Indian Journal of Applied Economics and Finance
Vol. 1, No. 1, 2026, pp. 31-64
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ISSN: 3107-667X
URL: http://www.pbjournals.com/ijaef

Internationalization Level Dynamics in the Mexican States: A Comprehensive Analysis of Subnational Disparities and Determinants

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To Cite this Article

José G. Vargas-Hernandez (2026). Internationalization Level Dynamics in the Mexican States: A Comprehensive Analysis of Subnational Disparities and Determinants. *Indian Journal of Applied Economics and Finance,* 1: 1, pp. 31-64.

Abstract: This research investigates the dynamics of internationalization levels across Mexico's 32 federal entities, analyzing the significant disparities in their engagement with global economic activities. Key determinants include geographic proximity to the United States, quality of infrastructure, institutional capacity, human capital development, and security conditions. Findings suggest that although nearshoring trends have opened up unprecedented opportunities for Mexico, the distribution of benefits has been highly uneven, as states with superior structural conditions have managed to capture disproportionate shares of FDI and export growth.

Keywords: *Internationalization, states of Mexico, foreign direct investment, subnational dynamics, regional disparities, export competitiveness, nearshoring*

Introduction

Mexico's status as a rising global economic power and active player in international trade networks is well documented; however, internationalization processes at the national level cannot comprehensively explain such dynamics. The Mexican federal system is a complex entity, with 32 states exhibiting different economic development levels, with variations in institutional capacity and geographical characteristics-a characteristic that creates stark contrasts in internationalization trends across subnational territories (Garriga, 2022). This heterogeneity begs some essential questions regarding how, why, and to what extent different states of Mexico have

Received: 21 February 2026 • **Revised:** 10 April 2026 • **Accepted:** 19 April 2026 • **Published:** 05 June 2026

been reached by international markets, and what factors drive differences in the success of attracting foreign investment and advancing export initiatives.

The importance of this research is informed both by theoretical and practical perspectives. Theoretically, this paper addresses significant gaps in international business literature that have traditionally adopted a single-country-level analysis while neglecting important within-country differences that may challenge or surpass those across nations. The Mexican case represents an unusually valuable case study, since this country exhibits remarkable subnational diversity: states along the border with the United States operate under fundamentally different conditions than those in the south, creating what some scholars have called internal "institutional distance" (Ma *et al.*, 2016). Understanding these dynamics contributes to emerging perspectives on subnational internationalization, paradiplomacy, and the geographic dimensions of global economic integration.

Practically, Mexico faces urgent challenges in regional disparities that threaten social cohesion and limit national economic potential. While Mexico has positioned itself as one of the preferred nearshoring destinations benefiting from changes in global supply chains, evidence suggests these opportunities have benefited already-advantaged states, thereby exacerbating rather than improving regional inequalities (IMCO 2024). The current geopolitical context, characterized by the implementation of USMCA and ongoing nearshoring trends, gives a peculiar timeliness to understanding state-level internationalization patterns.

The present research focuses on a number of interrelated questions: What is the situation with regard to internationalization across Mexican federal entities, and how can these differences be measured and described systematically? What are the causes of the significant discrepancies that occur in the states' level of internationalization? How do geographic, institutional, and economic variables interact in order to produce different internationalization paths for various regions? What are the implications of such patterns for the general development strategy of Mexico and the efforts to reduce inequalities among its regions?

By means of a mixed-methods approach that combines quantitative analysis of foreign direct investment, export performance, and competitiveness indicators with theoretical frameworks emanating from subnational internationalization literature, it uncovers significant heterogeneity in how Mexican states participate in international markets. The present analysis shows that northern border states, such as Nuevo León, Chihuahua, and Baja California, reach internationalization

levels way above the southern states of Oaxaca, Chiapas, and Guerrero. The contribution to subnational internationalization theory is threefold: this research demonstrates how within-country institutional and geographic variations create manifold internationalization pathways; it challenges the assumption of national-level homogeneity in international business studies; and it informs policy-relevant insights regarding how to tackle regional disparities in Mexico's integration into global value chains.

This research uses an encompassing analytical framework that embeds multiple theoretical perspectives: institutional theory, resource-based views of regional competitiveness, and subnational internationalization literature. Empirically, the study analyzes data on FDI flows, export performance, competitiveness indicators, and various structural factors across Mexico's 32 states, covering the period from 2010 to 2024. This timeframe captures both the implementation of structural reforms under the Peña Nieto administration and the more recent nearshoring phenomenon accelerated by global supply chain disruptions.

The rest of this report is organized as follows: Section 2 reviews the conceptual, theoretical, and empirical literature related to subnational internationalization and regional disparities. Section 3 describes the methodological approach, data sources, variables, and analytical techniques. Section 4 contains the empirical analysis and results. Section 5 discusses the findings in light of existing literature and theoretical frameworks. Section 6 concludes with implications for theory, policy, and future research directions.

Literature Review

Conceptual Framework: Defining Subnational Internationalization. Internationalization as a concept is beyond just nation-states or multinational corporations. Current scholarship sees states, provinces, regions, and cities as subnational entities that are of considerable importance in global economic affairs (Kuznetsov 2015). Subnational internationalization pertains to those processes associated with the way territorial units below the national level interact with international actors, participate in cross-border economic activities, and integrate into global value chains (Pinkham *et al.* 2019).

This conceptualization incorporates various dimensions. First, economic internationalization refers to the crossing of goods, services, capital, and labor across subnational borders into international markets. Relevant indicators include

export volumes, FDI inflows, participation in global production networks, and the presence of MNEs in the region. Second, institutional internationalization is defined as the creation of formal structures for international interaction, such as trade promotion offices, international cooperation agreements, and membership in transnational networks. Third, social and cultural internationalization entails international flows of people, ideas, and cultural products; this dimension, however, goes beyond the main scope of the present research.

The subnational dimension has become prominent for a number of reasons. Globalization opened possibilities for regions to bypass national intermediaries and deal directly with international partners. At the same time, decentralizing trends in many countries have allowed subnational governments more latitude in economic policy and international relations-a phenomenon sometimes referred to as "paradiplomacy" (Tavares, 2016). Furthermore, empirical evidence increasingly shows that location does matter at scales smaller than national: provinces or states within the same country may diverge as much as different countries along dimensions of institutional quality, economic structure, and international connectivity (Chan *et al*., 2010).

Subnational internationalization in the Mexican context largely occurs through differential participation in international trade and investment. In so far as the federal government retains constitutional authority with respect to foreign policy and international treaties, states exert significant influence through policies that impact business climate, infrastructure investment, education and training programs, and regional economic advantage promotion. Resulting variation in levels of internationalization reflects both structural factors that largely lie beyond state control (such as geographic location) and policy choices that shape regional competitiveness.

Theoretical perspectives on subnational internationalization

A number of conceptual frameworks underpin the exploration of subnational internationalization dynamics. The institutional perspective highlights how formal and informal institutions influence economic actors' incentives and constraints concerning international activity (North 1990; Scott 1995). This approach, when applied to subnational contexts, acknowledges that institutional quality can vary markedly within countries, thereby creating various distinct "institutional terrains" which differentially enable or constrain internationalization (Chan *et al*. 2010). Federal

systems, such as the one in Mexico, for example, provide subnational governments with considerable authority over areas crucial to international competitiveness, such as education, public security, infrastructure, and regulation affecting businesses. As a result, variations in how effectively states exercise these responsibilities generate distinct levels of institutional support for international activity.

Research on Chinese provinces shows that subnational institutional development has a meaningful impact on firms' internationalization strategies and performance. States with more developed market institutions, stronger rule of law, and lower corruption reduce transaction costs, enhance contract enforcement, and increase the predictability of the business environment, making international business easier to conduct. By contrast, poor institutions discourage foreign investors and hinder domestic companies keen to compete abroad. Thus, this framework implies that Mexican states with better institutional quality should have superior levels of internationalization, all else held constant.

The resource-based view provides a complementary perspective by emphasizing how the endowments of tangible and intangible assets within a region affect its international competitiveness (Barney, 1991). Applicable resources at the subnational level include physical infrastructure (ports, airports, highways, telecommunications), human capital (education levels, specialized skills, language proficiency), natural resources, and agglomeration economies emanating from industry clusters. According to this perspective, states with resources valuable in international business, especially those that are rare and hard to imitate, will be more successful at attracting FDI and increasing exports.

In the Mexican case, proximity to the United States represents a crucial resource that heavily favors northern border states. This locational advantage reduces transportation costs, facilitates just-in-time manufacturing, and allows for cultural and business ties that lower transaction costs for cross-border operations. Similarly, states that have invested in developing specialized industrial clusters-such as automotive manufacturing in Guanajuato and Querétaro or aerospace in Baja California-have created resources that attract additional international investment through agglomeration benefits.

On the other hand, dependency and center-periphery theories remain more critical, arguing that subnational internationalization will further entrench rather than alleviate regional inequalities. According to these perspectives, international economic integration will favor already-advantaged regions at the expense of

peripheral regions through a process of cumulative causation, which tends to increase disparities over time. On balance, the regions that succeed in integrating into global production networks tend to attract investment, build infrastructure, and gain human capital, thus becoming more attractive for further international linking. For their part, peripheral regions cannot overcome initial disadvantages and are in danger of being locked into a low-development equilibrium.

This perspective raises some important questions about the recent nearshoring experience in Mexico. While national aggregate statistics reveal a boost in FDI and an export growth, distribution may be made across states following center-periphery patterns-internationally connected central and northern states capture the opportunities, while southern states remain marginalized. The presence or absence of mechanisms for redistributing gains from internationalization becomes critical in the determination of whether increasing international integration accentuates or ameliorates regional disparities.

Paradiplomacy theory, in turn, focuses on how subnational governments conduct international relations and economic diplomacy in particular (Kuznetsov 2015; Tavares 2016). This literature clearly identifies states and provinces as becoming international actors in their own right through the establishment of trade offices abroad, the negotiation of investment agreements, and the involvement with transnational networks. The intensity and sophistication vary greatly across subnational units as a function of resources, institutional capacity, and political orientation.

Research has identified a number of motivations for subnational international engagement, including economic objectives (attracting investment, promoting exports), political goals of enhancing regional identity and increasing autonomy, and functional needs related to cross-border issues such as environmental management or security. Within Mexico's federal system, states have increasingly undertaken international activities, though variation is significant. Several states have developed sophisticated international promotion strategies and kept offices in key markets, while others lack dedicated capacity for international engagement. These differences themselves constitute a factor that might help explain variation in internationalization outcomes.

Empirical Literature on Regional Disparities in Mexico

Mexico's regional disparities have long been a subject of scholarly attention, as research has consistently documented the large differences in economic

development, poverty rates, and institutional capacity across states. Normally, there is more per capita income, better infrastructure, and higher industrialization in the northern states, particularly the ones that border the U.S., while the southern states retain more indigenous populations, rural communities, and informal economic activities (World Bank, 2024).

These disparities have deep historical roots, reflecting colonial-era patterns, differential integration into global commodity markets during the 19th century, and Mexico's 20th-century development model. The import substitution industrialization strategy pursued from the 1940s through the 1980s tended to concentrate manufacturing in central Mexico, especially the Mexico City metropolitan area and nearby states. This geography shifted somewhat with the adoption of trade liberalization in the late 1980s and the implementation of NAFTA in 1994, as export-oriented manufacturing increasingly located in northern border states to minimize transportation costs and maximize access to U.S. markets.

Research into the subnational effects of NAFTA indicates that, while border states emerged as significant beneficiaries in terms of manufacturing employment and exports, southern states benefited very little and sometimes suffered from negative import competition shocks to their agricultural sectors (Hanson, 2010). This uneven pattern reinforced diverging regional gaps throughout the period of NAFTA, even while there remains considerable debate over how much of this can be attributed to trade liberalization versus other factors such as internal migration and differentials in the supply of educated labor and infrastructure.

Research on location choices of FDI into Mexico identifies a number of key determinants.

Jordaan (2008) identified market size, labor costs, education levels, and proximity to the U.S. border as particularly significant determinants of FDI flows to Mexican states. Of the structural conditions that determine and promote the competitiveness of the states' productive sectors, infrastructure quality featured, especially in transport and telecommunications. More recent studies of the nearshoring phenomenon confirm that supply chain relocation-related FDI has concentrated in states with superior structural conditions-in particular, Aguascalientes, Nuevo León, and Mexico City-whereas states like Oaxaca and Veracruz have gained little benefit (IMCO, 2024).

Political influences also shape subnational patterns of FDI. For example, Garriga (2022) finds that states ruled by the left-wing party PRD received significantly more

FDI than those ruled by other parties, holding economic determinants constant. That finding is counterintuitive, given widespread assumptions about foreign investors' political preferences, and implies that greater human capital and social infrastructure investments by left-leaning governors can make a region more appealing for specific forms of FDI. This study underlines how high-quality governance and policy are crucial for the success of internationalization.

Security conditions represent another fundamental factor that influences regional internationalization. High levels of violence emanating from organized crime deter both foreign investors and efforts by domestic firms to expand internationally (Ríos, 2013). The states with high homicide rates, kidnappings, and extortion suffer significant disabilities in competing for international investment. This factor has turned out to be highly relevant since violence levels have varied greatly between Mexican states; some regions present very serious insecurity levels, while others remain in relatively stable conditions.

Recent empirical work on the competitiveness of the states in Mexico systematizes evidence on the multi-dimensional nature of regional differences. The Mexican Institute for Competitiveness publishes on a yearly basis an Index of State Competitiveness for all 32 federal entities in areas related to innovation and economy, infrastructure, labor markets, society and environment, rule of law, and political systems. The 2024 index places Mexico City as the most competitive state, while Nuevo León, Querétaro, and the rest of the northern and central states are the close followers; Oaxaca, Guerrero, and Chiapas remain at the bottom. These rankings correlate strongly with several internationalization indicators, and there are reasons to believe that regional competitiveness and internationalization are self-reinforcing.

The Nearshoring Context and Recent Developments. The recent nearshoring phenomenon has created new dynamics in the subnational internationalization landscape of Mexico. Nearshoring is about shifting production and sourcing activities to more proximate countries from major markets. These, according to Javorcik (2020), are driven by the need and desire to minimize supply chain vulnerabilities exposed during the COVID-19 pandemic, increased labor costs in faraway locations such as China, and geopolitical tensions. Mexico has turned out to be the primary beneficiary of nearshoring to supply the North American market due to proximity, participation in USMCA, relatively lower labor costs, and pre-existing manufacturing capabilities.

However, data show that the benefits of nearshoring have been distributed unevenly across Mexican states. According to IMCO's analysis, FDI flows related to the relocation of supply chains increased by 47% in the first nine months of 2023 compared to the same period in 2022, while non-nearshoring FDI decreased by 27%, showing the increasing relevance of this phenomenon (IMCO, 2024). But this growth was concentrated in a few states. Aguascalientes saw the growth of nearshoring FDI by 310%, while the states of Nuevo León and Mexico City registered more modest but still quite significant increases. In contrast, states such as Veracruz and Oaxaca barely captured any nearshoring investment, despite the presence of policy initiatives apparently intended to shift development to southern regions.

This disproportionate pattern is a function of deeper structural factors that impede most states' nearshoring potential. Many southern states still lack the adequate infrastructure to support manufacturing: dependable electricity, a water supply, transport systems, and telecommunications. Human capital needs for high-end manufacturing often surpass available capabilities in regions where educational attainment tends to be lower. Security concerns, where violence levels are particularly high, discourage investors. Agglomeration economies likewise favor places with established bases of manufacturing, as suppliers, skilled workers, and specialized services have a strong tendency to be concentrated in established industrial areas.

The literature is still limited but growing on the subnational impacts of nearshoring. Early evidence suggests that this phenomenon may widen rather than narrow regional disparities unless it is accompanied by deliberate policies aimed at strengthening the structural conditions of lagging regions. Some scholars suggest infrastructure investment, workforce development programs, and targeted incentives are necessary to channel nearshoring investments toward southern states, while others doubt whether such interventions will overcome disadvantages based on more fundamental geographic and agglomeration factors (World Bank, 2024). This debate has important implications for Mexico's development strategy and social cohesion.

Gaps in the Literature and Research Contributions. Despite a growing interest in subnational internationalization, several gaps persist regarding the understanding of Mexican states' engagement with global markets. First, although research has studied specific aspects, such as FDI determinants or export patterns, comprehensive analyses integrating various dimensions of internationalization remain scarce. Second, most studies deal with relatively short time periods or single sectors, which,

again, reduces the understanding of how internationalization dynamics evolve and respond to changing conditions. Third, the theoretical literature on subnational internationalization has developed mostly from cases in other countries, particularly China, raising concerns about the applicability of findings to Mexico's distinct institutional and geographic context.

This paper bridges these gaps through a multivariate study of the variation in the levels of internationalization across all 32 Mexican states, using both FDI and export dimensions for an extended period under different policy regimes and economic conditions. The paper makes theoretical contributions by assessing whether frameworks derived from other federal systems explain Mexican patterns and by identifying Mexico-specific factors that may call for theoretical extensions. Finally, the research provides timely empirical evidence on the subnational impacts of the nearshoring phenomenon, informing questions of immediate policy relevance.

By bridging international business scholarship, regional development studies, and Mexican policy debates, this research intends to contribute to both academic understanding and practical responses to the challenges of ensuring that the benefits of Mexico's internationalization extend beyond a privileged subset of its territory. The following analysis operationalizes these theoretical perspectives through concrete indicators and empirical methods tailored to testing key propositions about the driving factors behind subnational internationalization dynamics.

Method

Research Design and Analytical Approach. This research combines quantitative analyses of secondary data with the qualitative interpretation of emerging patterns and trends. The design of the study will be cross-sectional with longitudinal elements, in which data from the 32 federal entities of Mexico is analyzed across multiple points in time, to capture static differences and dynamic changes in levels of internationalization. This allows for the identification of persistent structural patterns but also detects shifts related to policy changes, economic cycles, and emerging trends such as nearshoring.

The analytical strategy unfolds in a sequence of steps. First, descriptive statistics profile the distribution of internationalization indicators across Mexican states, documenting the extent and nature of subnational disparities. Second, comparative analysis identifies groups of states exhibiting similar internationalization profiles and trajectories, revealing whether states cluster into distinct categories-e.g., high versus

low internationalization, border versus interior, manufacturing versus resource-based economies. Third, correlation and regression analyses investigate associations between internationalization outcomes and hypothesized determinants, testing propositions derived from the theoretical frameworks discussed above. Finally, case-based analysis explores specific states or regions to provide contextual depth and identify the mechanisms underlying statistical patterns.

Data Sources. Data for this analysis come from several authoritative sources that provide extensive coverage of the economic characteristics of Mexican states and their international engagement. Data on foreign direct investment are obtained from the Secretaría de Economía of Mexico, which keeps detailed records of FDI flows by federal entity, sector, and country of origin. Although subject to some limitations with regard to the attribution of investment to particular locations in cases where projects span several states, these official statistics are nonetheless the most reliable source to track subnational FDI patterns.

Export data come from the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía, INEGI), Mexico's official statistics agency. INEGI publishes exhaustive trade data, including state-level export values by sector and destination market. These data allow investigation of both the magnitude and composition of states' export activities, distinguishing between manufacturing exports-especially relevant in light of Mexico's insertion into North American production networks-and other types of exports.

Competitiveness indicators come from the Mexican Institute for Competitiveness (IMCO), an independent think tank that has produced the annual State Competitiveness Index, or ICE. In this index, there is a synthesis of 50 indicators within six categories: innovation and economy, infrastructure, labor market, society and environment, rule of law, and political systems. Based on transparent criteria and public data, the methodology of this index provides a systematic assessment of states with structural conditions that are relevant to economic performance and international engagement.

Additional data related to demographic and economic structure, education levels, and other indicators come from supplementary sources of census and survey programs conducted by INEGI, as well as from CONEVAL and international sources, including the World Bank. In terms of the nearshoring analysis, recent reports from IMCO and private sector sources reflect data on FDI flows in sectors related to supply chain relocation.

Variables and Indicators. The analysis uses multiple indicators that capture different dimensions of internationalization. The main dependent variables are:

Foreign Direct Investment: Measured as total FDI inflows to each state in U.S. dollars, FDI per capita to take account of differences in state population, and FDI as a percentage of state GDP to control for economic size. The analysis considers both flows-annual new investment-and stocks-accumulated investment-where data permit. Because FDI can vary substantially from year to year-particularly for the smaller states where one or two big projects can dominate-multi-year averages are used to discern underlying patterns rather than temporary ups and downs.

Export Performance: Measured as a total export value in U.S. dollars, exports per capita, and exports as a percentage of state GDP. Other indicators are export growth rates over fixed periods and export diversification (concentration across sectors and destination markets). Manufacturing exports figure with special prominence, given their predominance in Mexico's international trade profile, linked to participation in global value chains.

Competitiveness ranking: Overall State Competitiveness Index score and ranking from IMCO and scores for the specific sub-indices-theoretical frameworks identify those as particularly relevant for internationalization, such as infrastructure, innovation, and human capital. These indicators capture multidimensional aspects of regional competitiveness that may enable or constrain international engagement.

Independent variables, representing hypothesized determinants of internationalization, include:

- **Geographic Controls:** Dummy variable for border states - those sharing a boundary with the U.S.; miles from state capital to nearest major U.S. city; coastal state - Pacific, Gulf, or none. These operationalize the resource-based emphasis on locational advantage.
- **Infrastructure:** Indicators such as kilometers of paved roads per 1,000 square kilometers, number of airports with international connections, port cargo capacity for coastal states, and internet penetration rates. Infrastructure quality directly impacts the feasibility and cost of doing business internationally.
- **Human Capital:** Average years of schooling for adult population; percentage of population with university education; English language proficiency

indicators where available. Human capital represents both a resource for international competitiveness and an outcome of successful economic development.

- **Institutional Quality:** Rule of law index scores; corruption perception indicators; government effectiveness measures; regulatory quality assessments. These variables, taken together, operationalize the institutional perspective through an emphasis on the quality of governance as a determinant of economic performance.
- We use state GDP per capita, percentage of state GDP in manufacturing, services, and primary sectors, and the presence of major industrial clusters in the automotive, aerospace, and electronics, or other export-oriented sectors. These variables of economic structure control for the possibility that some states naturally orient more toward international markets with respect to their productive specialization.
- **Security Conditions:** Homicide rates per 100,000 population; organized crime presence indicators; perception of security measures from business surveys. Security is a potentially important yet often neglected determinant of investor confidence and firm willingness to operate in given locations.
- **Political Factors:** Party affiliation of state governor; years under the current political regime; level of political stability and continuity. Political variables test propositions about whether governance by particular parties or political configurations affects internationalization outcomes.

Analytical Techniques. Descriptive statistics allow for the preliminary characterization of central tendency, dispersion, and distribution of variables across states. Maps illustrate spatial patterns in the internationalization indicators, highlighting regional clusters and outliers. Time series graphs plot the evolution of the key indicators, tracing trends, cycles, or structural breaks that may correspond to policy discontinuities or exogenous shocks.

Correlation analysis examines the bivariate relationships between internationalization indicators and hypothesized determinants, thus providing preliminary evidence on which factors are more strongly associated with the levels of international engagement. However, many independent variables themselves correlate-e.g., infrastructure quality and GDP per capita-and therefore require multivariate techniques for isolating specific effects.

Multiple regression analysis assesses the hypotheses dealing with the determinants of internationalization controlling for various confounding factors. The basic form of the model specification is:

$Internationalization_i = \beta_0 + \beta_1 Geographic_i + \beta_2 Infrastructure_i + \beta_3 HumanCapital_i + \beta_4 Institutions_i + \beta_5 Economic_i + \beta_6 Security_i + \beta_7 Political_i + \varepsilon_i$ where the subscript i refers to states and ε is the error term. The different dependent variables, viz., FDI, exports, overall internationalization index, are estimated as separate models to check for any variation in determinants across internationalization dimensions. Robustness checks include alternative variable specifications, different time periods, and various estimation techniques to ensure findings are not artifacts of particular modeling choices.

Cluster analysis groups states with similar profiles across multiple internationalization and determinant variables. This shows whether the Mexican states represent separate classes of paths toward internationalization. It serves to reinforce regression analysis by identifying patterns that might not emerge when individual variables in isolation are considered.

Case study analysis provides qualitative depth for selected states that represent different internationalization profiles. The high performing cases, like Nuevo León or Aguascalientes, are examined to discern the success factors and mechanisms through which favorable conditions translate into international engagement. Low-performing cases, such as Oaxaca or Chiapas, are analyzed in order to understand various obstacles and constraints that limit internationalization. The comparison of states with similar structural conditions and different outcomes helps identify the role of policy choices and historical contingencies beyond structural determinants captured by quantitative variables.

Limitations and Methodological Considerations. Several limitations need to be acknowledged. First, data quality and availability differ across states and indicators; some key theoretical constructs are either weakly quantified or not at all (e.g., institutional quality, social capital), which makes it necessary to rely on proxy indicators capturing aspects but not entireties of the concepts. Second, there is a degree of ambiguity in attributing FDI and exports to specific states because firms may register in one location while operating primarily in another, and exported goods may transit through multiple states. Third, the observational nature of data means that strong causal inferences cannot be established; correlations may reflect reverse causation-i.e., internationalization driving one or more of the determinants

rather than the other way around-or omitted factors simultaneously affecting outcomes and determinants.

Fourth, the analytical focus lies more on the economic dimensions of internationalization because detailed data on social, cultural, and political aspects are less common. The focus in this study on measurable economic outcomes leads necessarily to an incomplete picture of subnational international engagement. Fifth, patterns identified can evolve quickly as nearshoring trends and policy shifts under different administrations are making rapid changes in the economic and political landscape of Mexico.

These limitations notwithstanding, this research applies the most stringent methods to the best available data to provide systematic evidence on a set of understudied questions related to subnational internationalization dynamics in Mexico. Triangulation across multiple data sources, indicators, and analytical techniques strengthens confidence in key findings. Explicit acknowledgement of limitations informs appropriate interpretation and application of results.

Analysis of Results

Current State of Internationalization Across Mexican States. Internationalization levels are highly heterogeneous among the federal entities of Mexico. In an aggregate sense, Mexico ranks as the world's 9th-largest recipient of FDI, while Mexican export volumes are also considerable, with the United States as the leading export destination for approximately 80% of Mexican exports. This national level performance conceals dramatic subnational variation.

FDI distribution across Mexican states is very highly concentrated, with the top five states—Mexico City, Nuevo León, Mexico State, Jalisco, and Chihuahua—receiving approximately 60-65% of total FDI to Mexico. Mexico City alone receives roughly 20-25% of national FDI, reflecting its role as the country's financial, administrative, and commercial center, where many corporations maintain headquarters even when operations occur elsewhere.

Among the border states, Nuevo León and Chihuahua are the biggest recipients of FDI, given their proximity to Texas and the agglomeration of manufacturing clusters. Baja California, especially the Tijuana-Mexicali corridor, receives significant investment in electronics, medical devices, and the aerospace sector. Sonora is a moderate recipient of FDI, though less than its geographic advantages would suggest, partly because some areas are plagued by security concerns.

Central states like Querétaro, Guanajuato, and Aguascalientes have become important destinations for FDI, with none of them having border locations. These states have managed to develop clusters of automotive and aerospace manufacturing with heavy investments in infrastructure and the development of the workforce. Aguascalientes has seen phenomenal growth in FDI flows linked to nearshoring, with investment flows increasing more than 300% in the recent period.

While southern states get very little FDI, the states of Oaxaca, Chiapas, and Guerrero combined receive less than 2% of the country's total FDI, even though they make up about 10% of the country's population. These states also face multiple disadvantages: distance to main markets, poor infrastructure, lower levels of human capital, and, in some cases, security issues. Other initiatives to create SEZs in southern states with the hope of attracting investment have also yielded very limited results, with many projects stalled or failing to attract expected levels of investment.

Export Performance Disparities: Export patterns broadly parallel FDI distributions but with some notable differences. Chihuahua appears as the largest exporting state in value from Mexico, reaching about $26 billion in exports during recent quarters, representing approximately 18% of national exports. Its export products feature strongly in automotive and electronics manufacturing for U.S. markets. Coahuila ranks second, with exports valued at approximately $18 billion, while Nuevo León, Baja California, and Tamaulipas follow.

Manufacturing exports are dominant in successful exporting states, primarily from automotive vehicles and parts, electronics, machinery, and aerospace products. This composition reflects the integration of Mexico into North American production networks, where facilities located in Mexico perform assembly and component production in global value chains coordinated by multinational corporations. Rapidly growing export values appear for states hosting major automotive clusters: Guanajuato, Aguascalientes, Querétaro, and San Luis Potosí.

The southern states are much fewer active exporters. Oaxaca's exports are basically primary products and handicrafts, and total export values are in hundreds of millions rather than billions of dollars. Chiapas also exports relatively little value, despite significant agricultural output, since much of that output is destined for domestic markets or takes the form of informal cross-border trade that is not recorded in official statistics. The absence of manufacturing capacity and infrastructure linking these states to international markets severely limits export potential.

Competitiveness Rankings and Internationalization Correlations: The State Competitiveness Index by IMCO provides regular, standardized analysis of the causes that underpin economic competitiveness. For 2024, Mexico City holds the top rank, with Nuevo León, Querétaro, Jalisco, and Coahuila rounding out the top five. Notice that the top five states are largely congruent with the best FDI and export performers, which indicates that overall competitiveness and success in internationalization go hand in hand.

Specific competitiveness sub-indices shed additional light on which factors most strongly associate with internationalization. Infrastructure scores are highly correlated with both FDI and exports, confirming theoretical predictions regarding the role of transportation networks, utilities, and telecommunications in facilitating international business. Human capital indicators, particularly those reflecting education levels and workforce skills, also show strong associations with internationalization measures. Rule of law and government effectiveness scores exhibit positive correlations with FDI; the relationships are somewhat weaker for exports, probably because exporters can somewhat insulate operations from institutional weaknesses through global value chain relationships.

By contrast, the states that are low in competitiveness rankings-Oaxaca, Guerrero, Chiapas, Morelos, and Michoacán-are little internationalized. They perform weakly on almost all dimensions of competitiveness, resulting in many self-reinforcing barriers to internationalization. The stability of these patterns across different indicators and analytical approaches strengthens the likelihood that disparities in internationalization reflect real, persistent structural differences among the states, rather than ephemeral fluctuations or measurement artifacts.

The Nearshoring Phenomenon and Differential Impacts. The nearshoring trend represents a possible inflection point in Mexico's internationalization trajectory, yet evidence indicates that benefits have concentrated in already-advantaged states. IMCO's analysis of FDI flows in 57 industrial activities associated with supply chain relocation demonstrates that nearshoring-related investment grew 47% in 2023 compared to 2022, even as non-nearshoring FDI declined 27%. This divergence underlines nearshoring's growing importance for Mexico's overall FDI performance.

However, state-level impacts vary widely. Aguascalientes posted 310% growth in nearshoring-related FDI, driven by expansion in the automotive sector as several manufacturers and suppliers initiated new projects. The state had invested heavily in technical education and training infrastructure, creating conditions

conducive to advanced manufacturing. Mexico City recorded 27% growth in nearshoring FDI, concentrated more in services and coordination functions than in production facilities. Nuevo León registered 265% growth despite a decline in total FDI, suggesting that nearshoring-related investment compensated for reductions elsewhere.

Meanwhile, Veracruz and Oaxaca have secured little nearshoring investment despite federal-government initiatives that ostensibly target southern development. These states lack key infrastructure, including reliable supplies of electricity and water, modern transportation links, and industrial land ready for manufacturing use. Security concerns also keep investors away from some areas, and a dearth of industrial clusters means there are limited agglomeration benefits to create advantages compared with other places.

These benefits reinforce existing geographic concentrations in their spatial pattern. States in the "Bajío" region (Aguascalientes, Guanajuato, Querétaro, San Luis Potosí) have emerged as primary beneficiaries, building on automotive manufacturing clusters established over the past two decades. Northern border states maintain advantages for industries requiring close coordination with U.S. operations or frequent cross-border movement of components. Central Mexico-particularly the Mexico City metropolitan area extending into Mexico State and surrounding entities-captures investment in coordination, design, and service functions supporting manufacturing located elsewhere.

This pattern of concentration suggests that nearshoring may worsen, rather than improve, regional disparities. States with existing manufacturing capacities, qualified workforces, and appropriate infrastructure are well-positioned to win new investment, while states without the relevant prerequisites continue to find it impossible to compete effectively. The process of cumulative causation expected by center-periphery theory seems to be at work: successful internationalization permits further investment in infrastructure and human capital, which in turn makes successful states increasingly attractive, while lagging states find themselves unable to surmount initial disadvantages (Wallerstein, 1974).

Geographic Determinants of Internationalization. Geographical considerations are powerful influences on the outcomes of internationalization. Border states together make up roughly 40-45% of the country's total FDI and more than 50% of its exports, yet they represent just about 15% of the national population. This disproportionate concentration shows proximity advantages, lowering transportation

costs, allowing just-in-time production systems, and helping business relationships that require frequent cross-border interaction (Hanson, 2010).

Nevertheless, mere geographic proximity is not enough. Tamaulipas state, though having a long border with Texas, receives considerably less FDI compared to Nuevo León or Chihuahua due in part to serious security challenges in the sister cities of Reynosa and Matamoros. Aguascalientes and Querétaro have become highly internationalized despite their interior locations, which shows that other aspects can overcome this specific geographical drawback.

Distance from the U.S. market is negatively correlated with both FDI and exports, especially for manufacturing activities integrated into North American production networks. States more than 1,000 kilometers from major U.S. markets experience transportation cost disadvantages that inhibit competitiveness for industries where logistics costs are a large share of total costs. This distance factor has contributed to the concentration of automotive manufacturing in northern and central states rather than dispersing throughout Mexico.

A coastal location has mixed effects. Pacific coast states, such as Sinaloa and Nayarit, have port facilities but demonstrate only modest levels of internationalization because their economic structures are focused on domestic agriculture and tourism rather than export manufacturing. The state of Veracruz is home to Mexico's largest port by cargo volume but attracts relatively limited FDI and displays minor manufacturing export growth. This pattern indicates that access to ports is not sufficient on its own without complementary factors, such as industrial clusters, skilled labor, and enabling business environments.

Infrastructure as an Enabling or Constraining Factor. Infrastructure quality stands out as a vital variable in internationalization capability. States with extensive paved road networks, modern airports with international connections, reliable electricity and water supplies, and advanced telecommunications infrastructure have significantly higher FDI and export levels compared to states without such assets. Regression analyses done indeed show that the infrastructure variables explain about 35-40% of the variance in the FDI flows across states, after control for other factors.

Transportation infrastructure proves particularly important for manufacturing exports. The automotive industry's adoption of just-in-time production systems requires reliable, efficient transportation networks that connect suppliers, assembly plants, and border crossing points. States investing heavily in highway infrastructure-

particularly modern toll roads connecting industrial zones to border crossings-have captured disproportionate shares of automotive FDI. Guanajuato's extensive road network connecting to major border crossings contributed significantly to the state's success in attracting automotive investment.

Electricity reliability and cost remain crucial determinants of investor decisions, particularly for manufacturing operations requiring a steady power supply. Frequent power interruptions occur in certain southern states, increasing production costs and raising the bar of reliability risk for manufacturers. In contrast, states like Nuevo León have invested in power generation capacity and grid improvements that enhance their attractiveness to energy-intensive industries.

Increasingly, location decisions for services and coordination functions depend on telecommunication infrastructure, particularly with respect to internet connectivity and mobile networks. Mexico City's comparative advantage in digital infrastructure explains the high concentration of corporate headquarters, research facilities, and service activities supporting international operations in the capital. The digital divide between technologically advanced states and those with poor levels of connectivity introduces yet another area of internationalization disadvantage in the lagging regions.

Human Capital and Workforce Development. Human capital indicators strongly correlate with internationalization success. States that have higher average levels of education, a larger percentage of university graduates, and more specialized technical training institutions tend to receive more FDI and produce much higher export values. This is partly a matter of direct effects-skilled labor is available for sophisticated production activities-but also indirect effects-education levels signal overall development and institutional capacity (Jordaan, 2008).

The top manufactured exports of Mexico, the automotive and aerospace industries, each require significant technical competencies. Indeed, many states have developed workforce competencies through establishing technical universities, vocational training centers, and partnerships between educational institutions and industry. In this respect, Aguascalientes investment in programs of automotive engineering and technical training facilities is considered to be an important factor in the state's success in securing major automotive projects.

Language skills represent an often-overlooked dimension of human capital relevant for internationalization. English proficiency smooths interactions with foreign partners and clients, particularly for firms integrated into U.S.-led production

networks. Northern border states profit from higher English language skills through proximity and migration effects. Some interior states have actively pursued improvements in English language education as part of overall competitiveness strategies, but large gaps remain.

Conversely, states with lower attainment levels create significant challenges for any type of advanced manufacturing investment. Workforce skills remain among the top factors foreign investors consider when deciding where to invest. States with large proportions of their workforce with less than a secondary education often cannot meet the needs of modern manufacturing facilities regardless of other assets they may offer.

Institutional Quality and Governance. Institutional factors generally show complex relationships with internationalization outcomes. Indicators of the rule of law-that is, all those measuring the effectiveness of contract enforcement, protection of property rights, and the quality of the judicial system-tend to have a positive correspondence with FDI inflows. Foreign investors especially value legal certainty and reliability of institutions; and poor rule of law increases operational risks and transaction costs for them (North, 1990; Scott, 1995).

States with lower corruption levels and more efficient bureaucracies show higher internationalization success. The quality of regulation within a state, such as how easily permits, licenses, and authorizations required for business operation are obtained, affects investor decisions. The states that perform well in streamlining administrative processes and reducing bureaucratic hindrances provide friendlier environments for international business. Efforts by Nuevo León to enhance regulatory efficiency and reduce the time it took to process permits for businesses contributed toward the competitive advantages of the state.

Nevertheless, Garriga (2022) results about the political party effects bring nuance to the conventionally held assumptions of investor preferences. The research showed that states governed by left-wing parties attracted more FDI than those under other parties, after controlling for economic variables. Such counterintuitive results may mean that long-term regional attractiveness increases with greater investments by left-leaning governors in education, healthcare, and social infrastructure, offsetting whatever ideological apprehensions foreign investors may have. These finding challenges simplistic narratives about business-friendly versus business-unfriendly governance and suggests that institutional quality transcends partisan divisions.

A further institutional dimension of internationalization is government capacity for strategic economic planning and investment promotion. The creation of dedicated agencies at the state level to attract FDI, maintaining international trade offices, and elaboration of focused sector development strategies are all conditions under which higher success rates are achieved. For example, the presence of a ProMéxico office in Jalisco, coupled with the focused promotion of information technology and creative industries, illustrates ways through which proactive economic diplomacy at the state level can be used to reinforce internationalization (Kuznetsov, 2015).

Security Conditions and Their Impact. Security is a factor that has become increasingly salient to influence the pattern of internationalization. States with high levels of homicides, organized crime violence, kidnapping, and extortion have had significant barriers to attracting and retaining international investment. Correlation analyses identified the negative performance of violence indicators with FDI inflows and export growth, though the relationships differed across industries and violence type (Ríos, 2013).

The effects of insecurity run through several channels: foreign investors factor security risks into location choices, either avoiding high-violence states or seeking extra compensation for perceived risks. Domestic firms operating in insecure environments also bear higher operating costs due to extortion payments, investments in security, and supply chain interruptions. Quality labor may decline to relocate to hazardous areas, which would reduce the quality of the labor force. Reputation effects from violence can stigmatize whole states regardless of whether individual industrial zones are experiencing problems.

However, security impacts are diffuse and vary geographically as well as by sector. Several states suffering from violence in parts of their territory maintain relatively secure industrial zones, which continue to attract investment. For example, Guanajuato's automotive corridor has maintained FDI growth amidst the state's security challenges, apparently due, in part, to effective local security measures. Conversely, in some northern border states, such as Tamaulipas, intense security deterioration in key cities has resulted in the diversion of investment to alternate locations.

Temporal patterns illustrate that the impact of security conditions on internationalization may operate with lag effects. Increases in violence in specific periods demonstrate associations with FDI reductions several years later, thus suggesting that reputational damage outlives immediate security improvements. This dynamic creates particular challenges for states seeking to rebuild international

competitiveness after periods of elevated violence. 4.8 Economic Structure and Sectoral Composition States' economic structures significantly influence internationalization patterns. Manufacturing-oriented states naturally show higher export levels than service-oriented or agricultural states. But even within manufacturing, participation in globally integrated sectors as opposed to production for domestic markets produces different internationalization profiles. States hosting automotive, electronics, and aerospace industries reveal higher international engagement than those specializing in construction materials, food processing, or other domestic-market-oriented manufacturing.

The presence of industrial clusters creates agglomeration effects that make further international investments attractive. When large numbers of related firms concentrate in specific places, they create specialized labor pools, supporting industries, and knowledge spillovers that increase productivity and foster innovation (Barney, 1991). The automotive clusters now existing in Guanajuato and Aguascalientes are great examples of these dynamics, whereby the initial anchor investments made by huge manufacturers attracted dozens of supplier firms, creating self-reinforcing growth in their manufacturing capacity and export potential.

States heavily dependent on agriculture or extractive industries show overall lower internationalization levels, although some reach high values of export commodities. Sinaloa is one of the major contributors to agricultural exports, mainly consisting of vegetables and fruits and seafood for the U.S. market. Still, agricultural exports involve less value-chain complexity and result in fewer spillovers for the rest of economic development than manufacturing exports. Tourism-oriented states, such as Quintana Roo, have distinct internationalization profiles marked by significant investment in tourism facilities and real estate but relatively little manufacturing production.

The internationalization based on tourism is qualitatively different from the manufacturing-based type of integration because the former entails providing services to international customers, while the latter involves producing for global production networks. The difference serves to reinforce the idea that internationalization is a multidimensional process that requires examination through more than one type of indicator.

Cluster Analysis: Typology of Mexican States' Internationalization Profiles

Cluster analysis shows that Mexican states group into five categories of different levels of internationalization and structural characteristics:

- **Cluster 1:** Global Gateway States, including Mexico City, Nuevo León, and Jalisco, combine high FDI, significant exports, high competitiveness scores, and a diversified economic structure. These states act as the main interfaces of Mexico with global markets, offering regional headquarters for the multinational corporations, advanced services, and sophisticated manufacturing. In general, they enjoy agglomeration economies, have better infrastructure, highly educated workforces, and strong institutional capacity.
- **Cluster 2:** Manufacturing Export Platforms. Chihuahua, Baja California, Coahuila, Guanajuato, Aguascalientes, and Querétaro are specialists in export-oriented manufacturing, particularly automotive, electronics, and aerospace. While dependent on manufacturing and less diversified than Cluster 1, these states attain high export values and significant FDI because of competitive advantages in particular sectors. Most feature specialized industrial clusters and have invested heavily in workforce development for technical skills.
- **Cluster 3:** Border Trade Hubs (Tamaulipas, Sonora, Baja California Sur). Border position is an advantage but these states underperform in comparison with their geographic potential due to many factors that include security challenges, infrastructure deficiencies, or economic structures less oriented toward export manufacturing. They maintain moderate levels of internationalization but lag in comparison with other border states.
- **Cluster 4:** Emerging Aspirants (México State, Puebla, San Luis Potosí, Michoacán, Veracruz). These states possess some favorable characteristics—market size, infrastructure in specific zones, or industrial heritage—but face obstacles limiting full internationalization potential. Some show recent positive trends suggesting possible transition toward higher internationalization, while others struggle with security, governance, or infrastructure challenges preventing breakthrough.
- **Cluster 5 consists of the following:** Oaxaca, Chiapas, Guerrero, Hidalgo, Tlaxcala, Zacatecas, Durango, Nayarit, Campeche, Tabasco, Yucatán, Morelos, and Colima. These states exhibit minimal internationalization across indicators. Most lack manufacturing capacity, suffer infrastructure deficiencies, face geographic disadvantages, and rank poorly on

competitiveness indices. Economic structures orient mainly toward domestic markets, with insignificant integration into global value chains. This cluster has a Southern predominance of states, a reflection of the persistence of regional inequalities.

This typology illustrates the idea that Mexican states follow distinct pathways of internationalization rather than being lined up along a simple continuum. The clustering suggests that different combinations of factors can underpin internationalization such as border location, manufacturing clusters, market size, or institutional quality, but absence of multiple favorable conditions severely constrains international engagement possibilities.

Discussion

Integration of Findings with Theoretical Frameworks. The empirical findings strongly support institutional and resource-based perspectives on subnational internationalization but at the same time uncover complexities that question the simplistic application of these frameworks. Precisely, the institutional perspective stresses the quality of governance, rule of law, and efficiency of regulation, confirming positive associations between these variables and internationalization outcomes in Chan *et al.* (2010) and Ma *et al.* (2016). The states that invest in institutional development thus appear to be able to attract FDI more easily and promote export activities, which confirms predictions of superior institutions lowering transaction costs and making business environments more predictable.

However, the finding that left-wing governance correlates positively with the attraction of FDI does complicate conventional assumptions with respect to investor preference for business-friendly, market-oriented governments. This result indicates that it is perhaps institutional quality that matters more than ideological orientation; investments in human capital and social infrastructure under progressive governments enhance long-term competitiveness despite possible short-term regulatory costs (Garriga, 2022). This nuance signals the importance of actual governance quality over ideological proxies.

The resource-based view finds very strong empirical support, in particular for infrastructure, human capital, and geographic location. There is obvious advantage on internationalization outcomes for states that have higher degrees of infrastructure, educated workforces, and proximity to major markets (Barney, 1991). The analysis confirms that these resources function as predicted—enabling activities, reducing

costs, and creating competitive advantages that attract international investment and facilitate export activities.

Geographic proximity to the United States proves an especially valuable resource but one whose impact is contingent upon complementary factors. A border location alone is clearly not enough, as indicated by Tamaulipas' lagging performance compared with other border states. But combined with adequate infrastructure, security, and human capital, proximity confers significant advantages for manufacturing integration into North American production networks. This interaction effect suggests that resources function synergistically rather than additively, with multiple favorable conditions reinforcing each other's effects.

Center-periphery and dependency perspectives receive partial but significant support. For instance, it is evident that the benefits of internationalization have conferred on already-advantaged regions, with peripheral states remaining marginalized. According to Wallerstein (1974), the nearshoring phenomenon, instead of providing opportunities to lagging regions, has tended chiefly to reinforce pre-existing geographic concentrations. This pattern supports predictions that global economic integration may accentuate rather than reduce internal inequalities when structural conditions vary significantly across subnational units.

Yet the fact that interior states such as Aguascalientes, Guanajuato, and Querétaro have emerged as significant manufacturing exporters shows that periphery status is not wholly predetermined. Such states surmounted many of their geographic disadvantages through strategic investments in infrastructure, labor capabilities, and sector-based competencies. Their successes indicate that, though powerful center-periphery dynamics are at work, targeted policies to reduce structural constraints can, for some places, facilitate at least partial trajectory shift. The important question then is whether such successes are anomalies or replicable models for other currently peripheral states.

The Nearshoring Paradox: Opportunity and Inequality. The nearshoring phenomenon presents a paradox in that the opportunities for Mexican manufacturing are unprecedented, yet the benefits distribute in ways that may intensify regional disparities. The phenomenon of nearshoring is a positive development at the national level, as evidenced by significant FDI growth into strategic industries and deeper integration within North American production networks. In comparison with other nearshoring alternatives, Mexico's proximity, membership in USMCA, and cost competitiveness make it a very attractive choice.

In contrast, the subnational distribution of nearshoring benefits shows some troubling trends: states that already had manufacturing capacity, infrastructure, and skilled workforces have captured most of the nearshoring investment, while states lacking these preconditions cannot effectively compete. The resulting concentration actually reinforces cumulative causation processes: successful states take nearshoring windfalls and reinvest them in improved infrastructure and better human capital, making themselves increasingly more attractive for further investments, whereas the lagging states fall further behind.

The Special Economic Zones initiative, intended to direct investment toward southern states, has largely failed to achieve objectives. Most SEZs have attracted minimal investment; projects have also fallen way short of projections. This failure reflects fundamental challenges: infrastructure deficiencies, human capital constraints, and security issues cannot be overcome through tax incentives alone. Moreover, agglomeration economies favor locations where industrial ecosystems already exist, creating powerful gravitational pull toward established manufacturing regions.

These dynamics raise profound questions about the model of development and social cohesion in Mexico: should the nearshoring contribute mainly to the northern and central states, while the southern regions continue to stagnate, regional inequalities might increase up to socially and politically unsustainable levels. Migration pressures could intensify as workers from marginal states seek opportunities in successful regions or abroad. In addition, political tensions between prosperous and struggling states could complicate national policy coordination.

Policy Implications and Strategic Considerations. Based on these findings, several important policy implications can be derived. First and foremost, regional gaps call for coordinated, long-term investment in structural conditions rather than for isolated interventions. For internationalization to be successful, several reinforcing factors need to come together: infrastructure, human capital, institutions, and security. Policies aimed at single factors when others are not considered are unlikely to make a transformative difference, and comprehensive multi-dimensional development strategies are needed for the Southern states.

Secondly, infrastructure investment needs to be oriented towards connectivity, not just local improvements. Inland and southern states wanting to join in international trade need dependable, efficient transportation links to border crossings and ports. Strategic investment in highway corridors, rail freight capacity, and last-

mile connectivity could help overcome the cost-of-transportation disadvantages holding back competitiveness. But such infrastructure must be targeted based on realistic economic development possibilities, rather than forging ahead as essentially political projects.

Third, workforce development programs should focus on sectors for which states have realistic competitive potential. Rather than trying to replicate automotive clusters in areas lacking the relevant industrial ecosystems, lagging states should focus on sectors that correspond with their resource endowments and accessibility constraints. This might include agricultural value-added processing, tourism-related services, or specialized manufacturing niches with minimal supplier network requirements. Education and training investments would align with these sector priorities.

Fourth, in the case of many states, security enhancements are a precondition for realizing internationalization potential. Federal and state governments will have to work together to create conditions of security in the industrial estates and transport corridors even as larger security challenges remain unresolved. Models of protected economic zones in otherwise insecure regions might allow for some international investment, but such strategies raise concerns regarding the build-up of enclaves that are cut off from the broader populace.

Fifth, institutional reforms should focus on regulatory efficiency, lower corruption, and the rule of law. These are generally good for all economic activities, not just for international engagement, and hence an especially good investment. States that show a strong commitment to institutional quality can offset other disadvantages through increased investor confidence in their legal and regulatory environment.

Sixth, realistic expectations must be held regarding nearshoring's geographic dispersion. Agglomeration economies and infrastructure realities considered; it is not realistic to expect nearshoring investment to disperse evenly across all states. In any case, it remains possible and desirable that benefits extend somewhat beyond the current narrow concentration. Policies could incentivize investment in second-tier locations possessing adequate structural conditions but currently overlooked due to information gaps or coordination failures.

Theoretical Contributions and Advances. Results of this research advance subnational internationalization theory on a number of fronts. First, it shows that frameworks developed mainly through Chinese provincial studies apply reasonably

well to the Mexican context, which suggests broader theoretical generalizability. Institutional quality, resource endowments, and geographic factors operate similarly across different federal systems, though specific configurations vary.

Second, the analysis underlines the relevance of security conditions as a specific determinant of subnational internationalization, a factor less considered in existing literature developed in more stable contexts. The case of Mexico offers evidence of how security challenges can severely impede internationalization even when other conditions seem favorable, leading to the thought that, in contexts where violence and organized crime affect business environments, explicit attention should be paid to security theoretically.

Third, the research has identified interaction effects among the determinants of internationalization, moving beyond additive models to explore how factors work synergistically. Geographic proximity matters more when combined with infrastructure; human capital is more valuable in contexts where institutions are adequate; infrastructure investments yield higher returns in secure environments. All these interactions suggest that theoretical models should incorporate multiplicative and threshold effects rather than assume linear relationships.

Fourth, the cluster analysis shows multiple internationalization trajectories, rather than one continuum, thereby undermining the assumption that all the regions follow a similar trajectory at different speeds. Instead, different combinations of enabling factors allow internationalization to occur through various means: border manufacturing platforms, diversified global gateways, or specialized sectoral hubs. This diversity suggests that theory on subnational internationalization should allow for multiple pathway possibilities, not presuming uniform developmental sequences.

Limitations and Future Research Directions. Several limitations of this research suggest directions for future investigation. First, the primarily quantitative approach, while enabling systematic cross-state comparison, provides limited insight into mechanisms and processes through which structural conditions translate into internationalization outcomes. Detailed case studies of both successful and unsuccessful states could illuminate just how policies, leadership decisions, historical contingencies, and social factors mediate between structural conditions and internationalization results.

Secondly, most of the analysis is based on FDI and export as an indication of internationalization, while other dimensions such as international partnerships, knowledge flows,migration patterns, and cultural exchanges are given scant

attention. Future research might develop more complete internationalization indices capturing those additional dimensions, providing richer understanding of how Mexican states engage globally.

Third, firm-level data might further complement state-level analysis by showing how different companies in one state have different strategies of internationalization and various levels of success. The understanding of whether or not specific types of enterprises drive the internationalization of different states-through size, ownership, sector, or organizational characteristics-could lead to more appropriate policy intervention.

Fourth, a longitudinal analysis following the state's internationalization trajectory over long periods may allow for the identification of critical junctures, tipping points, and path dependencies that shape current patterns. Historical analysis could show through which past policy decisions, investments, or crises created conditions that enabled or constrained current internationalization possibilities.

Fifth, comparison with other federal systems showing high diversity of subnational units, such as Brazil, India, and Canada, could establish whether results generalize or are due to Mexico-specific factors. Such comparison might uncover either general principles of subnational internationalization or dynamics that are dependent on context and theoretically captured only by tailored frameworks.

Sixth, research on policy effectiveness might assess how, or whether, specific interventions-infrastructural projects, educational programs, regulatory reforms-improve actual internationalization outcomes. Quasi-experimental designs in which similar states implement different policies can provide causal evidence about what works to enhance subnational international engagement.

Conclusion

This comprehensive analysis of internationalization dynamics across Mexico's 32 federal entities uncovers a landscape of marked heterogeneity, persistent disparities, and concerning patterns of concentrated development. The study illustrates how, despite the aggregate level of success that has been achieved by Mexico both in attracting foreign investment and in expanding exports, such accomplishments are distributed in highly uneven manners across subnational territories-with disproportionate shares taken up by northern border states and selected interior manufacturing hubs-while southern states are largely left out from global economic integration. Empirical results strongly support theoretical approaches underlining

institutional quality, resource endowments, and geographical factors as key drivers of internationalization success.

States that enjoy higher infrastructure, educated labor, good governance, appropriate security, and are close to main markets have a considerably higher FDI attractiveness and export performance level. Such advantages are synergetic rather than additive: in the presence of multiple positive conditions, each supportive factor is positively reinforcing the impact of others, whereas the absence of critical prerequisites sharply constrains the internationalization potential, irrespective of other favorable conditions. Whereas the nearshoring phenomenon represents an unparalleled opportunity for Mexican manufacturing, it has only tended to sharpen internal disparities rather than reduce them.

States with previous endowments in manufacturing capabilities, infrastructure, and human capital have managed to attract the lion's share of nearshoring-related investment, while states that lag in these prerequisites continue to fall behind in the competitive race. This pattern confirms center-periphery theoretical expectations that global economic integration can deepen internal inequalities when structural conditions vary significantly across territories.

The findings distinguish five different clusters of Mexican states, each with distinct internationalization profiles and trajectories: global gateway states that mix diversified economies with high levels of internationalization; manufacturing export platforms specialized in particular industrial sectors; border trade hubs that underperform compared to their geographic endowments; emerging aspirants that possess some advantages but also face key constraints; and finally, marginal states with low levels of international engagement according to all the indicators.

The proposed typology thus shows that internationalization takes multiple pathways rather than a single developmental continuum, where different mixes of factors enable various mechanisms for success. Policy implications emphasize comprehensive, integrated approaches to regional development rather than specific, narrow interventions. The disparities in Mexico's subnational internationalization call for long-term investments in infrastructure, human capital, institutional quality, and security because these development factors interact with each other.

Expectations about geographic dispersion also have to be realistic, since nearshoring benefits will not distribute evenly due to agglomeration economies and structural realities. Still, ensuring that opportunities extend somewhat beyond

current narrow concentrations remains both possible and critical for national cohesion and balanced development.

The theoretical contributions include: a demonstration of the applicability of subnational internationalization frameworks across diverse federal contexts; the identification of security conditions as a discrete and significant determinant that warrants explicit theoretical attention; the revelation of synergistic interactions among determinants; and the documentation of multiple internationalization pathways, rather than uniform trajectories. These advances add to the understanding of how within-country variations create distinct possibilities for global economic engagement. Going forward, Mexico must make some key choices about its course of development. It can remain on its current course, accepting concentrated internationalization benefits and increasing regional disparities as the cost of aggregate economic growth, or it can pursue conscious policies aimed at making at least the opportunities provided by globalization more equitably available. The latter path necessitates significant and sustained investments in the structural conditions in lagging regions, acknowledgement that quick fixes via tax incentives or isolated projects prove inadequate, and political will to prioritize long-term regional balance over short-term efficiency gains.

The research undertaken shows that subnational internationalization is neither automatic nor uniform. Geographic location matters profoundly, but geography is not destiny—deliberate policies can partially overcome geographic disadvantages or squander geographic advantages. Institutional quality, infrastructure, human capital, and security represent malleable factors that conscious policy choices shape over time. The question is whether Mexico will mobilize the political will and resources necessary to address regional disparities before they widen to points threatening social cohesion and national unity.

As global economic integration deepens, and the nearshoring trends pick up their pace, the urgency of this understanding intensifies. Mexico's experience contains broader lessons for other federal systems and developing countries on how international economic opportunities distribute across territories. This study firmly establishes that analysis at the national level produces incomplete pictures of internationalization, concealing key within-country differences that may be as large as, or larger than, those between countries. In conclusion, scholars, policymakers, and practitioners have to pay much closer attention to the sub-national dimensions of globalization if they are going to understand its full implications and shape more equitable developmental outcomes.

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