

Louvain School of Management

What industrial, economic and political factors have influenced reshoring and nearshoring dynamics in U.S. manufacturing since 2017, and what do these dynamics imply for supply-chain operations and performance?

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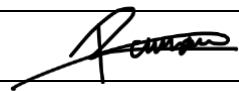
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Foreword

The completion of my Master's thesis marks the end of my academic journey and I would like to express my gratitude to everyone who contributed, directly or indirectly, to its elaboration.

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1. Introduction

1.1. Motivation

Over the past few decades, global supply chains in manufacturing sectors have largely been structured around offshoring strategies, companies relocating their production activities to countries offering lower labour costs, economies of scale and access to specialized industrial ecosystems. This fragmentation model of global production has allowed companies to drastically reduce their direct production costs and to optimize their international sourcing strategies. For this reason, Global Value Chains highly interconnected have become the dominant organizational model in many manufacturing sectors.

However, the growing complexity of supply chains has progressively revealed structural vulnerabilities. The concentration of production in geographically remote areas has increased companies' exposure to disruptions, logistical uncertainty, geopolitical tensions and coordination difficulties. Events such as the trade war between the United States and China, the COVID-19 pandemic, semiconductors shortages and growing global geopolitical instability have highlighted the fragility of supply chains strongly dependent on remote supply networks. Faced with these disruptions, companies have increasingly rethought the geographical organization of their production and supply activities. Two strategic alternatives have particularly emerged: reshoring, which consists of repatriating production activities to the country of origin and nearshoring, which consists of redirecting production or supply towards geographically closer countries. These strategies have often been presented as answers to the growing need of resilience, flexibility and control of the supply chain. In the United States, this debate has taken on particular importance since 2017. The introduction of tariffs on Chinese imports under the Trump administration marked a major turning point in American trade policy, directly affecting the economic attractiveness of supplies from China. In parallel, the pandemic has reinforced concerns about excessive reliance on global suppliers.

Nevertheless, the real nature of these supply chain transformations remains blurry. While public and political discourse often emphasizes the return of production to the United States, the actual reorganization of supply chains could follow more nuanced patterns. Rather than massively relocating national production, companies can favour regional reconfiguration strategies, by reorienting their supply to neighbouring countries like Mexico or Canada while maintaining their international production structures.

Understanding these transformations is crucial for several reasons. From a managerial point of view, decisions relating to supply chains' locations directly influence costs, operational flexibility, exposure to risks, coordination complexity and responsiveness to market fluctuations. From a political perspective, it is essential, in order to assess their economic impact, to determine whether trade and industrial policies actually stimulate domestic production or merely redirect supply to other countries. More broadly, these transformations raise strategic questions concerning the future structure of global production and the evolving balance between efficiency, resilience and geopolitical security.

This thesis addresses these issues by analysing the reconfiguration of American manufacturing supply chains since 2017 and more specifically the relative evolution of reshoring and nearshoring dynamics.

1.2. Research question

The reconfiguration of manufacturing supply chains in the United States has become a major strategic and political stake in the last few years. However, the mechanisms behind these changes remain complex. Location decisions of supply chains are rarely determined by a sole factor but result from interactions between industrial conditions, economic constraints and political incentives.

Technological progress, such as the automation of production, can change the relative importance of labour costs and facilitate new production configurations. Economic factors, notably transport costs and structural dependence on foreign suppliers can influence the relative attractiveness of national or regional sourcing strategies. Political decisions, particularly trade tensions and tariff policies targeting China, can further change incentives to supply by increasing existing offshore configuration costs.

In parallel, observed transformation of supply chains does not necessarily correspond to a simple return of the production to the United States. Regional alternatives, notably nearshoring to Mexico or Canada, can offer companies a trade-off between resilience and profitability.

This raises the following central research question: *What industrial, economic and political factors have influenced reshoring and nearshoring dynamics in U.S. manufacturing since 2017, and what do these dynamics imply for supply-chain operations and performance?*

To answer this question, this thesis adopts an empirical analysis centred on American manufacturing sectors between 2017 and 2025. Two complementary dynamics are examined: the evolution of nearshoring through a reallocation of trade towards neighbouring countries and

the evolution of reshoring through variations in the relative share of national production. The objective is not only to identify the principal observable determinants of supply chains reconfigurations but also to evaluate if recent transformations correspond more to a national industrial reshoring or a broader regional restructuring of supply chains.

1.3. Limitations

This study has several limitations that should be mentioned. Firstly, the empirical analysis relies on sectoral panel data rather than observations at the company level. Thus, the thesis apprehends structural changes in supply-chain configurations rather than strategic decisions of reshoring directly taken by companies. Dependent variables play the role of indirect indicators of nearshoring and reshoring dynamics rather than direct measures of these behaviours.

Secondly, data availability has imposed methodological constraints concerning the choice of explanatory variables. Some pertinent theoretical determinants, such as labour costs or detailed transport costs were not systematically available depending on the sector and the year. Therefore, substitution variables, like oil price for transport costs or manufacturing robots installations for technological intensity, were used.

Thirdly, the temporal horizon remains relatively limited. The empirical analysis covers the period 2017 to 2025, which corresponds to a strategic time marked by major disturbances, but remains short to observe structural industrial transformations in the long term. Furthermore, the number of manufacturing sectors included in the panel is relatively limited, which reduces the statistical power and increases sensitivity to sectoral effects. Although fixed-effects models are used to control for unobservable structural differences, the empirical framework remains exploratory and not fully causal.

Another limit concerns the unequal intensity of reconfiguration phenomenon studied. Although the same analytical framework is applied to reshoring to the United States and nearshoring to Canada and Mexico, observable structural changes are not as marked. Sectoral data suggest that the most significant reconfiguration of supply chains since 2017 has primarily benefited Mexico, while Canada has remained relatively stable and reshoring to the United States appears more limited (Leal et al., 2026). This asymmetry might explain partly why the Mexican model produces clearer statistical results as structural changes are more easily apprehended econometrically than weaker or more progressive transformations.

Finally, the thesis primarily aims to identify factors and the observable impact of supply chain reconfiguration in the United States. The implications for operational performance, resilience

and supply chain management are thus interpreted based on theoretical consistency with existing literature rather than measured directly from enterprise-level performance data.

Despite these limits, the study brings a structured empirical contribution to recent transformations of supply chains of the American manufacturing sector.

1.4. Outline

This Master's thesis is structured in five parts. After the introduction, the second part presents the literature review and establishes the theoretical framework of the study. It examines the fragmentation of Global Value Chains, reshoring and nearshoring concepts, the principal industrial, economic and political factors of these phenomena, the intermediary mechanisms influencing location decisions as well as the expected implications for performance and operations of the supply chain. Part three describes the research methodology, the econometric models and the data used for the empirical analysis. It presents the construction of dependent and explanatory variables and the models' specifications. Then, the fourth part presents the empirical analysis and the results. It comprises of a descriptive analysis of supply chains trends, a sectoral correlation analysis, robustness checks and the interpretation of results regarding the research question and the theoretical framework. Finally, the last part concludes the thesis by discussing theoretical and managerial contributions, by addressing the broader implications and identifying limitations and potential directions for future research.

2. Literature review

2.1. Fragmentation of Global Value Chains as a condition for reshoring

The development of Global Value Chains (GVC) has deeply transformed the organization of international production by favouring productive processes on a global scale (Globerman, 2011). This fragmentation lies on a fine division of tasks, allowing to locate each activity where costs and competencies are the most competitive (Timmer et al., 2014). It is part of an optimization logic of costs, facilitated by the reduction of transport costs and coordination costs thanks to information technologies (Globerman, 2011).

However, this organization has progressively led to an increase of supply chains' complexity and reinforced their geographical interdependency. The dispersion of activities resulted in an increase of vulnerability to exogenous shocks, whether they are logistical, economic or political (Timmer et al., 2014). Therefore, the fragmentation of Global Value Chains creates structural conditions which makes possible and sometimes necessary the reconfiguration of productive location strategies.

This way, reshoring does not constitute a rupture with globalization but fits into the continuity of these dynamics, in response to limits and vulnerabilities induced by excessive fragmentation of value chains.

2.2. Reshoring and nearshoring as decisions to reconfigure value chains

In this context of transformation of GVCs, reshoring and nearshoring strategies correspond to reconfiguration decisions of the location of productive activities. Reshoring designates the return to activities previously delocated, while nearshoring corresponds to their relocation in geographic zones close to their final market (De Backer et al., 2016 ; Pegoraro et al., 2020).

These strategies should not be interpreted as isolated phenomena but as alternatives in a set of location choices also including the maintenance of offshoring. They reflect a reconfiguration of firms' spatial choices, increasingly oriented towards reducing organizational distances and uncertainties (De Backer et al., 2016).

Thereby, reshoring and nearshoring constitute decision variables, whose selection depends on the economic, technological and institutional conditions that companies face.

2.3. Drivers of reshoring: industrial, economic and political factors

Decisions of value chain reconfigurations are determined by a set of independent factors, which the literature groups into three main categories: industrial and technological, economic and financial, and political and institutional.

2.3.1. Industrial and technological factors

Technologies of industry 4.0 play a differentiated role in reshoring dynamics. Automation, notably via industrial robots, tend to reduce the importance of the labour factor in production costs, thus reducing the comparative advantage of low-wage countries (Artuc et al., 2019 ; Faber, 2020). Empirically, an increase in robot investments is associated with an increase in reshoring activities (Lamperti et al., 2025 ; Krenz et al. 2021).

On the contrary, some technologies such as the Internet of Things (IoT) reinforce international coordination capacities by improving visibility and the integration of supply chains, which can favour the maintenance of fragmented global chains (Zhou et al., 2015 ; WTO, 2018 ; UNCTAD, 2020 ; Lamperti et al., 2025).

Finally, Additive Manufacturing modifies the geography of production by favouring a closer production to the final market, without necessarily leading to a comeback to the country of origin (Lamperti et al., 2025). These results show that these technologies do not act in a homogeneous way, but influence location trade-offs differently.

2.3.2. Economic and financial factors

The economic determinants are based on an evolution of cost structures and productivity gains. The reduction of wage gaps between developed and emerging countries has progressively reduced the advantages of offshoring (Antràs, 2020 ; De Backer et al., 2016). Furthermore, the increase of transport costs as well as logistics uncertainties has contributed to questioning long chains (Cigna et al., 2022).

The integration of hidden costs, such as coordination costs, safety stocks or quality defects, also changes the economic evaluation of location decisions (Ellram et al., 2013 ; Ocicka, 2016). Productivity gains linked to automation can compensate for higher labour costs in developed countries, making domestic production more competitive (Lamperti et al., 2025). Thereby, reshoring decisions emerge when productivity gains and total costs reduction compensate for the traditional advantages of reshoring.

2.3.3. Political and institutional factors

Public policies and geopolitical dynamics play a central role in reshoring and nearshoring decisions. The slowdown in trade liberalization and the increase of protectionist measures, notably customs duties, have changed enterprises' economic incentives (Cigna et al., 2022).

Industrial politics favour innovation and the adoption of advanced production technologies also increase reshoring's probability (Barbieri et al., 2018). Moreover, institutional factors such as intellectual property protection or environmental standards influence location choices (Bornert et al., 2024). These political factors often act as catalysts or moderators of economic and technological dynamics.

2.3.4. Interaction and hierarchy of drivers

These different factors do not act independently but interact through economic and organisational mechanisms. For example, automation (technological factor) modifies cost structures (economic factor), which influences location decisions. Likewise, trade policies affect perceived risks and exchange costs, reinforcing or attenuating incentives to reshoring.

We can then distinguish structural drivers, such as technological and institutional factors, from circumstantial drivers, such as costs, logistics shocks and geopolitical tensions. These drivers influence location decisions through specific mechanisms linked to costs, risks and the coordination of value chains.

2.4. Transmission mechanisms: costs, risks, coordination and chain structure

Industrial, economic and political factors identified in the previous section do not directly influence reshoring and nearshoring decisions. They operate through several intermediary mechanisms which modify strategic evaluations of enterprises. The literature allows to identify four principal mechanisms: total cost optimization, risk allocation, organizational coordination and structural reconfiguration of value chains. These mechanisms enable the understanding of how external drivers are concretely translated to arbitrations between offshoring, nearshoring and reshoring.

2.4.1. Total cost optimization

Historically, offshoring strategies have mostly relied on a direct production costs minimization strategy, particularly on labour costs. However, the literature shows that this approach has become insufficient to explain contemporary location decisions. In fact, businesses now integrate a larger vision of total costs by including not only production costs but also logistics

costs, coordination costs, delays, the costs associated with quality defects as well as the costs of adapting to fluctuations in demand (Ellram et al., 2013 ; Ocicka, 2016).

This evolution questions the apparent economic advantage of low-cost locations. An offshore production can seem attractive because of low labour costs but these savings can be largely offset by hidden costs associated with the complexity of managing global supply chains. The increase of transport costs, trade disruptions and geopolitical tensions also alter this economic trade-off. In this perspective, reshoring appears not necessarily as a costly strategy but as an option allowing to optimize global costs of the supply chain in some contexts.

2.4.2. Risk allocation and resilience

Beyond costs, the literature underlines the increasing importance of risk management in the location decisions. Global Value Chains, by their geographical fragmentation and their dependence to multiple suppliers, are particularly exposed to external disruptions, whether they are logistical, health-related, geopolitical or regulatory (Kumar, 2024).

In this context, resilience does not constitute a distinct paradigm of economic performance but an integrated criteria in the strategic evaluation of supply chains. Companies must weigh not only cost and efficiency but also risk exposure and security of supply. An excessive dependence to having suppliers located far away or concentrated in certain geographical areas can increase operational vulnerability, as have illustrated recent disruptions in global supply chains (for example the COVID-19 pandemic and the global semiconductors shortages (Ochonogor et al., 2023)).

Reshoring or nearshoring can be interpreted as mechanisms of risk reduction by shortening logistics chains and improving visibility on operations. Nevertheless, the literature highlights that these strategies do not completely eliminate risk as they might simply displace some dependencies rather than eliminate them (Fernández-Miguel, 2022). The challenge is therefore not the elimination of risk but its rebalancing in the overall configuration of the chain.

2.4.3. Organizational coordination and control

A third central mechanism concerns coordination costs and organizational control. The more supply chains are long, fragmented and geographically dispersed, the more their management becomes complex. This complexity is translated by increased difficulties of supervision, communication, quality control and rapid adaptation to market changes (Zhou et al., 2015).

Technological advances, notably digitalization and integrated management tools, have partially reduced some coordination costs by improving the flow of information and operational visibility. Yet, the literature shows that these tools do not entirely compensate for disadvantages linked to geographical distance, particularly in industries where flexibility, personalization or quality control are strategic (WTO, 2018).

In this perspective, geographical proximity becomes an organizational lever rather than a simple logistics factor. Nearshoring and reshoring can then improve responsiveness, facilitate coordination with suppliers and reinforce control on critical processes. This mechanism is particularly pertinent in operationally intensive manufacturing sectors (automotive, electronics, industrial machinery, chemistry/pharmaceutical sectors).

2.4.4. Reconfiguration of the value chain structure

Finally, location decisions imply a broader transformation of the architecture of the value chains themselves. The debate is no longer solely about the choice of a production location but on the way in which companies configure the structure of their international production networks.

Global chains historically designed according to a logic of maximal fragmentation of costs can evolve toward shorter structures, more regional or more diversified. This reconfiguration can take several forms such as a reduction of the number of intermediaries, a geographical diversification of suppliers, a partial relocation of some critical activities or a regionalization of supplies (Akinbolajo, 2022).

The literature suggests that companies do not necessarily substitute a unique strategy to another. On the contrary, hybrid reconfigurations combining offshoring, nearshoring and reshoring become more frequent in order to simultaneously balance costs, flexibility and resilience. This perspective is particularly important as it shows that location decisions must be analysed as gradual structural adjustments rather than binary choices.

2.5. Location decisions: choosing between offshoring, nearshoring and reshoring

Previously identified mechanisms translate into concrete decisions of location which reflect multi-criteria trade-offs. Companies do not react mechanically to one factor but simultaneously evaluate economic, organizational and strategic implications of different supply-chain configurations. Offshoring remains pertinent when advantages linked to production costs stay sufficiently important to compensate for indirect costs, coordination difficulties and associated costs. This logic is particularly observable in industries where products' standardization and economies of scale dominate.

On the contrary, reshoring becomes more attractive when risk reduction, improvement of operational control or gains in flexibility compensate for higher costs of domestic production. Therefore, it is not a simple geographical return but a strategic trade-off between total cost, resilience and operational performance.

Moreover, nearshoring appears as a particularly interesting intermediary solution, allowing to reduce geographical distance and some risks while conserving a part of economic advantages linked to outsourced production (Pegoraro et al., 2020). This strategy can notably improve responsiveness and coordination without bearing the full costs of a complete reshoring.

Finally, several papers show that companies adopt more and more hybrid approaches, combining different forms of location according to their activities, products or concerned markets (Akinbolajo, 2022 ; Canello et al., 2022). This observation is essential as it justifies an empirical analysis centred not only on binary choices but on a relative evolution of sourcing configurations of sourcing and production.

2.6. Outcomes: impacts on performance and operations

These productive activities shift decisions lead to multidimensional effects on companies' performance. These effects are not uniform and depend on mechanisms through which drivers (industrial, economic and political) influence location decisions. In that sense, outcomes must be analysed as the result of a causal chain linking initial conditions, organizational trade-offs and reconfiguration of value chains.

2.6.1. Economic performance: cost reconfiguration and value creation

One of the principal effects of reshoring concerns the transformation of cost structure. Unlike traditional analyses based on unit production cost, the literature highlights the importance of a total cost approach, integrating logistics costs, coordination costs as well as costs related to risks and uncertainties (Ellram et al., 2013 ; Ocicka, 2016).

In this framework, reshoring can lead to an improvement of economic performance when indirect costs reduction compensates for higher labour costs. The reduction of geographical distances allows to reduce transport and storage costs, particularly through a decrease of safety stocks made possible by a better predictability of demand (Ocicka, 2016). Furthermore, delays and logistics uncertainty reductions limit costs linked to stock shortages and overcapacity.

However, these gains stay strongly contingent. Their realization depends on the level of domestic productivity, the capital intensity of activities and the institutional context. For

example, industrial policies and fiscal incentives can reinforce the profitability of reshoring strategies (Barbieri et al., 2018), while less suitable industrial structures may limit the observed gains (Lee, 2022). Thus, the economic performance of reshoring does not result from a simple difference in costs but from a recomposition of the trade-offs between direct costs, indirect costs and the costs of risk.

2.6.2. Operational performance: improved flexibility and responsiveness

On the operational level, relocation of productive activities profoundly changes the functioning of supply chains. The reduction of geographical distances between production and final market can improve the synchronization of flows and the capacity of adaptation to demand variations (Shih, 2014).

This proximity translates into a decrease of lead times, which improves companies' responsiveness to market fluctuations. It also allows a better precision of forecasts, reducing inefficiencies linked to planning errors and the accumulation of stocks (Ocicka, 2016).

Furthermore, reshoring favours a better control of production processes which lead to an improvement of quality and a reduction of costs linked to defects. Organizational proximity facilitates communication between different actors of the value chains and allows a faster resolution of operational issues.

Nonetheless, these gains can be limited in contexts where supply chains remain strongly dependent on international suppliers, notably for raw materials or critical components. In this case, the relocation of production does not eliminate constraints linked to globalization but alters its nature.

2.6.3. Innovation and dynamic capabilities: effects on organizational learning

Beyond the economic and operational aspects, reshoring influences innovation capacities of companies. The literature highlights a close link between the location of productive activities and organizational learning processes (Shih, 2014). Proximity between production, research and development and strategic functions facilitates information exchange and strengthens feedback loops between design and manufacturing. This makes possible the acceleration of innovation cycles and a better adaptation of products to market needs. These effects are particularly marked in knowledge-intensive industries, where coordination between different functions is essential to maintain a competitive advantage (Lee, 2022). In this context, reshoring does not limit itself to an operational decision but constitutes a strategic level to reinforce enterprises' dynamic capacities.

However, these benefits depend on these companies' capacity to mobilize qualified human resources and to become part of high-performing innovation ecosystems. Without these conditions, the effects of reshoring on innovation can remain limited.

2.6.4. Resilience and risk management: a conditional improvement

Resilience constitutes another central outcome of reshoring strategies. By reducing the length and complexity of supply chains, reshoring leads to a decrease of exposure to disruption costs, notably those linked to geopolitical shocks, health crises or logistics disruptions (Kumar, 2024). This risk reduction is explained by a better management of productive processes and a decrease of the dependence on remote suppliers. Proximity also facilitates the implementation of more effective control and coordination mechanisms, reinforcing companies' capacity to anticipate and manage disturbances (Ellram et al., 2013).

Yet, the literature emphasizes that reshoring does not constitute a universal solution to resilience problematics. In some cases, it can lead to a concentration of activities which increases vulnerability to other types of risks, notably in case of dependence on critical resources located abroad (Fernández-Miguel, 2022). Thus, resilience depends less on location of activities alone than the global reconfiguration of value chains. The most robust strategies generally rely on hybrid approaches combining geographic diversification, redundancy of capabilities and improved visibility of flows (Akinbolajo, 2022).

2.7. Synthesis and identification of research gaps

The literature underlines a causal chain linking reshoring drivers to its outcomes through intermediary mechanisms. Industrial, economic and political factors influence costs, risks and coordination, which in turn determine companies' location decisions, which in turn produce effects of their performance and operations. However, several limits appear. Firstly, the literature often stays fragmented and analyses separately different drivers without offering integrated frameworks allowing to understand their interactions. Secondly, the transmission mechanisms between drivers and decisions are rarely modeled explicitly, particularly with regard to the simultaneous integration of costs and risks. Thirdly, empirical studies rarely establish direct links between explanatory factors and observed outcomes. Thus, the literature highlights the need for empirical analyses to assess how key economic, political and organizational factors influence the evolution of sourcing and production strategies within manufacturing supply chains. This work contributes to this perspective by proposing an empirical framework focused on analyzing these determinants.

3. Model and data

3.1. Overview and methodology

This study adopts an econometric approach based on panel data in order to analyse factors influencing the reconfiguration of American manufacturing supply chains since 2017. The objective is to distinguish two complementary dynamics: nearshoring, defined as the reallocation of supplies towards geographically close partners like Mexico and Canada and reshoring, defined as the strengthening of American domestic production (Baldwin et al., 2022).

The empirical analysis relies on panel data, combining a temporal and cross-cutting dimension. This methodology is pertinent in this context as reshoring decisions are not only influenced by macroeconomic or geopolitical shocks but also by the structural differences between sectors. The time dimension covers the period 2017-2025, which encompasses several major disruptions likely to have affected supply decisions, including the U.S.-China trade war, the COVID-19 pandemic, increasing geopolitical uncertainty and the acceleration of industrial automation. The cross-cutting dimension includes several U.S. manufacturing sectors selected because of their exposure to international trade and supply chain restructuring.

Two econometric models are developed. The first model focuses on nearshoring and examines the determinants of the share of imports originating from the two main regional partners of the United States: Mexico and Canada. The second model focuses on the dynamics of reshoring and analyses the evolution of national manufacturing output relative to total sectoral supply.

3.2. Indices and model components

The empirical models rely on several parameters to represent the different economic, political and industrial dimensions susceptible to influence supply chains' reshoring and nearshoring decisions.

Table 3.1: Indices and components of the models

Parameter	Symbol	Explanation
Manufacturing sector	i	Reshoring and nearshoring behaviours differ across industrial sectors
Country observed	j	Allows the observation of data in different countries
Observation year	t	Allows to capture the temporal evolution between 2017 and 2025
Estimated coefficient	β_k	Measures the marginal impact of each explanatory variable
Sectoral fixed effects	μ_i	Control the unobservable characteristics specific to each industry
Error term	ε_{it}	Represents the unobserved factors affecting the dependent variable

Seven manufacturing sectors are observed: automotive (HS code 87), electrical machinery (HS code 85), machinery (HS code 84), iron and steel (HS code 73 and 73), chemicals and pharmaceutical products (HS code 28 to 30), textile (HS code 61 and 62) and plastics (HS code 39). Concerning the observed period, it encompasses nine years going from 2017 to 2025. In total, the model each use a panel of 63 observations (7 sectors x 9 years).

The choice of the sectoral fixed effects is particularly important in the study's framework. Some industries, such as electronics or industrial equipment, historically present a strong dependence on Asian supply chains, while other industries already have a more regionalized production (Kamakura, 2022). To ignore these structural differences could lead to biased estimations.

Fixed times effects (λ_t) were not included in the model because the principal explanatory variables mostly vary in time and are common to all sectors. The inclusion of annual fixed effects would have absorbed this variation and reduced the capacity to identify the effects of macroeconomic and political variables such as trade tariffs and oil prices.

3.3. Model variables

3.3.1. Dependent variables

Table 3.2: Dependent variables of the models

Variable	Description	Explanation
<i>Country_share_Mexico/Canada_{it}</i>	Share of imports from neighbouring countries (Mexico or Canada) in total imports of the sector <i>i</i> in year <i>t</i>	Measures the share of nearshoring imports in total American imports
<i>Domestic_share_{it}</i>	Share of American production in total imports and production of the sector <i>i</i> in year <i>t</i>	Measures the proportion of U.S. demand supplied by domestic production

In order to answer the research question, two empirical models have been developed. The first model analyses the determinants of American nearshoring through the two main regional partners of the United States: Canada and Mexico. The dependent variable is the country share, which measures the share of U.S. imports (in current USD) from the partner country in question in the sector's total imports (in current USD) for each year. It however is not based on actual nearshoring events and should not be considered as such, it is used as a proxy for nearshoring dynamics.

$$Country_share_Mexico/Canada_{it} = \frac{Imports_{it}}{Total_imports_{it}} \quad (3.1)$$

The second model focuses on domestic reshoring. The dependent variable is the domestic share, defined as the proportion of U.S. demand (in current USD) supplied by domestic production (in current USD).

$$Domestic_share_{it} = \frac{Production_{it} - Exports_{it}}{Apparent_domestic_consumption_{it}} \quad (3.2)$$

With:

$$Apparent_domestic_consumption_{it} = Production_{it} + Total_imports_{it} - Exports_{it} \quad (3.3)$$

3.3.2. Explanatory variables

The explanatory variables selected aim to capture the main dimensions identified in the literature: political, industrial and geopolitical factors.

Table 3.3: Explanatory variables of the models

Variable	Description	Explanation
<i>Tariffs_china_t</i>	U.S. tariffs on Chinese imports per year <i>t</i>	Allows to measure the impact of such tariffs on Chinese imports
<i>Manufacturing_robots_{it}</i>	Number of industrial robot installations in the manufacturing sector <i>i</i> per year <i>t</i>	Allows to measure the impact of the adoption of new technologies in manufacturing activities
<i>China_dependency_{it}</i>	Share of Chinese imports in total imports in sector <i>i</i> per year <i>t</i>	Measures imports dependence on China
<i>Oil_price_t</i>	Cost of oil per year <i>t</i> (in current USD)	Proxy for transport costs

a) Tariffs on Chinese imports

The variable measures the annual level of tariffs applied by the United States on imports from China. This variable aims to capture the effect of trade tensions and protectionist policies on supply chain reconfiguration decisions. Conceptually, an increase in tariffs raises the relative cost of sourcing from China and can thus strengthen incentives for reshoring or nearshoring. This variable varies only by year, meaning that the model relies heavily on time variation rather than sector variation.

b) Manufacturing robots

As analysed in the literature review, technologies of Industry 4.0 play a role in the context of reshoring and nearshoring. Industrial automation reduces the importance of wage cost differential between the United States and low-cost countries. An increase of the number of

industrial robots can then ease the reshoring of production or the increase of domestic production (Lamperti et al., 2025 ; Krenz et al. 2021). This variable is used as a proxy for technological intensity and manufacturing automation. It is weighted with each sectors' shares in total robotic installations in America (IFR, 2025).

c) China dependency

This variable measures the extent to which a sector remains reliant on Chinese imports. A high dependence on China may indicate lower diversification of sourcing strategies and a reduced shift toward nearshoring alternatives. Therefore, a negative relationship between China dependency and nearshoring/reshoring intensity is expected.

d) Oil price

This variable corresponds to the average annual price of crude oil and is used as a proxy for international transportation costs. The aim is to incorporate an economic factor related to logistics costs, which play a significant role in supply chain location decisions. While this variable does not directly reflect the logistics costs specific to each sector or mode of transport, it provides a consistent approximation of the overall evolution of transportation costs over the period studied.

3.3.1. Interaction variable

Table 3.4: Interaction variable of the model

Variable	Description	Explanation
$Tariff_exposure_{it}$	Interaction between customs duties and sectoral exposure i to China per year t	Makes it possible to identify the impact of tariffs on China depending on sectors' dependence on these imports

The $Tariff_exposure$ variable was constructed to introduce a sectoral dimension into the analysis of the impact of U.S. trade policies. It represents an interaction between the level of tariffs applied to Chinese imports and a dummy variable identifying sectors historically heavily dependent on China.

$$Tariff_exposure_{it} = Tariffs_china_t * High_china_exposure_i \quad (3.4)$$

Where $High_china_exposure$ takes the value 1 for sectors whose median dependence on Chinese imports in the pre-trade war period (2017) is greater than the sample median, and 0 otherwise. This construct allows us to test whether the effect of trade tensions varies according

to the degree of structural exposure of sectors to Chinese value chains, taking into account that sectors highly integrated into these chains may exhibit greater organizational inertia in the face of trade shocks. With the analysis of the model, this variable's coefficients should be interpreted as an interaction effect due to its nature.

3.4. Model description

The **nearshoring models** are as follows:

$$\begin{aligned} \text{Country_share_Mexico}_{it} = & \beta_0 + \beta_1 \text{Manufacturing_robots}_{it} + \beta_2 \text{China_dependency}_{it} \\ & + \beta_3 \text{Tariffs_china}_t + \beta_4 \text{Oil_price}_t + \beta_5 \text{Tariff_exposure}_{it} + \mu_i + \varepsilon_{it} \end{aligned} \quad (3.5)$$

$$\begin{aligned} \text{Country_share_Canada}_{it} = & \beta_0 + \beta_1 \text{Manufacturing_robots}_{it} + \beta_2 \text{China_dependency}_{it} \\ & + \beta_3 \text{Tariffs_china}_t + \beta_4 \text{Oil_price}_t + \beta_5 \text{Tariff_exposure}_{it} + \mu_i + \varepsilon_{it} \end{aligned} \quad (3.6)$$

The **reshoring model** follows a similar logic:

$$\begin{aligned} \text{Domestic_share}_{it} = & \beta_0 + \beta_1 \text{Manufacturing_robots}_{it} + \beta_2 \text{China_dependency}_{it} \\ & + \beta_3 \text{Tariffs_china}_t + \beta_4 \text{Oil_price}_t + \beta_5 \text{Tariff_exposure}_{it} + \mu_i + \varepsilon_{it} \end{aligned} \quad (3.7)$$

3.5. Data collection

The data used come from several recognized institutional sources. First, trade data were collected via UN Comtrade, which provides detailed statistics on import and exports flows by country, year, and sector using HS codes. These data made it possible to measure U.S. imports from Canada, Mexico, and China, as well as total imports by sector, also using HS code. Data relative to American manufacturing production were found on the Bureau of Economic Analysis website from the United States government. Furthermore, data concerning the U.S. tariffs on China were found on the Peterson Institute For International Economics website and the oil prices were found on the Macrotrends website. Data on industrial robot installations were collected from Statista and the International Federation of Robotics (IFR) in order to measure the level of manufacturing automation.

The data were manually consolidated in Excel to construct two panel datasets: a sector-country-year dataset for the nearshoring model and a sector-year dataset for the reshoring model. The sample covers the period 2017 to 2025 and several U.S. manufacturing sectors selected due to their exposure to recent transformations in global supply chains.

4. Analysis

4.1. Data analysis

Before diving into the model analysis, this section presents the descriptive analysis of the two datasets used for the reshoring and nearshoring models. The objective is to identify the principal structural trends observed in the supply chains of the American manufacturing sector between 2017 and 2025 before interpreting the econometric estimates. The descriptive analysis is important in this framework as the considered period comprises several major disruptions that are susceptible to have affected supply and production strategies, notably the Sino-American trade war, the COVID-19 pandemic, rising geopolitical tensions and the acceleration of industrial automation.

4.1.1. Evolution of nearshoring dynamics

Descriptive analysis highlights a significant transformation of American supply strategies during the period studied.

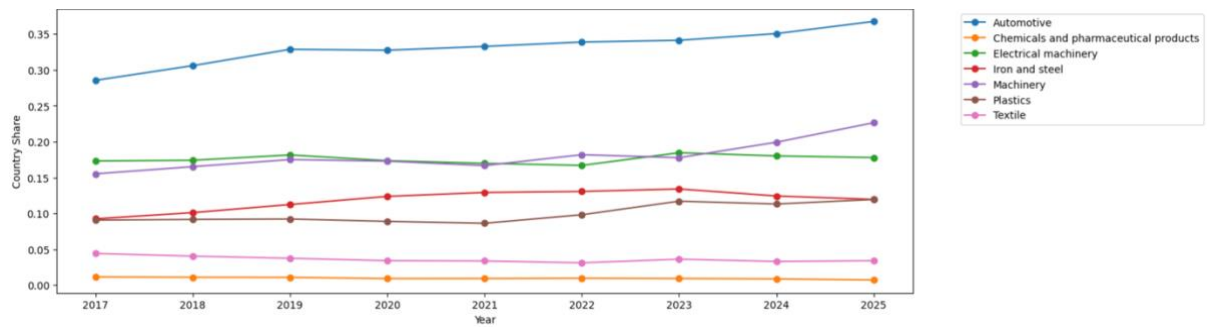


Figure 4.1: Evolution of the share of U.S. imports from Mexico in different manufacturing sectors from 2017 to 2025

Figure 4.1 displays a progressive increase of imports from Mexico in several manufacturing industries after 2018. The automotive sector shows the strongest increase, reflecting the increasing importance of the country within this sector's supply chains in America. This result is coherent with research works that underline the particular importance of transport costs, delivery times and regional integration in industries characterized by complex just-in-time production systems (Antràs et al., 2004).

Sectors of machinery and electrical machinery also present moderate increases of Mexico's part in American imports. These industries are particularly exposed to trade tensions between the United States and China, which has probably accelerated the diversification of supply strategies towards geographically closer partners.

The timing of these increases is particularly interesting. In several sectors, the acceleration of Mexican supply appears after 2018 which coincides with the introduction of tariffs on Chinese imports. This observation provides preliminary evidence to support the hypothesis that the trade war has indirectly contributed to the regionalization of supply chains.

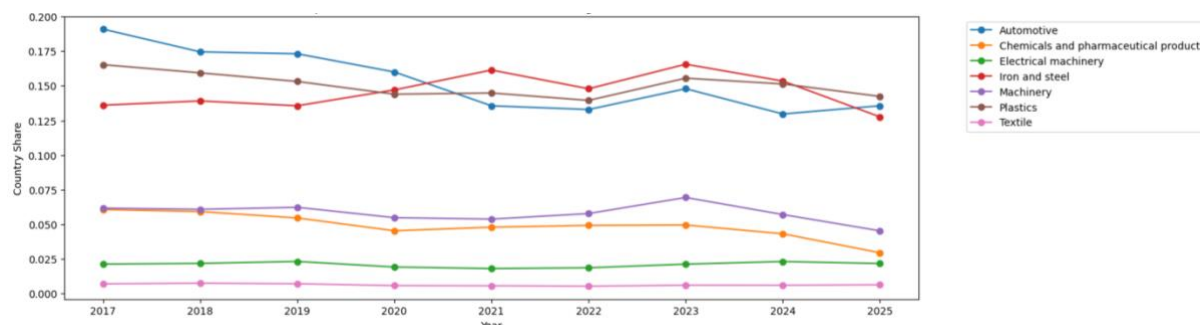


Figure 4.2: Evolution of the share of U.S. imports from Canada in different manufacturing sectors from 2017 to 2025

Figure 4.2 reveals a more stable evolution of Canada's market share. Unlike Mexico, Canada does not display strong increases in most industries. This difference can be partly explained by the distinct comparative advantages of the two countries. While Mexico benefits from lower labour costs and strong manufacturing specialization, Canada is more concentrated in industries requiring greater capital and natural resource intensity.

Canada, however, conserves an important position within strategic North American industries such as automotive, iron and steel and plastics manufacturing sectors. The relative stability of Canadian market share suggests that Canadian American integration was already structurally sound before the start of the observed period.

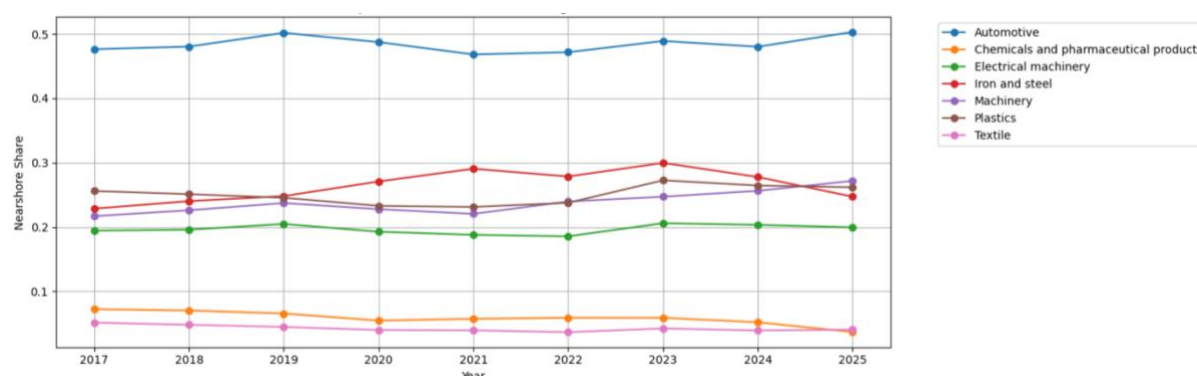


Figure 4.3: Evolution of the share of U.S. nearshore imports in different manufacturing sectors from 2017 to 2025

The combined part of nearshore imports (Canada and Mexico) confirms a more general trend to the regionalization of supply strategies in the American manufacturing sector (see Figure 4.3). Most sectors show stable or increasing shares of imports from nearshore partners between

2017 and 2025. The largest increases are observed in industries traditionally dependent on Asian manufacturing supply chains, including automotive and machinery.

This result is also coherent with the increasing importance given to the resilience of supply chains in companies' strategic decisions following disruptions related to COVID-19 and geopolitical tensions highlighted in the literature review (Javorcik, 2020 ; McKinsey Global Institute, 2020).

It is however important to note that due to the construction of the Domestic_share variable, the observed nearshoring share may increase because of a fall of total imports and not only because imports from Mexico rise.

4.1.2. Evolution of the dependence on China

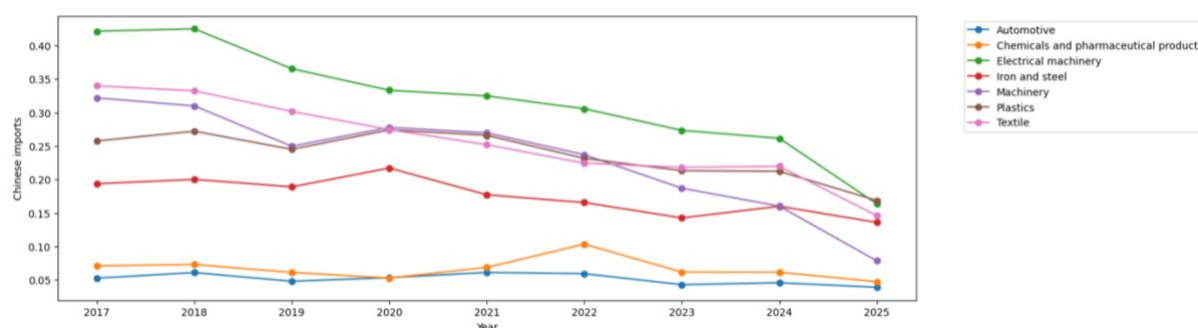


Figure 4.4: Evolution of China's part in U.S. imports in different manufacturing sectors from 2017 to 2025

Figure 4.4 illustrates the evolution of the United States' dependence to Chinese imports in different manufacturing sectors. There is a gradual decline in several industrial sectors after 2018, particularly concerning electrical machinery, machinery and textiles.

This trend seems to confirm the idea that American companies have progressively diversified their supply strategies by moving away from China following the trade war and supply chain disruptions caused by the pandemic. However, this reduction remains partial as several sectors that can be considered as less dependent on Chinese imports, such as chemicals and pharmaceutical sectors and automotive, remain relatively stable in their imports share. Furthermore, it is important to keep in mind that a declining share can reflect both supply diversification and changes in total imports.

4.1.3. Evolution of domestic reshoring dynamics

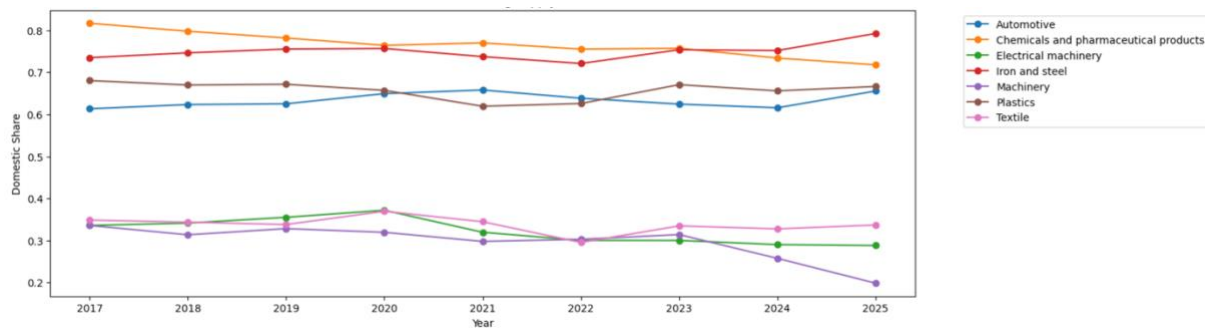


Figure 4.5: Evolution of the proportion of U.S. demand supplied by domestic production in different manufacturing sectors from 2017 to 2025

The evolution of the domestic share variable reveals a more nuanced image of the reshoring dynamic. Contrary to nearshoring trends, national reshoring does not present a generalized increase in all sectors. While some industries show moderate increases in their share of national production, the overall development remains relatively limited compared to the more pronounced regionalization trends observed in the nearshoring model (see Figure 4.5).

This result suggests that American companies might have favoured regional diversification strategies over large-scale national reshoring. Nearshoring to Mexico and Canada allows them to improve their resilience and reduce the risks linked to transportation, while benefiting from lower production costs compared to those of a national production. However, mechanically, the domestic share may increase if imports fall, even without increased domestic production. It is also important to keep in mind that an increase in the Domestic_share variable is not direct evidence of reshoring as it is an indirect domestic supply proxy.

The strongest increases in the share of domestic production are seen in industries characterized by greater strategic importance or greater automation potential. Industries such as automotive and iron and steel show moderate upward trends, potentially reflecting increasing investment in domestic production capacity.

Nevertheless, traditional sectors depending on a labour-intensive production continue to show relatively small shares of national production throughout the period. This observation confirms the idea that labour cost differentials remain a significant structural limitation to large-scale reshoring in the United States.

4.2. Sectoral correlation analysis

The sectoral analysis of correlations highlights a strong heterogeneity between manufacturing industries, which confirms that the dynamics of nearshoring and reshoring are not

homogeneous. The following analysis must be considered as exploratory evidence and descriptive, not inferential.

4.2.1. Nearshoring towards Mexico

The Mexican case shows the relationships most consistent with the regional substitution hypothesis. As it can be seen Appendix A.1, the positive correlations between Country_share and Tariffs_china are particularly strong in the automotive (0.85), iron and steel (0.91) and machinery (0.59) sectors, suggesting that Sino-American trade tensions have further encouraged a shift toward Mexico in these industries. This trend is consistent with the observed evolution of import shares as between 2017 and 2025, Mexico's share of the automotive, machinery and iron and steel sectors have increased significantly, while the share of Chinese imports decreases simultaneously in several of these sectors. Automation also shows marked positive correlations in plastics (0.84), machinery (0.74), and automotive (0.66), suggesting that the most industrially intensive sectors appear more compatible with productive regionalization. Finally, dependence on China shows mainly negative correlations in sectors where Mexican nearshoring is progressing strongly, which reinforces the idea of a substitution effect between Chinese sourcing and nearshore supply.

4.2.2. Nearshoring towards Canada

In Appendix A.2, the Canadian profile appears different. Unlike Mexico, the correlations between Country_share and Tariffs_china are predominantly negative, particularly in the automotive (-0.84), textile (-0.85), plastics (-0.83), and chemical (-0.80) sectors. This suggests that trade tensions with China have not led to a systematic reallocation toward Canada and the negative tariff relationships support the argument that the country did not become the main substitute for Chinese sourcing. This interpretation is consistent with sectoral data, which show relative stability, or even a slight decline, in the Canadian share in several sectors over the studied period. Dependence on China here presents more contrasting, sometimes positive, correlations, indicating that some Canadian sectors maintain a logic of coexistence with Chinese value chains rather than direct substitution. Overall, these results suggest that North American nearshoring cannot be considered a homogeneous phenomenon, with Mexico appearing as a much more responsive destination than Canada.

4.2.3. Domestic reshoring in the United States

Domestic reshoring exhibits a more fragmented sectoral structure in Appendix A.3. The correlations observed between Domestic_share and the explanatory variables vary considerably across sectors, without a clear and uniform pattern. Tariffs are positively associated with the domestic share in some sectors, such as automotive (0.62), but negatively in others, such as machinery (-0.49) and chemicals and pharmaceuticals products (-0.85). Similarly, automation shows predominantly negative correlations, particularly in electrical machinery (-0.92) and machinery (-0.77), suggesting that automation has not consistently supported a return of production to the United States. Surprisingly, the automotive does not show any correlation with this variable. Finally, dependence on China shows ambiguous effects, with some industries combining strong domestic production with continued significant reliance on Chinese imports. Overall, the mixed signs correctly show that domestic reshoring is less systematic.

4.2.4. Main takeaway

Sectoral analysis confirms that supply chain reconfiguration mechanisms differ significantly across industries. Sectors historically most integrated into global value chains, notably automotive, machinery and certain heavy manufacturing sectors show the clearest signs of reorientation toward Mexico. On the other hand, Canada does not appear to have captured a comparable dynamic, while domestic reshoring in the United States appears much more diffuse and less structurally identifiable.

This descriptive analysis reveals two main findings. First, the observed relationships differ substantially between Mexico and Canada. This divergence methodologically justifies separating the nearshoring model into two distinct estimates. Analysing an aggregate model would implicitly assume that the determinants of nearshoring are identical for both countries. However, the initial descriptive analyses indicate, on the contrary, structurally different dynamics. Second, the correlations suggest that some theoretically relevant factors do not necessarily produce strong, simple linear relationships. This reinforces the need for econometric modelling with sectoral fixed effects to isolate intra-sectoral variations over time.

4.3. Numerical results

4.3.1. Model specification and estimation strategy

The empirical analysis is based on sector-specific fixed-effects panel models. This methodological choice addresses two analytical constraints. First, manufacturing sectors

exhibit unobservable structural characteristics that can significantly influence location decisions (capital intensity, technological structure, production organization and historical dependence on global value chains). Secondly, these sector-specific characteristics present some correlations with the explanatory variables, making a fixed-effects specification more appropriate than a purely cross-sectional approach. The estimation was performed with robust standard errors to limit potential biases related to heteroscedasticity.

Presented estimations rely on robust standard errors but not clustered at the sectoral level. This choice is partly explained by the limited size of the panel, the limited number of sectors making estimates with clustering potentially unstable and unreliable in terms of statistical inference. Nevertheless, this specification constitutes a methodological limitation as it does not explicitly correct eventual intra-sectoral errors over time. In consequence, statistical significance levels must be cautiously interpreted as the test can overestimate the real precision of estimated coefficients in a small-sized sample.

The nearshoring model was ultimately split into two separate estimations (Mexico and Canada). This decision was based on the heterogeneity observed between the two countries during the exploratory analyses and on the initial results of the aggregate model, which masked conflicting dynamics. This approach allows for a more economically coherent interpretation and addresses the methodological limitations of a single model. The econometric estimation relies primarily on sectoral fixed effects models to control for unobservable characteristics specific to each manufacturing sector and assumed to be relatively stable over time.

Formally, the sectoral fixed effects μ_i absorb unobserved structural differences between sectors, such as capital intensity, technological complexity, specific cost structures, coordination needs, historical value chain configurations and intrinsic sensitivity to reshoring trade-offs. This methodological choice is particularly important in the context of this research because the manufacturing sectors studied exhibit highly heterogeneous economic structures that may be correlated with the explanatory variables. For example, some sectors are historically more automated, more dependent on Chinese imports or more exposed to international production trade-offs. Without controlling for these structural effects, the estimated coefficients could capture fixed sectoral differences rather than genuine temporal variations associated with the variables under study.

From this perspective, a fixed-effects estimation allows us to identify relationships based on observed intra-sectoral variations over time, rather than on average differences between sectors. Random-effects models were also estimated for comparison. However, in this context, random

effects assume that unobserved sector-specific characteristics are not correlated with the explanatory variables, an assumption difficult to support empirically in the context studied.

Given the small number of available sectoral units, the choice of panel structure strongly influences the results. With a small sample, the chosen specification directly affects the stability of the coefficients, their statistical significance and the model's ability to distinguish long-term structural effects from simple cyclical variations. For this reason, fixed-effects models are preferred as the primary specification, as they offer a more cautious approach to the risk of bias related to omitted structural variables, even if this approach mechanically reduces some of the exploitable variation in the sample.

4.3.2. Nearshoring towards Mexico

Table 4.1: Fixed-effect estimations for the nearshoring model of Mexico

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	4.337e-06	2.13e-06	0.0469
China_dependency	0.0224	0.0758	0.7692
Tariffs_china	0.1059	0.0382	0.0077
Oil_price	-7.657e-05	0.0001	0.5865
Tariff_exposure	-0.0711	0.0272	0.0117
Number of observations			63
Number of sectors			7
R ²			0.4144
Within R ²			0.4144

The fixed-effects model in Table 4.1 estimated for Mexico reveals several statistically significant relationships. However, with a panel of only 7 sectors, p-values should be interpreted very cautiously. The coefficient associated with Manufacturing_robots is positive and statistically significant at the 5% level ($p = 0.0469$). This coefficient is however extremely small but the p-value indicates that an increase in automation intensity is associated with an increase in the share of U.S. imports originating from Mexico. The coefficient associated with Tariffs_china is also positive and highly significant ($p = 0.0077$), suggesting that a tightening of U.S. tariff barriers against China is associated with an increase in sourcing flows to Mexico. Finally, the variable Tariff_exposure has a negative and significant coefficient ($p = 0.0117$). This indicates that the positive effect of tariffs is mitigated in sectors historically heavily

dependent on China. It also indicates that these sectors historically more most exposed to China may face higher switching costs and therefore respond less quickly to tariffs. Conversely, China_dependency and Oil_price do not show a statistically significant relationship. The intra-sectoral coefficient of determination (within R^2) indicates moderate explanatory power, consistent with the complexity of industrial location decisions. These results suggest that political and technological factors play an identifiable role in nearshoring dynamics toward Mexico.

4.3.3. Nearshoring towards Canada

Table 4.2: Fixed-effect estimations for the nearshoring model of Canada

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	-4.031e-06	1.292e-06	0.0030
China_dependency	-0.0937	0.0441	0.0385
Tariffs_china	-0.0936	0.0326	0.0059
Oil_price	6.252e-05	0.0001	0.5786
Tariff_exposure	0.0164	0.0189	0.3878
Number of observations			63
Number of sectors			7
R^2			0.3282
Within R^2			0.3282

The results obtained in Table 4.2 for Canada differ significantly from the Mexican case. The coefficient associated with Manufacturing_robots is negative and significant ($p = 0.0030$), suggesting that an increase in automation intensity is associated with a decrease in the Canadian share of sectoral U.S. imports. The coefficient for China_dependency is also negative and significant ($p = 0.0385$), indicating that sectors historically more dependent on China do not appear to have shifted their sourcing to Canada. The coefficient for Tariffs_china is also negative and significant ($p = 0.0059$), which contrasts sharply with the Mexican case. The variable Tariff_exposure is not significant, suggesting that the differentiated effect of tariffs based on historical exposure to China is not statistically detectable in the Canadian case. These results confirm that North American nearshoring dynamics are not uniform, that Canada is not a systematic substitute for Chinese supplies, as well as the fact that Canada did not capture the same reallocation dynamic as Mexico.

4.3.4. Domestic reshoring in the United States

Table 4.3: Fixed-effect estimations for the reshoring model of the United States

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	-8.774e-07	3.684e-06	0.8127
China_dependency	0.2375	0.1265	0.0660
Tariffs_china	0.0366	0.0672	0.5890
Oil_price	-0.0006	0.0002	0.0157
Tariff_exposure	-0.0648	0.0555	0.2488
Number of observations			63
Number of sectors			7
R ²			0.3254
Within R ²			0.3254

First of all, it is important to restate the fact that domestic reshoring is only indirectly observed through the domestic share proxy and that the results do not demonstrate firm-level reshoring decisions. The reshoring model also appears as weaker than the first two.

Two results stand out in particular as it can be seen in Table 4.3. China_dependency has a positive and marginally significant coefficient ($\beta = 0.2375$, $p = 0.066$), suggesting that sectors historically most dependent on Chinese imports also tend to strengthen their relative domestic supply, which may reflect a partial internal rebalancing dynamic. The oil price variable exhibits a significant negative coefficient ($\beta = -0.0006$, $p = 0.0157$), indicating that higher energy and logistics costs are associated with a decrease in the share of domestic supply in apparent U.S. consumption. While this result may seem counterintuitive, the oil price may reflect broader macroeconomic effects that also impact domestic production costs. In contrast, the manufacturing robots, tariffs China, and tariff exposure variables do not show a statistically significant relationship. Automation and U.S.-China trade tensions therefore do not appear to be direct drivers of domestic reshoring in this specification. Overall, unlike nearshoring to Mexico, domestic reshoring appears more limited and influenced by more complex mechanisms than simply the reallocation of import flows.

4.3.5. Comparative synthesis

The numerical results highlight three main findings. First, nearshoring to Mexico appears to be the most clearly identifiable empirical trend. Second, the Canadian results show that geographic

proximity alone is insufficient to explain a reorientation of trade flows. Third, domestic reshoring appears more difficult to detect empirically using the selected variables. These results suggest that the reconfiguration observed since 2017 seems to correspond more closely to a selective nearshoring of supply chains than to a massive movement of domestic reshoring.

4.4. Robustness check: exclusion of COVID years

To assess the robustness of the results obtained, a sensitivity analysis was performed excluding 2020 and 2021, the period most severely affected by disruptions related to the COVID-19 pandemic. This robustness test addresses a significant limitation of the empirical analysis: some trends observed since 2017 may reflect not structural transformations linked to trade tensions or long-term industrial trade-offs but rather exceptional adjustments triggered by a global health crisis. The objective of this analysis is therefore to verify whether the relationships observed in the main models remain qualitatively consistent when the most atypical years are removed from the sample. It is however important to note that these tests aim to support qualitative consistency but should not be overstated as the sample becomes even smaller (7 sectors x 7 years).

4.4.1. Nearshoring towards Mexico

Excluding the COVID years mechanically reduces the sample size, thus limiting the statistical power of the estimates. Despite this, the results of the Mexican model (see Appendix B.1) maintain a structure that is generally consistent with the main model. The coefficient associated with `Manufacturing_robots` remains positive, suggesting that the observed relationship between automation and the increase in nearshoring to Mexico is not solely dependent on the exceptional disruptions caused by the pandemic. Similarly, `Tariffs_china` retains a positive effect, indicating that the relationship between U.S.-China trade tensions and the regional reorientation of supply chains remains qualitatively stable. On the other hand, the significance of some variables decreases, which is expected given the reduced number of observations. In particular, the `Tariff_exposure` variable loses statistical robustness, suggesting that the differentiated effects based on sectoral exposure to China should be interpreted with caution. Overall, this analysis indicates that the main results of the Mexican model do not appear to be solely explained by the pandemic shock.

4.4.2. Nearshoring towards Canada

The results of the Canadian model (see Appendix B.2) also remain broadly consistent after excluding the COVID years. The coefficients maintain directions comparable to those observed in the main model, suggesting that the identified dynamics are not solely the product of

exceptional health disruptions. The negative signal associated with the variables `Tariffs_china` and `China_dependency` remains consistent, reinforcing the idea that Canada did not systematically capture supply reallocations related to U.S.-China tensions. As with Mexico, some loss of significance is observable, primarily due to sample size reduction. However, the directional consistency of the coefficients suggests that the Canadian results reflect a more structural dynamic than a simple temporary crisis effect.

4.4.3. Domestic reshoring in the United States

The results remain for the U.S. generally consistent with the main model (see Appendix B.3). The variable `Oil_price` retains a highly significant negative effect, further strengthening the robustness of this relationship. The variable `China_dependency` also retains a positive and marginally significant coefficient, confirming that the observed relationship is not solely dependent on the exceptional adjustments of the COVID period. The variable `Manufacturing_robots`, while not significant at the conventional 5% threshold, becomes marginally significant with a positive coefficient, suggesting that a technological effect may exist but remains empirically fragile. The variables `Tariffs_china` and `Tariff_exposure` remain non-significant. The explanatory power of the model increases slightly after excluding the COVID years (within $R^2 = 0.3995$), suggesting that the exceptional disruptions of the pandemic introduced additional volatility into the observed dynamics. Overall, this analysis indicates that the main results of the U.S. model exhibit reasonable consistency, while confirming that domestic reshoring remains a more difficult phenomenon to identify empirically than regional nearshoring.

4.4.4. Methodological implications

This sensitivity analysis offers several methodological insights. First, it shows that the main results of the nearshoring model, particularly for Mexico, maintain qualitative consistency even outside the COVID period. Second, it reinforces the distinction between nearshoring and domestic reshoring: the former appears more directly observable through trade flows, while the latter remains more difficult to capture using available data. Third, it highlights the inherent limitations of small sectoral panels. Sample size reduction naturally affects statistical significance, necessitating an interpretation focused not only on significance thresholds but also on the overall stability of the signs and orders of magnitude. From this perspective, the robustness checks provide reassurance about sign stability of the empirical models.

4.5. Interpretation

The objective of this thesis was to identify the main industrial, economic and political factors influencing reshoring trends in the United States since 2017, to assess their effects on reshoring and nearshoring dynamics and to examine their potential implications for supply chain operations and performance. The results obtained provide a nuanced answer to this research question, highlighting differentiated dynamics depending on the type of reconfiguration observed.

4.5.1. Industrial factors: automation as a differentiated driver

Among industrial factors studied, automation appears as a partially significant determinant but its effect is neither uniform nor systematic. In Mexico's case, the positive relation observed between `manufacturing_robots` and `country_share` suggests that an intensification of automation is associated with a progression of American supply from Mexico. This result suggests that manufacturing sectors more technologically advanced are more able to support productive regionalization than to maintain more distant offshore configurations. This observation is consistent with some of the literature suggesting that automation gradually reduces the relative importance of labor costs in location decisions (Artuc et al., 2019; Faber, 2020). From this perspective, advanced industrial technologies can facilitate a geographical reorganization of production without necessarily leading to a complete return to the domestic sphere. However, this is not generalized in all studied cases. In the Canadian model, the observed effect is the opposite, while in the American model, automation does not present any robust statistical relation. These discrepancies confirm that automation is a relevant industrial factor, but one whose effect is highly dependent on the sectoral and geographical context. This heterogeneity aligns with studies highlighting that Industry 4.0 technologies do not produce homogeneous effects on location choices (Zhou et al., 2015; WTO, 2018; Lamperti et al., 2025). This way, automation appears more as a facilitating factor for reconfiguration rather than as a universal driver of reshoring.

4.5.2. Political factors: trade policy as a selective reallocation mechanism

Empirical results suggest that political factors constitute one of the most visible factors in the reconfiguration of the supply chain but more specifically in the framework of nearshoring. For the Mexico model, the positive and significant relation between the U.S. tariffs on China and the share of Mexican supply indicates that the hardening of U.S. trade policies towards China is associated with a regional reorientation of trade flows. This result is coherent with the

literature on the effects of protectionist policies and geographical tensions on location decisions (Cigna et al., 2022 ; Barbieri et al., 2018). By increasing the relative cost of Chinese imports, customs duties appear to alter the economic choices made by companies and make certain regional alternatives more attractive. However, these dynamics stay selective as the Canadian model shows that the observed effect is negative which indicates that geographical proximity alone does not suffice to capture the effects of trade reallocation. Similarly, in the American model, customs duties do not show a statistically significant relationship with domestic reshoring. These results suggest that trade policies have favoured a regional reorganization of supply chains towards Mexico rather than a direct return of production to U.S. territory. Political factors therefore appear to be major determinants of nearshoring, but their ability to stimulate domestic reshoring remains more limited.

4.5.3. Structural dependence on China: inertia, substitution and rebalancing

The structural dependence on China appears as an important factor but its effects differ according to the studied configurations. In the Canadian model the negative relation between the sector's dependence on China and the nearshore imports share of the country suggest that sectors historically heavily integrated into Chinese supply chains have not spontaneously reoriented themselves towards Canada. This finding confirms the existence of structural inertia in Global Value Chains. In the Mexican model, the negative effect of the tariff exposure indicates that the positive impact of tariffs is attenuated in the sectors most historically exposed to China. This suggests that even when policy incentives exist, the most dependent sectors remain more difficult to reconfigure quickly. On the contrary, the American model is more nuanced. The positive relation between the dependence on Chinese imports and the domestic production share suggest that some sectors historically dependent on China have simultaneously strengthened their relative domestic supply. This result can be interpreted as a partial signal of internal rebalancing, without necessarily corresponding to complete reshoring in the strict sense. These observations align with the works of Globerman (2011), Timmer et al. (2014), and Fernández-Miguel (2022), which highlight the organizational rigidity of international value chains and the transition costs associated with their reconfiguration. The results thus suggest that dependence on China constitutes both a structural constraint and, in some cases, a trigger for partial adjustments.

4.5.4. Nearshoring versus reshoring: evidence of differentiated reconfiguration

One of the central results of this research concerns the distinction between regional nearshoring and domestic reshoring. Results clearly show that nearshoring dynamics are more directly

observable and econometrically clearer than those of domestic reshoring. The Mexican model highlights several statistically significant relationships consistent with the hypothesis of a regional reallocation of supply chains in response to Sino-American trade tensions. On the contrary, Canada does not seem to have benefited from a similar dynamic which confirms that North American nearshoring is not a homogeneous phenomenon.

American domestic reshoring presents an intermediary situation. The `domestic_share` variable allows to identify some economically coherent signals, notably around the dependence on Chinese imports and energetic costs. However, these results remain less direct and less robust than those observed for nearshoring to Mexico. This suggests that the transformations observed since 2017 correspond less to a massive return of production to the United States than to a gradual and selective reconfiguration of supply chains, combining nearshoring and partial domestic adjustments. This conclusion is consistent with the works of Pegoraro et al. (2020), Akinbolajo (2022) and Canello et al. (2022), which describe the emergence of hybrid strategies combining offshoring, nearshoring and partial reshoring.

4.5.5. Implications for supply chain operations and performance

Results also allow to infer certain operational implications coherent with the literature, all while remaining cautious regarding causality. The rise of nearshoring to Mexico suggests a trend towards more regional supply chains, potentially associated with reduced logistical distances, improved response times, better operational coordination and reduced exposure to certain geopolitical or logistical risks. These implications join what was said in the works of Ocicka (2016), Shih (2014) and Ellram et al. (2013) which highlight the potential benefits of shorter chains in terms of flexibility, visibility and resilience.

Concerning domestic reshoring, results suggest more limited and more complex adjustments, which implies that operational gains associated with complete reshoring of production probably remain more difficult to attain in the short term. However, this thesis does not include direct measures of logistical or financial performance. The operational implications should therefore be interpreted as theoretically plausible extensions rather than empirically demonstrated effects.

4.5.6. Summary

The three dimensions of observed factors (political, economic and industrial) have different effects and weights on reshoring and nearshoring dynamics. First, Sino-American trade tensions and tariff policies appear as an important lever of reconfiguration, especially in a nearshoring logic towards Mexico rather than a domestic reshoring.

Secondly, economic factors, notably transport costs approximated by oil prices, play a slightly significant role. The American model highlights a negative relationship between oil prices and the share of domestic supply, suggesting that energy and logistics costs directly influence location trade-offs, even if their effect does not necessarily translate into a mechanical strengthening of national production.

Thirdly, industrial and structural factors, such as automation and historical dependence on Chinese imports show more contrasted effects. Automation seems to act more as a facilitating factor in certain sectoral contexts, particularly in nearshoring to Mexico, without constituting a universal driver of reshoring. The dependence on China appears as a structuring factor, both as a constraint inherited from globalized value chains and as an incentive for partial adjustments.

However, the influence of these factors varies depending on the type of reconfiguration observed. The results show that U.S. trade policies have primarily favoured the regionalization of supply chains, particularly toward Mexico, rather than a massive and direct return of production to the national territory. Domestic reshoring appears more limited, more diffuse, and influenced by more complex economic and structural mechanisms than trade policy instruments alone.

Thus, the movement observed since 2017 seems to correspond more to a selective reconfiguration of Global Value Chains, based on hybrid strategies of regionalization, diversification and adaptation to economic constraints, rather than a genuine abandonment of the internationalized production model.

In answer to the research question, results indicate that U.S. tariffs on China are the main driver of supply chain reconfiguration, favouring a regionalization towards Mexico rather than a massive return of production to the United States. Automation plays a contextual facilitating role, dependence on China reflects both structural inertia and some partial rebalancing, while the effect of logistics costs remains ambiguous.

4.6. Limitations of the empirical analysis

Despite the lessons learned from the empirical analysis, several methodological limitations must be recognized in order to interpret the results with caution.

4.6.1. Data availability constraints and proxy construction

The main limitation of this research concerns the availability of consistent sectoral data for the period studied. The initial objective was to integrate directly observable industrial, economic,

and political determinants at a detailed sectoral level. However, the actual availability of comparable international data proved limited, particularly for certain theoretically relevant variables such as detailed production costs, harmonized sectoral data on automation by country, and precise indicators of sector-specific logistics costs. This constraint led to the use of several proxies.

Automation, for example, was approximated using annual manufacturing robot installation data by country, weighted with each sector's share of total robotic installations, while transportation costs were represented using the annual global oil price. Although these proxies are conceptually consistent, they only partially capture the true complexity of the mechanisms under study. In particular, the price of oil provides a general macroeconomic approximation of logistics costs, without directly reflecting the specific maritime, land, or multimodal transport costs actually incurred by companies. The possibility of using the container price index from China was considered but ultimately rejected due to a lack of data. Similarly, customs duties are measured in aggregate, without detailed differentiation by product or sub-sector, which necessarily simplifies companies' actual exposure to trade policies. These methodological trade-offs have allowed us to maintain a usable empirical framework, but they reduce the accuracy of interpreting the estimated coefficients.

4.6.2. Limited panel size

A second important limitation concerns the relatively small panel size. The analysis is based on a limited number of sectoral observations over a short period (2017 to 2025), which mechanically restricts the statistical power of the estimates. This constraint is particularly pronounced in the separate nearshoring models for Mexico and Canada, where the methodologically necessary analytical separation further reduces the number of available observations. This separation, however, prevents the mixing of factors that sometimes had opposing effects for each country. A limited sample can affect the stability of the coefficients, statistical significance, the sensitivity of the results to certain atypical years, and the ability to detect weaker effects. This limitation justifies the cautious interpretation adopted throughout the analysis.

4.6.3. Structural simplification of location decisions

Reshoring and nearshoring decisions are complex trade-offs, influenced by a range of simultaneous factors that are sometimes difficult to observe. The estimated models necessarily simplify this reality. Some potentially important dimensions could not be integrated, including

hidden coordination costs, contractual constraints with suppliers, the availability of local industrial capacity, specific firm strategies, targeted sectoral policies, intellectual property considerations and the effects of specific trade agreements. Thus, the models capture some important structural determinants but do not claim to reproduce all of the actual microeconomic trade-offs made by firms.

4.6.4. Proxy nature of dependent variables

Another important limitation concerns the construction of the dependent variables. Country_share measures the relative change in U.S. imports from a given destination. This variable serves as a relevant proxy for regional supply reconfiguration, but it does not directly identify an explicit nearshoring decision at the firm-level. An increase in this share may also reflect a decrease in imports from other countries, changes in sectoral demand, or competitiveness developments independent of an explicit reshoring strategy.

Similarly, Domestic_share serves as an indirect proxy for reshoring. This variable captures the relative change in the proportion of U.S. demand supplied by domestic production but does not directly observe production reshoring decisions. The results should therefore be interpreted as indicators of structural reconfiguration rather than as a direct measure of individual strategic decisions.

4.6.5. Unequal intensity of observed reconfiguration dynamics

Another limit concerns the asymmetry of the reconfiguration phenomena's intensity highlighted by the empirical models. Although the same explanatory framework was applied to three configurations (Nearshoring to Mexico and Canada and reshoring to the U.S.), the underlying empirical dynamics are not as pronounced. The descriptive analysis and the more general sectoral data suggest that the most observed significant shift in the recent reconfiguration of American supply chains was towards Mexico rather than Canada or domestic production. Recent sectoral analysis, such as Kearney's reshoring index, highlighted that Mexico has become the principal beneficiary of the trend towards North American regionalization. On the other hand, Canada displayed a much more stable commercial dynamic, while national reshoring remains more progressive and structurally constrained (Leal et al., 2026).

This asymmetry could partially explain why the Mexican model produces clearer and statistically more significant results than the Canadian or American model. When the underlying phenomenon is more pronounced and more directly observable through trade flows,

the econometric model is more susceptible to detect the statistical significance, not necessarily because the explanatory factors are irrelevant, but because the observable structural adjustment remains limited during the period studied. Therefore, the differences in statistical significance between the models should not solely be interpreted as differences in the economic importance of the explanatory variables, but also as a reflection of the unequal maturity and visibility of the reconfiguration processes analysed.

4.6.6. Econometric limitations

Some econometric limitations must also be acknowledged. First, the presence of multicollinearity between some time-domain variables, particularly between tariffs and oil prices, complicates the precise identification of their respective effects (see Appendix C). Although the diagnostics have identified this constraint, it necessitates a cautious interpretation of certain coefficients. Secondly, fixed-effects models allow for controlling for unobservable sectoral characteristics that remain constant over time, but do not necessarily capture all unobserved evolving factors. Finally, the results identify statistical associations rather than strictly demonstrated causal relationships. In the presence of potential simultaneous mechanisms or omitted variables, the coefficients should be interpreted as empirical relationships consistent with certain theoretical assumptions, without any claim to strong causal identification.

4.6.7. Implications for interpretation

These limitations do not invalidate the overall relevance of the analysis, but they do frame its interpretation. The objective of this thesis is not to provide an exhaustive causal demonstration of reshoring decisions, but to identify empirical associations consistent with the theoretical mechanisms discussed in the literature. From this perspective, the analysis offers a structured exploratory contribution to the understanding of recent dynamics in the reconfiguration of American manufacturing supply chains, while highlighting the need for future research based on more detailed, longer-term, and potentially microeconomic data.

5. Conclusions

5.1. Theoretical contributions

This thesis aimed to identify the principal industrial, economic and political factors influencing reshoring and nearshoring in the United States since 2017, to evaluate their effects on manufacturing supply chains reconfiguration and to examine their implication on the functioning and performance of these chains. Results bring a nuanced answer to the research question and enrich the existing literature in several ways. First, this Master's thesis contributes to the literature on supply chain reconfiguration by empirically distinguishing reshoring from nearshoring, two concepts often addressed together despite their distinct strategic and economic mechanisms. While public and political discourse frequently presents recent transformations in the American manufacturing industry as evidence of a return of production to the United States, empirical findings suggest a different reality. The most visible transformation observed during the period studied does not correspond to a large-scale national reshoring movement but rather to a selective regionalization of supply chains through nearshoring movements, particularly towards Mexico. This distinction is important on the theoretical level as it underlines that the reconfiguration of supply chains should not be seen as a binary opposition between globalization and national production but rather as a broader range of strategic reshoring choices.

Secondly, this work contributes to the understanding of trade policy as a driver of supply chain transformation. Existing literature often suggests that protectionist measures, notably customs duties, can encourage reshoring by increasing the relative cost of sourcing from abroad. However, the empirical data presented here suggest a more nuanced mechanism. American trade policies, particularly customs duties imposed on Chinese imports, seem to have mainly acted as a catalyst for the reallocation of regional trade rather than as a direct incentive for national industrial reshoring. The strongest and most coherent empirical relationship identified concerns the increase of supply from Mexico following the introduction of trade barriers against China. This result refines the literature by suggesting that trade protectionism does not necessarily lead to a repatriation of national production but can instead accelerate geographical substitution towards economically competitive regional partners.

Thirdly, this thesis contributes to the larger debate on the determinants of the reshoring of supply chains by offering an integrated empirical frame combining political, industrial and economic explanatory variables. The literature often examines these dimensions separately

when reshoring decisions result from interactions between multiple constraints and incentives. The analysis confirms that these factors do not have uniform effects. Political variables appear as the most visible determinants of nearshoring to Mexico, while industrial factors, such as automation, act more as conditional facilitators depending on sectoral characteristics. The historical dependence on Chinese imports reflects both structural inertia and a dynamic of partial rebalancing, while the role of logistics costs remains more ambiguous. This reinforces the idea that reshoring and nearshoring decisions cannot be explained by a unique and universal framework.

Finally, it contributes on a methodological level by offering an approach based on sectoral panel data focused on observable structural transformations rather than on strategic statements by companies. Even if this approach remains exploratory and indirect, it offers a complementary empirical approach to studies based on case studies or surveys of companies, allowing a larger understanding of supply chains of the American manufacturing sector. Overall, this research suggests that recent transformation of the American manufacturing sector does not correspond to a generalized retreat from globalization but rather a selective reconfiguration of Global Value Chains, characterized by regional adaptation, strategic diversification and differentiated sectoral responses.

5.2. Managerial contributions

Beyond these theoretical contributions, this Master's thesis offers several managerial contributions to supply chain decision-makers facing increasing geopolitical uncertainty, supply chain disruptions and strategic pressures prompting them to reconfigure their supply networks. A first implication concerns the strategic interpretation of the concepts of reshoring and nearshoring. The results suggest that the transformation of the supply chain focused on resilience should not automatically be associated with a complete domestic reshoring movement. Even if reshoring often benefits from a significant political and media attention, empirical results indicate that nearshoring can constitute a strategic response more realistic and economically viable in many manufacturing sectors. For companies aiming to reduce their exposure to geopolitical risks, long transport distances and supply chain disruptions, nearshoring can offer a compromise between resilience and profitability without necessitating a complete restructuring of production systems.

Secondly, results highlight the importance of integrating geopolitical risk to supply strategies. The clear impact of U.S. tariffs on the reallocation of supplies to Mexico demonstrates that political decisions can rapidly alter international cost structures and supplier attractiveness.

Supply chain managers should therefore not view trade policy as a mere external condition, but as an active strategic variable that can significantly influence procurement decisions, supplier risk and long-term competitiveness.

Thirdly, results also underline the importance of a strategic sectoral decision-making process. The effects of automation, the dependence on suppliers and reshoring incentives can considerably vary from one sector to another. This suggests that the reconfiguration of the supply chain should not be addressed through standardized strategic frameworks. Sectors characterized by a high capital intensity, a better compatibility with automation, or a complex operational coordination can be structurally more adapted to reshoring compared to labor-intensive sectors. Managers should then evaluate reshoring and nearshoring strategies taking into account their specific operational constraints rather than relying on generalized discourse about reshoring.

Finally, the different conclusions reinforce the managerial pertinence of the perspective of total cost. Direct production costs do not suffice to evaluate supply chain location decisions. The complexity of coordination, logistical uncertainty, perturbation risks, delivery times and geopolitical exposure influence the actual economic attractiveness of supply configurations. This is consistent with the literature that highlights that the competitive design of supply chains increasingly depends on the balance between efficiency, resilience and strategic flexibility rather than solely on minimizing production costs.

5.3. Critique

Despite these contributions, this research still presents limits that need to be acknowledged while interpreting results. The empirical analysis relies on sectoral indicators and indirect variables rather than direct observations of companies' reshoring decisions which limits the capacity to fully capture the complexity of strategic reconfiguration of supply chains. Moreover, the relatively small sample size and the exploratory nature of the panel study reduce the robustness of the statistical inferences and do not allow for strong causal conclusions to be drawn. These limits do not call into question the results' pertinence but suggest that they should be interpreted as structured empirical data on recent supply chain reconfiguration trends, rather than definitive proof of underlying decision-making mechanisms. Future research could then build on this work by using company-level data, a longer time horizon and more detailed explanatory variables in order to better understand the causal mechanisms behind the reconfiguration of the supply chain and to directly assess their operational and financial impacts.

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Appendix

Appendix A. Sectoral correlation analysis

Appendix A.1. Correlations between the country share and the different variables for different sectors in Mexico

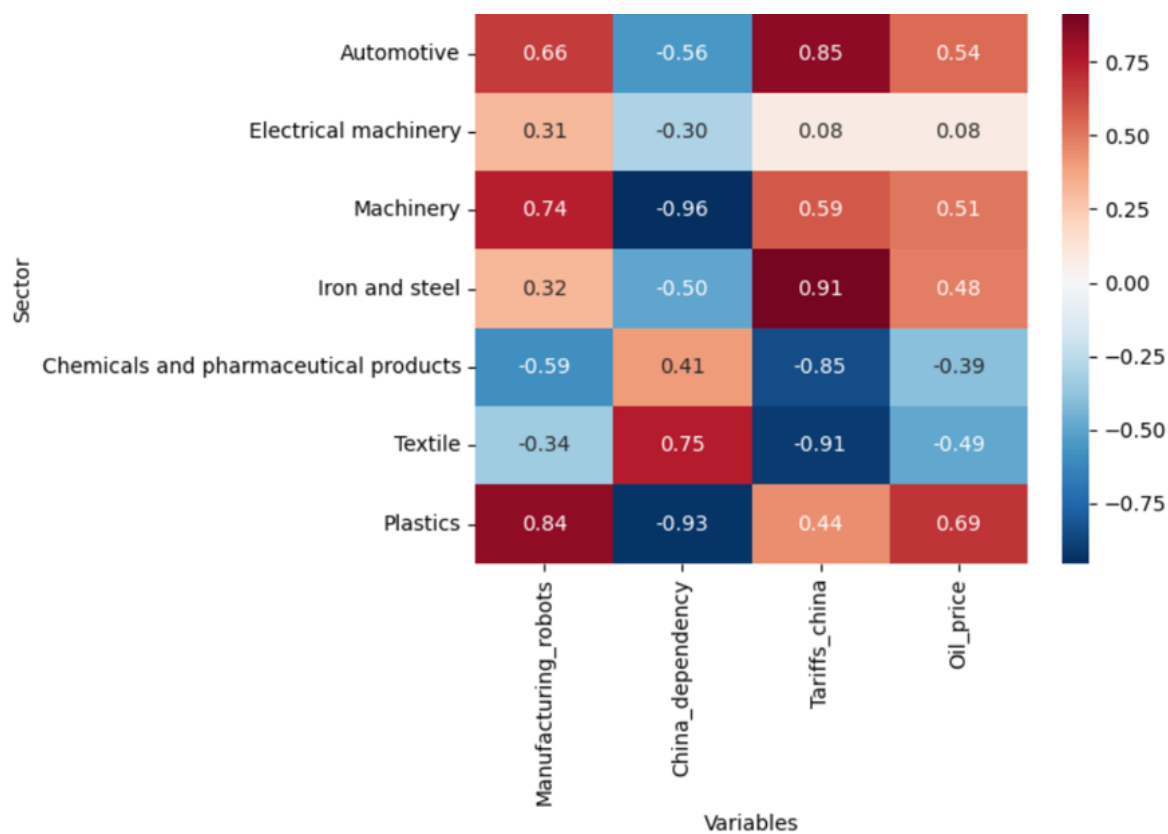


Fig. A.1: Sector-level correlations with Mexico's country share of U.S. imports

Appendix A.2. Correlations between the country share and the different variables for different sectors in Canada

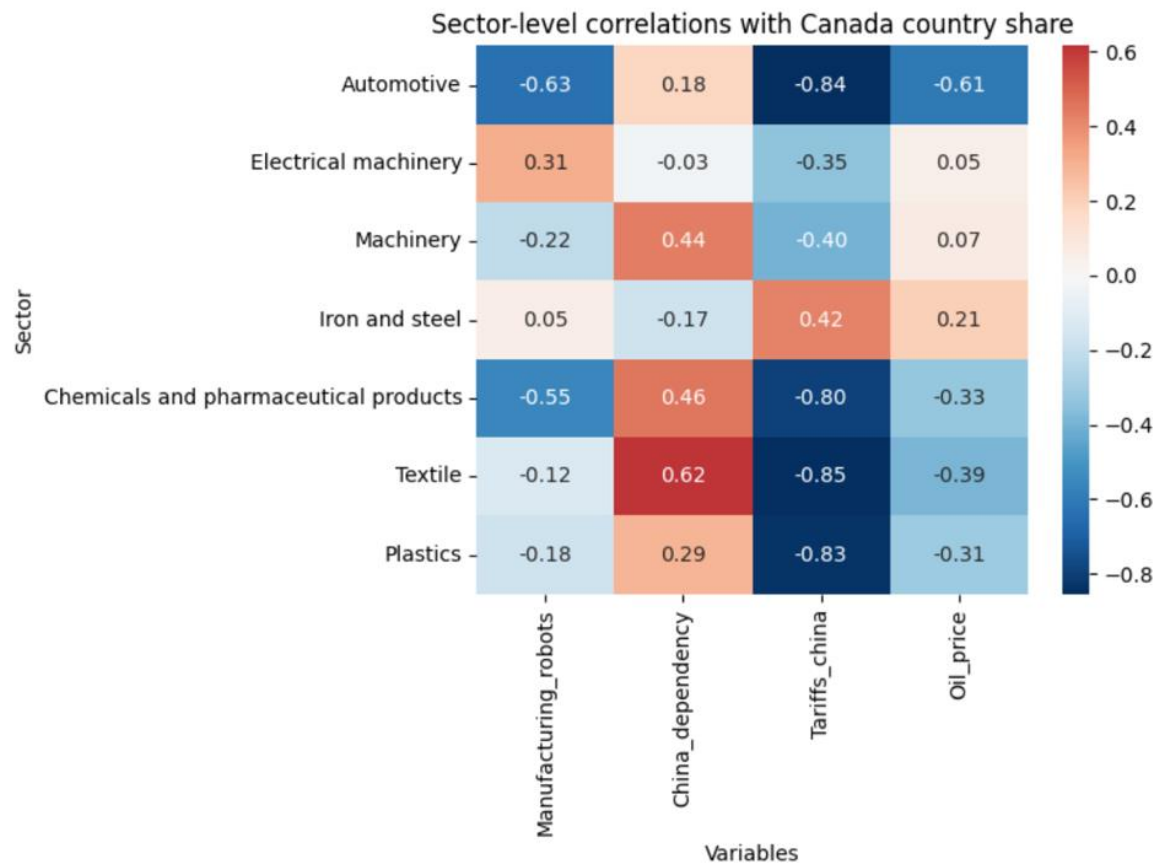


Fig. A.2: Sector-level correlations with Canada's country share of U.S. imports

Appendix A.3. Correlations between the country share and the different variables for different sectors in the United States

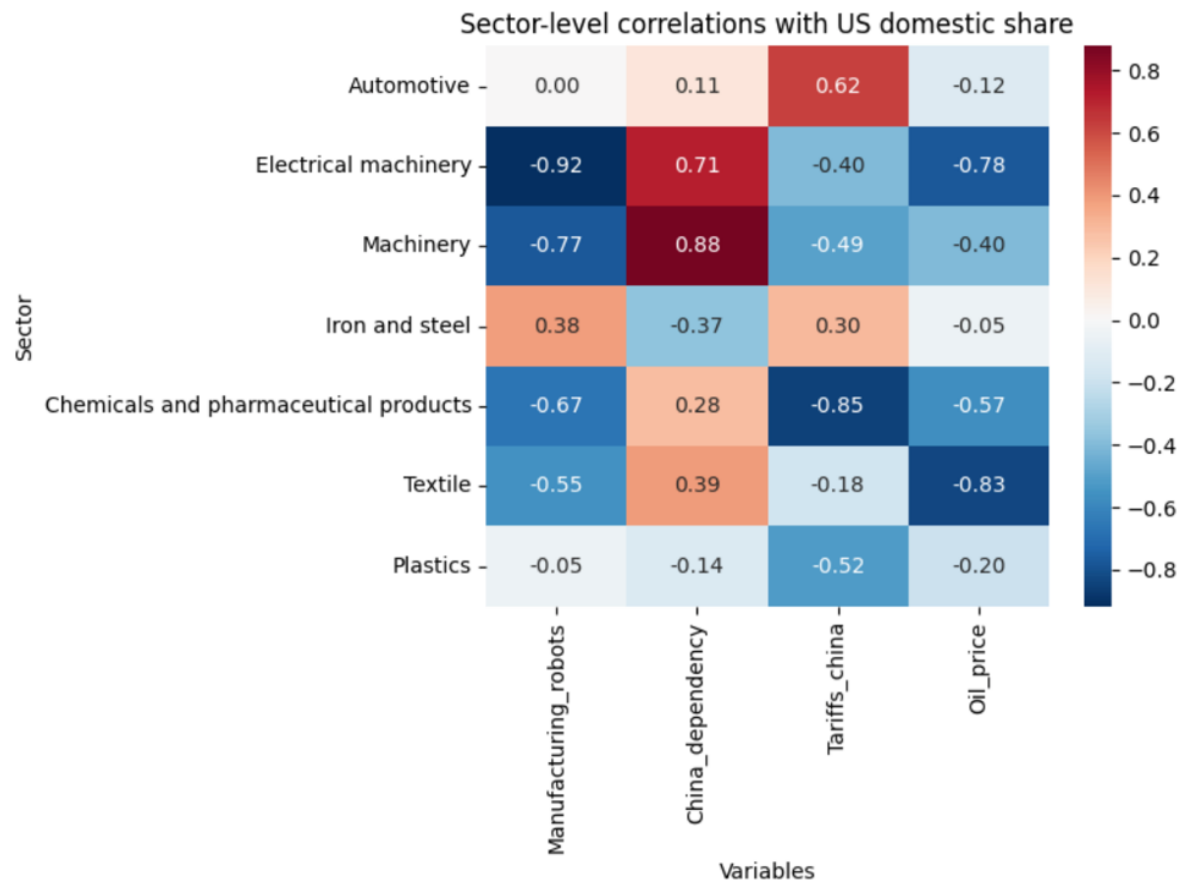


Fig. A.3: Sector-level correlations with American domestic share

Appendix B. Robustness check

Appendix B.1. Robustness check of the nearshoring model for Mexico

Table B.1: Robustness check for the Mexican model

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	6.578e-06	2.832e-06	0.0258
China_dependency	0.0542	0.0830	0.5279
Tariffs_china	0.1403	0.0505	0.0085
Oil_price	-0.0003	0.0002	0.1083
Tariff_exposure	-0.0318	0.0503	0.5306
Number of observations			49
Number of sectors			7
R ²			0.4612
Within R ²			0.4612

Appendix B.2. Robustness check of the nearshoring model for Canada

Table B.2: Robustness check for the Canadian model

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	-5.679e-06	1.693e-06	0.0018
China_dependency	-0.1176	0.0451	0.0131
Tariffs_china	-0.1128	0.0346	0.0024
Oil_price	0.0002	0.0001	0.2082
Tariff_exposure	0.0341	0.0258	0.1941
Number of observations			49
Number of sectors			7
R ²			0.4057
Within R ²			0.4057

Appendix B.3. Robustness check of the American reshoring model

Table B.3: Robustness check for the American model

Variable	Coefficients	Robust std. Error	P-values
Manufacturing_robots	5.194e-06	2.979e-06	0.0895
China_dependency	0.3119	0.1710	0.0762
Tariffs_china	0.0820	0.1539	0.5971
Oil_price	-0.0009	0.0002	0.0002
Tariff_exposure	-0.0668	0.0633	0.2984
Number of observations			49
Number of sectors			7
R ²			0.3995
Within R ²			0.3995

Appendix C. VIF table

Table C.1: VIF table

Variable	VIF
Manufacturing_robots	2.443745
China_dependency	6.480387
Tariffs_china	9.048280
Oil_price	17.704400
Tariff_exposure	2.645266

Abstract:

This Master's thesis examines the recent reconfiguration of American manufacturing supply chains since 2017 focusing on reshoring and nearshoring dynamics. The objective was to identify the principal political, industrial and economic factors influencing these phenomena and to evaluate if the observed changes correspond more to a return of manufacturing production to the United States or to an increase in nearshore imports.

To answer this question, an empirical analysis of panel data was conducted on several American manufacturing sectors for the period of 2017 to 2025. Three complementary models were developed: the first two measuring nearshoring through American imports from Mexico and Canada and the third one measuring reshoring through the share of domestic production in apparent US demand. Explanatory variables include U.S. tariffs on Chinese imports, industrial automation, the dependence on Chinese imports, oil prices and sectoral exposure to tariffs.

Results indicate that the most significant observable transformation is a regional reallocation of supply chains towards Mexico rather than a massive return of the production to the United States. Trade policies, and in particular the tariffs imposed on Chinese imports, seem to be the principal identifiable factor of this evolution. Automation appears to act as a contextual facilitator factor while the dependence on China reflects both a structural inertia and a dynamic of partial rebalancing. The effect of logistics costs remains ambiguous.

Overall, results suggest that recent transformations in the American manufacturing sector reflect a selective regional restructuring of Global Value Chains rather than a vast movement of reshoring.

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