide actionable insights. This research could also address the feasibility of Mexico leveraging Chinese investments to access alternative markets without undermining its relationship with the United States.

By addressing these areas, future research could expand on the findings of this thesis and provide critical insights into the evolving dynamics of Mexico-U.S. trade relations. A comprehensive understanding of these issues would not only inform academic discourse but also guide policymakers and industry leaders in navigating the complex interplay of opportunities and risks within this vital economic partnership.

Bibliography

Alarcón, A. (2024, September 08). *Mexico Business News*. Retrieved from https://mexicobusiness.news/mobility/news/nearshoring-mexico-held-back-infrastructure-security-cmic

Alianza del Pacífico. (2025). *Alianza del Pacífico*. Retrieved from https://alianzapacifico.net/que-es-la-alianza/

Alvarado, E. (enero-junio 2008). Poverty and Inequality in Mexico after NAFTA: Challenges, Setbacks and Implications. *Estudios Fronterizos, vol. 9, núm. 17*, pp. 73-105. Retrieved from https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0187-69612008000100003

Alvarado, J., González, E., Rangel, C., Salcedo, A., & Torre, L. (February 2022). *DISRUPTIONS IN GLOBAL SUPPLY CHAINS AND THEIR EFFECTS IN MEXICO'S REGIONAL GROSS OUTPUT IN THE CONTEXT OF THE COVID-19 PANDEMIC.* Center for Latin American Monetary Studies' (CEMLA).

Anderson , K., & Valdés, A. (2009). *Distortions to Agricultural Incentives: A Global Perspective, 1955-2007.* Washington DC: The International Bank for Reconstruction and Development / The World Bank .

Angulo, S. (2019, August 1). *Reuters*. Retrieved from https://www.reuters.com/article/economy/mexicos-dependence-on-us-demand-spells-trouble-for-weak-economy-idUSKCN1UR5LS/

Arenas, J., Segovia, D., & Aguilar Benignos, R. (2024, April 30). *APCO*. Retrieved from https://apcoworldwide.com/blog/mexicos-rise-investment-potential-in-the-post-usmca-era/

Aritua, B. (2019). *The Rail Freight Challenge for Emerging Economies.* Washington DC: World Bank Group .

Attaché Report (GAIN). (2018, June 8). *Mexico: Mexico Applies Tariffs in Retaliation to Section 232.* USDA Foreign Agricultural Service . Retrieved from https://fas.usda.gov/data/mexico-mexico-applies-tariffs-retaliation-section-232

Banco de Mexico. (n.d.). *Banco de Mexico*. Retrieved from https://www.banxico.org.mx/CuboComercioExterior/ValorDolares/seriesproducto

Bandara, P. (2024, October 30). *BU Global Development Policy Center* . Retrieved from https://www.bu.edu/gdp/2024/10/30/lessons-from-the-past-the-impact-of-nafta-on-mexicos-export-specialization-pattern/

Barrera, A., & Graham, D. (2018, March 23). *Reuters*. Retrieved from https://www.reuters.com/article/world/mexican-president-defends-energy-reform-from-leftists-attacks-idUSKBN1GZ0DQ/

BDO. (2024, November 14). *BDO*. Retrieved from https://www.bdo.com/insights/tax/tariffs-and-trade-taking-center-stage-in-new-u-s-administration

Berger, R. (2024). *Navigate the nearshoring process Why Mexico is becoming the leading destination for automotive companies.* Munich : Roland Berger GmbH.

Bondarenko, P. (2024, Octubre 28). *Britannica* . Retrieved from https://www.britannica.com/event/North-American-Free-Trade-Agreement

Boughton, J. (2012). *Tearing Down Walls: The International Monetary Fun 1990-1999: Chapter 10: Tequila Hangover: The Mexican Peso Crisis and Its Aftermath.* International Monetary Fund (IMF).

Brander, J., & Spencer, B. (1985). *Export subsidies and international market share rivalry. Journal of International Economics.* Vancouver: University of British Columbia.

Bureau of Industry and Security. (2024, November 07). *Bureau of Industry and Security*. Retrieved from https://www.bis.doc.gov/index.php/232-steel

Bustillos, M. (2023). *Trade Wars, COVID-19, USMCA, and Protectionism: Exogenous Factor Influence on U.S- Mexico Supply Chains in the Automotive Industry.*

Campos Vázquez, R., & Campos Ortiz, G. (2023, November 07). *SCIELO*. Retrieved from https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0301-70362023000200031&lng=en&nrm=iso&tlng=en

Campos, S. (2024, September 17). *Friedrich Naumann Foundation* . Retrieved from https://www.freiheit.org/mexico/industrial-policy-mexico

Cano, R., Gallardo, D., & Acosta, J. (2019). *Foreign Exchange Intervention in Inflation Targeters in Latin America, Chapter 11, Mexico: Free-Floating.* Washington, D.C.: International Monetary Fund.

Cañas, J., & Pranger, A. (2023, October 20). *Federal Reserve Bank of Dallas*. Retrieved from https://www.dallasfed.org/research/swe/2023/swe2310

Cañas, J., & Smith, C. (2021). *Federal Reserve Bank of Dallas*. Retrieved from https://www.dallasfed.org/research/swe/2021/swe2101/swe2101c

Carreto Sanginés, J., Russo, M., & Simonazzi , A. (2021). *Mexico's Automotive Industry: A Success Story? .* Institute for New Economy Thinking.

Carrillo, J. A., & García, A. (2021). The COVID-19 economic crisis in Mexico through the lens of a financial conditions index. *Latin American Economic Review*.

Casselman, B. (2020, Abril 29). *The New York Times* . Retrieved from https://www.nytimes.com/2020/04/29/business/economy/us-gdp.html

Castillo, J., & J. de Vries, G. (July 18-19, 2013). *The Domestic Content of Mexico's Maquiladora Exports: 1988-2006.*

CBS NEWS. (2009, February 17). *CBS NEWS*. Retrieved from https://www.cbsnews.com/news/obama-signs-stimulus-plan-into-law/

Chatham House Report. (2017). *America's International Role Under Donald Trump.* Chatham House, the Royal Institute of International Affairs.

Chatzky, A., McBride, J., & Aly Sergie, M. (2020, July 1). *Council on Foreign Relations*. Retrieved from https://www.cfr.org/backgrounder/naftas-economic-impact

Chivvis, C. S. (2023, December 14). *Carnegie Endowment for International Peace*. Retrieved from https://carnegieendowment.org/posts/2023/12/the-us-mexico-relationship-is-about-more-than-migration?lang=en

Chivvis, C. S., & Geaghan-Breiner, B. (2024, March 25). *Carnegie Endowment for International Place* . Retrieved from https://carnegieendowment.org/research/2024/03/mexico-in-the-emerging-world-order?lang=en

Combes, J.-L., & Guillamount, P. (2002|). Commodity Price Volatility, Vulnerability and Development . *Development Policy Review* , 25-39.

Congressional Research Service . (2017). *Congressional Research Service .* 27: April.

CO-Production International . (2024, November 13). *CO-Production International* . Retrieved from https://www.co-production.net/mexico-manufacturing-news/mexico-nearshoring-claudia-sheinbaum-usmca-fdi.html

Council Economic Institute. (June 2021). *Southern Connection Innovation Clusters in Mexico and the Bridge to Silicon Valley.* Bay Area Council Economic Institute.

Coutino, A. (April 2024). *Nearshoring and Potential Trade Triangulation.* Moody´s Analytics . Retrieved from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.moodys.com/web/en/us/site-assets/nearshoring-and-potential-trade-triangulation.pdf

Covington . (2024, October 28). *Covington* . Retrieved from https://www.cov.com/en/news-and-insights/insights/2024/10/the-impact-of-the-us-elections-on-trade-and-international-supply-chains

COVINGTON. (2024, November 25). *COVINGTON*. Retrieved from https://www.cov.com/en/news-and-insights/insights/2024/11/trade-policy-under-a-second-trump-administration-and-implications-for-business

CPI . (2023, Abril 11). *Co-Production International*. Retrieved from https://www.co-production.net/mexico-manufacturing-news/guadalajara-monterrey-mexican-cities-leading-fourth-industrial-revolution.html

Cuevas, A., Messmacher, M., & Werner, A. (2005). *Foreign Direct Investment in Mexico since the Approval of NAFTA.* Oxford University Press.

Damer-Salas, S. (2022, September 28). *OWP The organization for world peace*. Retrieved from https://theowp.org/conflicts-between-u-s-and-mexico-are-exacerbated-by-new-government-and-new-energy-policies/

Dedrick, J., Kenneth L., K., & J. Palacios, J. (1999). *Impacts of Economic Integration on the Computer Sector in Mexico and the United States.* California: Center for Research on Information Technology and Organizations (CRITO).

Duclau , J., & García, G. (2011). Mexico's Oil Price–Hedging. In *Commodity Price Volatility and Inclusive Growth in Low-Income Countries* (p. 384). Washington DC : International Monetary Fund .

E. Bond, D., de Rosenzweig, F., & Spak, G. (2024, November 24). *White&Case*. Retrieved from https://www.whitecase.com/insight-alert/north-america-prepares-2026-usmca-review-and-potential-renegotiation

E. Burfisher, M., Lambert, F., & Matheson, T. (March 2019). *NAFTA to USMCA: What is Gained?* International Monetary Fund.

Estefan, B. (2024, November 26). *Americas Quarterly*. Retrieved from https://www.americasquarterly.org/article/mexico-faces-monumental-challenges-with-trump-2-0/

European Comission . (n.d.). *European Comission* . Retrieved from https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/mexico/eu-mexico-agreement/eu-mexico-agreement-explained_en

Faccarello, G. (2015). *Comparative Advantage.* Université Panthéon-Assas: Paris, France.

Federal Ministry of Economy. (2024, 10 04). Retrieved from https://www.bmz.de/en/countries/mexico/economic-situation-49250

Flores-Macías, G. A., & Sánchez-Talanquer, M. (2019). The Political Economy of NAFTA/USMCA. *Oxford Research Encyclopedia of Latin American Politics*, 35.

Floyd, D. (2024, Abril 04). *Investopedia*. Retrieved from https://www.investopedia.com/articles/economics/08/north-american-free-trade-agreement.asp

Freund, C., Mattoo, A., Mulabdic, A., & Ruta , M. (October 2023). *Is US Trade Policy Reshaping Global Supply Chains?* World Bank Group .

FTI Consulting. (2023). *FTI Consulting*. Retrieved from https://www.fticonsulting.com/australia/insights/articles/nearshoring-mexico-where-opportunities

Garcia, S., Saucedo, E., & Velazco, A. (2018). The effects of oil prices on the spot exchange rate (MXN/USD) a VAR analysis for Mexico from 1991 to 2017. *Análisis económico*, 33(84), 33-56.

Gerber, J. (2024, August 27). *Baker Institute for Public Policy*. Retrieved from https://www.bakerinstitute.org/research/exploring-slow-growth-mexico

Global Business Report. (2024). *MEXICO CHEMICALS 2024.* Global Business Reports (GBR) .

Global Policy Watch. (2024, October 29). *Global Policy Watch*. Retrieved from https://www.globalpolicywatch.com/2024/10/the-impact-of-the-u-s-elections-on-trade-and-international-supply-chains/

Global SMT & Packaging. (2024, August 15). *Global SMT & Packaging* . Retrieved from https://www.globalsmt.net/articles-and-papers/mexico-a-preferred-commercial-and-manufacturing-partner-for-the-united-states/

Goldman, J., Kronby, M., Barutciski, M., & Mantle, J. (2018, November 22). *BLG Canada´s Law Firm*. Retrieved from https://www.blg.com/en/insights/2018/11/usmca-automotive-rules-of-origin

Gonzalez Henrichsen, J. (2024, August 29). *Forbes*. Retrieved from https://www.forbes.com/councils/forbesbusinesscouncil/2024/08/29/the-rise-of-automotive-manufacturing-in-mexico/

González Ormerod, A. (2023, August 2). *Rest of World Reporting Global Tech Stories* . Retrieved from https://restofworld.org/2023/newsletter-latin-america-mexico-ev-manufacturing-hub/

Government of Mexico. (n.d.). *Statistical information on foreign direct investment*. Retrieved from https://datos.gob.mx/busca/dataset/informacion-estadistica-de-la-inversion-extranjera-directa

Grimwade, N. (2000). *International Trade: New Patterns and Policy Perspectives.* Routledge.

Gurría, J. A. (2000). Mexico Recent Developments, Structural Reforms, and Future Challenges. *Finance and Development*, vol 37(1), 23.

Haley, S., & Suarez , N. (1999). *U.S.-Mexico Sweetener Trade Mired in Dispute.* Economic Research Service/USDA.

Hanson, I. (2024, October 21). *GTR Global Trade Review*. Retrieved from https://www.gtreview.com/magazine/the-supply-chain-issue-2024/is-the-us-china-trade-war-driving-manufacturers-to-mexico/

Heckscher, E. F., & Ohlin, B. (1991). *Heckscher-Ohlin Trade Theory.* London England: The MIT Press.

IISS. (2024, February). *IISS*. Retrieved from https://www.iiss.org/publications/strategic-comments/2024/01/the-immigration-issue-for-mexico-and-the-united-states/

INC. (2021, January 5). *INC.* Retrieved from https://www.inc.com/encyclopedia/north-american-free-trade-agreement-nafta.html#:~:text=Before%20NAFTA%2C%20tariffs%20of%2030,U.S.%20duties%20on%20Mexican%20products.

Inman, P. (2024, November 26). *The Guardian* . Retrieved from https://www.theguardian.com/business/2024/nov/26/trump-tariffs-china-mexico-canada

Internal Monetary Fund . (2023, November). *MEXICO 2023 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT .* Washington, D.C. : (IMF Country Report No. 23/356).

International TRADE Administration . (n.d.). *Department of Commerce* . Retrieved from https://www.trade.gov/usmca-overview

International Trade Administration . (n.d.). *International Trade Administration* . Retrieved from https://www.trade.gov/usmca-auto-report

International Trade Administration. (2023, November 04). *International Trade Administration*. Retrieved from https://www.trade.gov/knowledge-product/exporting-mexico-market-overview

International Trade Administration. (2023, November 05). *International Trade Administration*. Retrieved from https://www.trade.gov/country-commercial-guides/mexico-trade-agreements

International Trade Administration. (2023, November 04). *International Trade Administration*. Retrieved from https://www.trade.gov/country-commercial-guides/mexico-advanced-manufacturing

IVEMSA. (2024, January 30). *IVEMSA*. Retrieved from https://www.ivemsa.com/mexico-labor-rise-minimum-wage-affects-manufacturers/

Johnson, R. (2017). *Congressional Research Service .* Congressional Research Service.

JUSDA Supply Chain Management International Co. (2024, October 11). *JUSDA* . Retrieved from https://www.jusdaglobal.com/en/article/key-supply-chain-developments-mexico-2025/

Kalter, E., & Ribas, A. (1999). *The 1994 Mexican Economic Crisis: The Role of Government Expenditure and Relative Prices.* International Monetary Fund .

Klint W., A., & J. Soukup, B. (2010). Obama's first trade war: The US-Mexico cross-border trucking dispute and the implications of strategic cross-sector retaliation on US compliance under NAFTA. *Berkeley Journal of International Law*, Vol. 28, p. 313.

krugman, p. (1979). *Increasing returns, monopolistic competition, and international trade. Journal of International Economics.* New Haven: Yale University.

L. O'Sullivan, M. (2022, February 28). *Brookings* . Retrieved from https://www.brookings.edu/articles/mexicos-energy-reforms-a-blow-to-realizing-the-most-competitive-and-dynamic-region-in-the-world/

Latinometrics . (2024, Jun 06). *Latinometrics*. Retrieved from https://latinometrics.substack.com/p/deep-dive-the-worlds-largest-trade

Library of Congress. (n.d.). *Library of Congress*. Retrieved from https://guides.loc.gov/latinx-civil-rights/bracero-program#:~:text=An%20executive%20order%20called%20the,on%20short%2Dterm%20labor%20contracts.

licence, T. b. (2024, November 1). *Infrastructure Investor* . Retrieved from https://www.infrastructureinvestor.com/mexico-seeks-to-capitalise-on-nearshoring-bonanza/

Lopez-Vivas, L. (2023). *Nearshoring in Mexico: Mirage or the real deal?* Puteaux – France : AXA Investment Managers 2023.

M. Loser, M., & Kalter, M. (1992). Mexico. The Strategy to Achieve Sustained Economic Growth. International Monetary Fund.

Magnusson, L. (1994). *Eli Heckscher and Mercantilism An Introduction.* Uppsala universitet.

Malaver-Vojvodic, M. (2017). *Measuring the impact of president donald trump's tweets on the mexican peso/us dollar exchange rate.*

McNeece , J. (September 2023). *President Biden's Industrial Policy and Prospects for North American Regionalization.* The North American Competitiveness Working Group.

Meltzer, J. P., Wayne, E., & Marroquín Bitar, D. (2023, July 19). *Brookings* . Retrieved from https://www.brookings.edu/articles/usmca-at-3-reflecting-on-impact-and-charting-the-future/

Mexico cómo vamos . (2024, November 4). *México cómo vamos*. Retrieved from https://mexicocomovamos.mx/publicaciones/2024/11/what-challenges-does-mexico-face-with-the-new-u-s-administration/

Moreno-Brid, J. C., Gómez Tovar, R., Gómez Rodríguez , L., & Sánchez Gómez, J. (2021). *Trade and decent work in Mexico's automobile sector: The road*

travelled and the uncharted territory ahead. International Labour Organization.

Moreno-Brid, J., Gómez Tovar, R., Gómez Rodríguez , L., & Sánchez Gómez, J. (2021). *Trade and decent work in Mexico's automobile sector:.*

Moreno-Brid, J., Pérez-Benítez, N., & J. Villarreal, H. (2016). *Austerity in Mexico: Economic impacts and unpleasant choices ahead.* World Economic Review, 7, 56-68.

Morgenstern, S. (2024, December 31). *The Conversation*. Retrieved from https://theconversation.com/faced-with-trumps-tariffs-and-crackdowns-on-migration-and-narcotrafficking-mexico-is-weighing-retaliatory-options-244704

Morris, B. E. (2024, September 25). *Cronkite Borderlands Project*. Retrieved from https://cronkite-asu-edu.translate.goog/projects/buffett/chiapas/nafta-an-empty-basket-for-farmers-in-southern-mexico/?_x_tr_sl=en&_x_tr_tl=es&_x_tr_hl=es-419&_x_tr_pto=sc

Moser, H., & Kelley, M. (2021). *Reshoring iniciative Bringing Manufacturing Back Home* . Retrieved from https://reshorenow.org/blog/reshoring-initiative-2021-data-report/

Murguía, F. (2023, July 12). *Mexico Business News* . Retrieved from https://mexicobusiness.news/ecommerce/news/how-exporters-can-battle-against-strengthened-peso

NAPS. (n.d.). *North America Product Sharing* . Retrieved from https://napsintl.com/mexico-manufacturing-news/history-maquiladora-industry/

NewZealand Trade and Enterprise (NZTE). (2021). *MANUFACTURING IN MEXICO SECTOR OVERVIEW.* New Zealand : NewZealand Trade and Enterprise (NZTE).

NewZealand Trade and Enterprise (NZTE). (October 2021). *MANUFACTURING IN MEXICO SECTOR OVERVIEW.* NewZealand : NewZealand Trade and Enterprise (NZTE).

NOVALINK. (2021, September 8). *NOVALINK*. Retrieved from https://novalinkmx.com/2021/09/08/immex-program/

NOVALINK. (2024, May 23). *NOVALINK*. Retrieved from https://novalinkmx.com/2024/05/23/mexicos-industrial-manufacturing-sector-2/

NU. CEPAL. (2009). *Preliminary Overview of the Economies of Latin America and the Caribbean.* ECLAC.

OECD. (February 2024). *OECD Economic Surveys MEXICO.* OECD .

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE . (2022). *REPORT TO CONGRESS ON THE OPERATION OF THE UNITED STATES-MEXICO-CANADA AGREEMENT WITH RESPECT TO TRADE IN AUTOMOTIVE GOODS .* OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE .

Office of the United States Trade Representative . (2024, September 4). *Office of the United States Trade Representative* . Retrieved from https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2024/september/fact-sheet-usmca-rapid-response-mechanism-delivers-workers

P. Meltzer , J., & Verheul, S. (2024, March 6). *Brookings*. Retrieved from https://www.brookings.edu/articles/usmca-review-upcoming-elections-and-a-path-forward/

P. Meltzer, J., Wayne, E., & Marroquín Bitar, D. (2023, July 19). *Brookings* . Retrieved from https://www.brookings.edu/articles/usmca-at-3-reflecting-on-impact-and-charting-the-future/

Paletta, D., Miroff , N., & Dawsey, J. (2019, May 30). *The Texas Tribune*. Retrieved from https://www.texastribune.org/2019/05/30/trump-threatens-mexico-tariffs-central-american-migrants-cross-border/

Patterson, T. (2024, January 30). *VISIGISTICS* . Retrieved from https://www.visigistics.com/resources/major-industries-in-mexico-an-overview-of-industries-innovation-and-growth

Peters, E. D. (2005). *The implications of China's entry into the WTO for Mexico .* Berlin: Heinrich Böll Foundation.

PRODENSA. (2024). *PRODENSA*. Retrieved from https://www.prodensa.com/insights/blog/manufacturing-in-mexico-the-ultimate-site-selection-guide

PROTRANS. (n.d.). *PROTRANS*. Retrieved from https://protrans.com/logistics-in-mexico-infrastructure-investments/

R, C., R, G., & A. Sectoral, S. (2023, Jan 2). supply and demand shocks during COVID-19: Evidence from Mexico. *Latin American Journal of Central Banking*. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC9805904/

R., D.-F. (August 2024). *Nearshoring in Mexico: Navigating Expectations and Realities of the Reconfiguration of Global Value Chains.* Kiel, Hamburg: ZBW - Leibniz Information Centre for Economics, .

Ramani, V., Ghosh, D., & S Sodhi , M. (2022, June 29). *National Library of Medicine* . Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC9363154/

Reddish, G. (2024, August 1). *Baxter Freight*. Retrieved from https://baxterfreight.com/the-impact-nearshoring-and-reshoring-has-on-your-carbon-footprint/

Reyes, M., & Fernández , R. (2017). *NAFTA´s impact on US-Mexican border security: drug, trade and migration.* Retrieved from NAFTA´s impact on US-Mexican border security: drug, trade and migration

Ribando Seelke, C., Ratner, M., Villarreal , M., & Brown , P. (September 28, 2015). *Mexico's Oil and Gas Sector: Background, Reform Efforts, and Implications for the United States.* Congressional Research Service.

Romero, I., & López Cabrera, J. (2024, July 16). *Baker Institute for Public Policy*. Retrieved from https://www.bakerinstitute.org/research/nearshoring-mexico-seizing-opportunities-and-facing-challenges

Rosenthal-Kay, J. (2023). *Introduction to International Trade.* Chicago: University of Chicago.

Rousseau, I. (2021). *Mexico's Energy Policies During the Presidency of Andrés Manuel López Obrador Sovereignty and Security.* Paris cedex.

Ruxer Franklin , A. (2024, December 20). *Rice University*. Retrieved from https://news.rice.edu/news/2024/mexicos-relationship-us-and-incoming-trump-administration-examined-baker-institute

Sabatini, C. (2024 , November 1). *Chatham House* . Retrieved from https://www.chathamhouse.org/2024/10/us-election-rhetoric-migration-undermines-washingtons-soft-power-latin-america

Sadovi, M. W. (2024, October 15). *CFODIVE*. Retrieved from https://www.cfodive.com/news/companies-shift-nearshoring-mexico-supplychains/729937/#:~:text=Mexico%20tops%20the%20countries%20poised,for%20nearshoring%20in%20the%20Americas.

Salcedo, M.-J. (2023, June 09). *Friedrich Naumann Foundation*. Retrieved from https://www.freiheit.org/mexico/future-nearshoring-and-trade-between-european-union-and-mexico

Saucedo, E., Ozuna Jr, T., & Zamora, H. (2020). The efect of FDI on low and high-skilled employment and wages in Mexico: a study for the manufacture and service sectors. *Journal for Labour Market Research*, 15. Retrieved from file:///C:/Users/EduardoUrb/Downloads/s12651-020-00273-x.pdf

Schropp, S., & Center, M. (2024, June 19). *WITA Washington International Trade Association*. Retrieved from https://www.wita.org/atp-research/trade-biden/

Schumacher, R. (2012). *Free Trade and Absolute and Comparative Advantage.* Potsdam : Universitätsverlag Potsdam .

Secretary of Economy. (2016, January 11). *Mexico Government*. Retrieved from https://www.gob.mx/se/acciones-y-programas/industry?idiom=en

SHIPPEO. (2024, March 11). *SHIPPEO*. Retrieved from https://www.shippeo.com/blog/the-nearshoring-advantage-real-time-visibility-empowers-mexicos-supply-chains

Shirk, D. A. (2018). *US-Mexico Relations in an Age of Uncertainty.* University of San Diego, US: Latin America Research Review .

Sidaoui, J., Manuel Ramos, F., & Cuadra, G. (2010). The global financial crisis and policy response in Mexico. *BIS papers*, 54, 279-298.

Sidaoui, J., Ramos Francia, M., & Cuadra, G. (2010). *The global financial crisis and policy response in Mexico.* BIS papers, 54, 279-298.

Siddiqui, K. (2018). David Ricardo's comparative advantage and developing countries: Myth and reality. International Critical Thought. 426-452.

SiiLA News. (2023, August 22). *SiiLA News*. Retrieved from https://siila.com/news/nearshoring-mexico-three-years-chinese-companies-multiply-occupancy-five-fold/6480/lang/en

Sourcengine. (2022, December 1). *Sourcengine*. Retrieved from https://www.sourcengine.com/blog/electronic-component-shortages-update?srsltid=AfmBOoo7INBlhYwgUkGOHCls8Dajxd4lp-bK-mkPOj717MbtVegPDUfd

Stevenson, M., & Verza, M. (2024, November 23). *AP News*. Retrieved from https://apnews.com/article/mexico-us-canada-free-trade-agreement-fa29352ff219a4ab76a8f158d72d2651

Stringer, T., & Ramírez-Melgarejo, M. (2023, August 05). *Findings* . Retrieved from https://findingspress.org/article/91272-nearshoring-to-mexico-and-us-supply-chain-resilience-as-a-response-to-the-covid-19-pandemic

Sturgeon, N. (2021). *The Wealth of Nations in the Twenty-First Century.* Global Ethical Finance iniciative .

Swanson, A., Stevis-Gridneff , M., & Romer, S. (2024, November 25). *The New York Times* . Retrieved from https://www.nytimes.com/2024/11/25/business/economy/trump-tariffs-canada-mexico-china.html

TACNA . (2021, October 21). *TACNA* . Retrieved from https://tacna.net/the-growing-electronics-industry-in-mexico/

TACNA . (2022, March 17). Retrieved from https://tacna.net/the-top-5-manufacturing-sectors-in-mexico/

Teichman, J. A. (2001). *The Politics of Freeing Markets in Latin America: Chile, Argentina, and Mexico.* North Carolina : Univ of North Carolina Press.

Teletrade. (2024, October 28). Retrieved from https://www.teletrade.org/analytics/market-analysis/market-news/4005918

The Business Year . (2024, October 20). *The Business Year*. Retrieved from https://thebusinessyear.com/article/life-after-obrador-mexico-2024/?srsltid=AfmBOoqXNsdnp0rU09p6w2vZFzp80utraWlx9vYafKUvmTljyAj77gaa

The CFO. (2024, June 5). *The CFO*. Retrieved from https://the-cfo.io/2024/06/05/mexico-president-business-impact/

The GlobaLEconomy. (2024). Retrieved from The GlobaLEconomy: https://www.theglobaleconomy.com/Mexico/GDP_current_USD/

The Nearshore Company. (2023, June 05). *The Nearshore Company*. Retrieved from https://www.thenearshorecompany.com/5-well-known-us-companies-succeeding-in-mexico/

(2021). *The Trade Agenda for the 46th U.S. President Advancing Global Economic Order?* Washington, DC: Konrad-Adenauer-Stiftung USA. Retrieved from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.kas.de/documents/283221/283270/Trade+Agenda+for+the+46th+US+President.pdf/03611238-05a0-daf5-ccd0-fa4820c0efc2?version=1.0&t=1610727921462

The White House . (June 2021). *BUILDING RESILIENT SUPPLY CHAINS, REVITALIZING AMERICAN MANUFACTURING, AND FOSTERING BROAD-BASED GROWTH.* The White House Washington .

The World Bank . (2020). *INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT .* The World Bank .

The World Bank . (2022). *Productivity Growth in Mexico .* The World Bank .

The World Trade Report 2021. (2021). *The role of trade in economic resilience.* the WTO's World Trade.

Tordjman, K. L., León, E., McAdoo, M., Pulido, M., & Thiebaud, F.-X. (2024, September 05). *BCG*. Retrieved from https://www.bcg.com/publications/2024/shifting-dynamics-of-nearshoring-in-mexico

U.S. Customer and Border Protection . (2024, December 17). *U.S. Customer and Border Protection* . Retrieved from https://www.cbp.gov/trade/nafta/guide-customs-procedures/description-nafta

U.S. DEPARTMENT of STATE. (2024). *U.S. DEPARTMENT of STATE*. Retrieved from https://www.state.gov/reports/2024-investment-climate-statements/mexico/

U.S. Embassy. (2014). *US Department of State. "2014 Investment Climate Statement.".* Mexico City : Economic Counselor U.S. Embassy, Mexico City .

UC San Diego. (2021). *U.S.-MEXICO FORUM 2025.* School of Global Policy and Strategy at the University of California San Diego .

UNITED NATIONS. (2013). *MEXICO'S AGRICULTURE DEVELOPMENT: Perspectives and outlook.* Geneva 10, Switzerland.: UNITED NATIONS.

United Nations Development Programme . (2011). *TOWARDS HUMAN RESILIENCE: Sustaining MDG Progress in an age of economic uncertainty.* New York.

United States International Trade Commission Office of Economics. (February/March 1997). *Country and Regional Developments.* Washington DC: USITC Publication.

United States Trade Representative. (2024). *2024 Trade Policy Agenda and 2023 Annual Report .* United States Trade Representative.

Valenzuela, P. (2016). *Mexico´s Reforms and the Prospects for Growth.* Wilson Center Mexico Institute.

Vasquez, A. (2024, November 23). *BNN Blomberg*. Retrieved from https://www.bnnbloomberg.ca/investing/commodities/2024/11/23/mexico-looks-past-trump-threats-with-27-billion-port-expansion/

Vernon, R. (1966). *International investment and international trade in the product cycle. The Quarterly Journal of Economics.*

VERZA, M. (2024, November 23). *Yahoo News*. Retrieved from https://www.yahoo.com/news/afraid-losing-us-canada-trade-140147926.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAKsc55how4PahX6CZp9AcSeQV4FlXXQH0kD_Oz%20-ZopOnDXBt6sy9l4N459rizwoc6_PC7V_HYGBtIFneFdd6S1NWSRW4qJovFwV

Vidal, E., & González Pandiella, A. (2024). *A review of Mexico's participation in global value chains.* OECD.

Villanueva, L., & Jiang, X. (2022). Export collapse and employment effects during the Covid-19 crisis in Mexico. *Problemas del Desarrollo. Revista Latinoamericana de Economía, vol. 53, núm. 210,*, 97-127.

Villarreal, M. A. (2010). *The Mexican Economy After the Global Financial Crisis .* Congressional Research Service .

Villarreal, M. A. (2010). *The Mexican Economy After the Global Financial Crisis .* Congressional Research Service.

Villarreal, M. A. (2020). *NAFTA and the United States-Mexico-Canada Agreement (USMCA) .* Congressional Research Service .

Villarreal, M. A. (2024). *The United States-Mexico-Canada Agreement (USMCA) .* Congressional Research Service .

Vorhaben , E. (2021, September 17). *Wilson Center* . Retrieved from https://www.wilsoncenter.org/article/agricultural-trade-under-usmca-challenges-potential-solutions-and-win-win-opportunities

Warburton, S. (2024, October 31). *Automotive Logistic*. Retrieved from https://www.automotivelogistics.media/supply-chain-management/mexican-powerhouse-poised-to-grow/46305.article

White & Case . (2024, April 19). *White & Case* . Retrieved from https://www.whitecase.com/insight-alert/biden-administration-announces-new-measures-protect-us-steel-aluminum-and

Williams, M. (2024, November 22). *Automotive Logistics*. Retrieved from https://www.automotivelogistics.media/automotive-logistics-and-supply-chain-mexico-insights/mexico-is-the-backbone-of-north-american-automotive-supply/46423.article

Wilson Center. (2019). *Farm Labor and Mexico´s Export Produce Industry.* Washington: Wilson Center.

Wilson, C. (2012). *Issues in Science and Technology*. Retrieved from https://issues.org/p_wilson/

WITS World Trade Integrated Solution. (n.d.). *World Trade Integrated Solution*. Retrieved from https://wits.worldbank.org/CountryProfile/en/Country/MEX/Year/2000/Summarytext#:~:text=Top%20five%20countries%20to%20which,partner%20share%20of%2088.16%20percent.

Worl Trade Organization . (1997, October 2). *Worl Trade Organization* . Retrieved from https://www.wto.org/english/tratop_e/tpr_e/tp063_e.htm

World Bank Group. (2019). *Systematic Country November 2018 Diagnostic Mexico.* Washington DC: World Bank Group. Retrieved from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://documents1.worldbank.org/curated/es/588351544812277321/pdf/Mexico-Systematic-Country-Diagnostic.pdf

World Economic Forum. (2023, April 3). *World Economic Forum*. Retrieved from https://www.weforum.org/stories/2023/04/cptpp-trade-tariff-brexit-uk/

World Trade Organization . (1997, October 2). *World Trade Organization* . Retrieved from https://www.wto.org/english/tratop_e/tpr_e/tp063_e.htm

World Trade Organization. (2019). *TECHNOLOGICAL INNOVATION, SUPPLY CHAIN TRADE, AND WORKERS IN A GLOBALIZED WORLD.* Geneva: Co-publishing partners.

Zahniser, S. (2023, July 31). *Economic Research Service U.S. DEPARTMENT OF AGRICULTURE*. Retrieved from https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail?chartId=107008

Zahniser, S. (2024, September 23). *Economic Research Service U.S. Department of Agriculture*. Retrieved from https://www.ers.usda.gov/topics/international-markets-u-s-trade/countries-regions/usmca-canada-mexico/mexico-trade-fdi/#:~:text=Mexico's%20agricultural%20imports%20(from%20all,country's%20imports%20in%20this%20category.