The Takeaway

Policy Briefs from the Mosbacher Institute for Trade, Economics, and Public Policy

Trade, Wages, and Regional Growth

How Mexico's Economic Geography Shapes Shared Opportunity

COLLEEN GOGGIN The Bush School of Government & Public Service

Does globalization make countries richer or poorer? This longstanding question is at the heart of economic debates about trade policy, development, and inequality. While macrolevel cross-country comparisons often dominate the conversation, few countries provide a better natural laboratory for evaluating this hypothesis than Mexico. With a northern region deeply embedded in global supply chains and a southern region still relatively isolated from international markets, Mexico's economic geography creates a compelling setting to observe globalization's effects on wages, growth, and regional development.

The empirical insights of Frankel and Romer show that trade has a positive causal impact on national income.¹ This brief asks whether those effects are evenly distributed within a single country—specifically, Mexico—and what those patterns mean for U.S.-Mexico regional ties. Despite national growth, wide disparities remain across Mexican states in wages, exports, and overall development. These differences reveal important dynamics for understanding how trade exposure translates into regional growth, and carries particular signifi-



THE TEXAS LYCEUM



WHAT'S THE TAKEAWAY?

Mexico offers a clear internal contrast between regions exposed to globalization (northern and port states) and those that remain isolated (southern interior).

States along the U.S. border and those with strong port infrastructure consistently demonstrate higher growth in manufacturing wages and GDP.

Manufacturing has outpaced services in wage growth across nearly all regions, contributing to sectoral inequality.

Southern states remain disconnected from trade-related growth, lagging in both wages and economic output.

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Mosbacher Institute for Trade, Economics, and Public Policy THE BUSH SCHOOL • TEXAS A&M UNIVERSITY cance for Texas, whose economy is closely tied to northern Mexican states through supply chains, labor mobility, and infrastructure.

Mexico's internal variation offers precisely the kind of structural asymmetry that sharpens inference. In the north, states like Nuevo León, Chihuahua, and Baja California are fully exposed to globalization and integrated with U.S. supply chains. In the south—particularly Chiapas, Oaxaca, and Zacatecas—trade exposure remains limited and growth has been more uneven. The center of the country lies somewhere in between. As previous work by Chiquiar, Hanson, and Robertson suggests, regional divergence in Mexico is rooted in both economic geography and global integration.²

This analysis uses wage and GDP data from 2010 to 2023, adjusted for inflation and exchange rate effects, to explore how trade expo-

sure affects economic outcomes across Mexican states. It draws on labor and export data from INEGI, occupational wage profiles from DataMexico, and GDP indicators from the World Bank. The goal is to understand how exposure to trade—as proxied by geographic location and infrastructure—shapes wage growth, particularly in manufacturing and services sectors.

The Takeaway

APPROACH AND MAIN RESULTS

From 2010 to 2023, national-level data show that GDP per capita and manufacturing salaries both experienced substantial growth, while services salaries increased at a much slower pace. GDP per capita rose from around \$9,600 in



Figure 1: Change in Manufacturing and Service Salaries for Each Mexican State, 2010 - 2023

The Takeaway

2010 to approximately \$13,200 in 2023—an increase of nearly 40%. Over the same period, average manufacturing salaries doubled, from about \$5,500 to \$9,500. In contrast, services salaries grew more modestly, increasing from roughly \$1,700 to \$3,000.³ This parallel trajectory between GDP and manufacturing wages— combined with the much flatter trend in services—suggests that much of the national economic growth has been concentrated in sectors tied to industrial production and trade. The data point to manufacturing as a key engine of GDP growth, reinforcing its role as a driver of regional economic performance.

Export data further support this trend. On average, a northern Mexican state generates approximately \$31.98 billion in manufacturing exports per year, while a southern state produces only about \$3.76 billion— a difference of nearly 750%.⁴ Manufacturing exports remain highly concentrated in northern states such as Nuevo León, Chihuahua, and Baja California, which benefit from established industrial infrastructure and proximity to U.S. markets. In contrast, many southern and interior states export very little manufacturing output, reflecting their limited integration into global supply chains. This gap highlights the structural barriers-including weaker supply chain networks, fewer trade corridors, and limited port infrastructure—that continue to shape the unequal geography of export-driven growth.

Figure 1 illustrates the regional divide in wages across Mexico's states. From 2010 to 2023, manufacturing salaries in northern and portaccess states rose from \$5,000-\$10,000 to \$15,000-\$20,000, while salaries in interior and southern states largely remained at or below \$10,000. Services salaries were lower overall, starting around \$1,000-\$3,500 and growing to \$3,500-\$5,000 by 2023-more evenly distributed across states but still significantly behind manufacturing.⁵ These patterns support a central insight: manufacturing drives GDP, manufacturing represents trade, and the states that export the most through manufacturing also see the highest wages and the largest wage gains.

MEXICO'S UNEVEN GROWTH AND CROSS BORDER IMPLICATIONS

The Mexican case reinforces the notion that globalization drives growth—but unevenly. As Frankel and Romer argue, trade causes growth, but the gains from that growth are highly contingent on infrastructure, institutions, and proximity to international markets.⁶ In Mexico, border and port states benefit from those complementarities. States like Nuevo León and Baja California have seen substantial increases in manufacturing wages and GDP, reflecting their tight integration with U.S. supply chains.⁷ In contrast, interior and southern statesparticularly Chiapas and Oaxaca-remain disconnected from global markets and exhibit far slower wage and output growth.8 Chiquiar further illustrates that border states saw greater wage increases due to their global integration, while southern states with less exposure saw limited or no gains. These findings support the broader argument that geography and openness jointly shape development trajectories. They also help explain why regional inequality despite national-level persists economic growth.

The divergence is also visible between sectors. While manufacturing wages have risen steadily in trade-exposed regions, services wages have grown more slowly across the board.⁹ This sectoral divide limits broad-based prosperity and reinforces existing inequalities. Understanding these dynamics helps policymakers and businesses identify where cross-border collaboration in infrastructure, training, and trade facilitation can support shared prosperity.

POLICY IMPLICATIONS

Mexico's regional economic variation provides strong evidence that globalization increases growth, but that exposure is everything. As Frankel and Romer argue, at the international level, trade causes growth.¹³ Within Mexico, the regions most exposed to globalization via bor-



der access, port infrastructure, and industrial connectivity have grown richer. Those left out of global markets have not.

- Investments in trade-related infrastructure and logistics in underdeveloped southern regions could help integrate them into the global economy, reducing inequality and increasing Mexico's overall growth potential.¹⁰
 - Improve productivity, formality, and worker protections in Mexico's underleveraged services sector, which employs a majority of its workers, to broaden the distribution of economic gains from globalization.¹¹
 - Strengthen collaboration between U.S. and Mexican border states, particularly on cross-border infrastructure, workforce development, and regional industry growth.¹²

For Texas and the broader U.S.–Mexico relationship, these findings point to a path forward: targeted collaboration that expands integration and reduces spatial inequality. Deepening these ties can generate shared value on both sides of the border—supporting business competitiveness, regional stability, and long-term prosperity.

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Notes:

¹ Frankel, J. A., & Romer, D. (1999). Does trade cause growth? *American Economic Review*, *89*(3), 379–399. https:// doi.org/10.1257/aer.89.3.379

² Chiquiar, D. (2005). Why Mexico's regional income convergence broke down. *Journal of Development Economics*, *77*(1), 257–275; Chiquiar, D. (2008). Globalization, regional wage differentials and the Stolper-Samuelson theorem: Evidence from Mexico. *Journal of International Economics*, *74*(1), 70–93; Hanson, G. H. (1998). North American economic integration and industry location. *Oxford Review of Economic Policy*, *14*(2), 30–44; Robertson, R. (2000). Wage shocks and North American labor-market integration. *American Economic Review*, *90*(4), 742–764. https:// doi.org/10.1257/aer.90.4.742

^{3.} World Bank. Mexico Overview. https://www.worldbank.org/en/ country/mexico/overview; World Bank. GDP per capita (current US\$) – Mexico. https://data.worldbank.org/indicator/ NY.GDP.PCAP.CD?locations=MX; World Bank. Official exchange rate (LCU per US\$, period average). https://data.worldbank.org/ indicator/PA.NUS.FCRF?locations=MX

⁴ INEGI. Banco de Información Económica (BIE). https:// www.inegi.org.mx/app/indicadores/?tm=0; INEGI. Exportaciones por Entidad Federativa (ETEF). https://www.inegi.org.mx/ programas/exporta_ef/; INEGI. Encuesta Nacional de Ocupación y Empleo (ENOE). https://www.inegi.org.mx/programas/ enoe/15ymas/

⁵ DataMexico. Trabajadores en Servicios Personales y Vigilancia: Salarios. https://www.economia.gob.mx/datamexico/en/profile/ occupation/trabajadores-en-servicios-personales-y-vigilancia

- ⁶ Frankel & Romer (1999).
- ⁷ See INEGI and World Bank.
- ⁸ Chiquiar (2005 and 2008) and Hanson (1998).

⁹See DataMexico.

¹⁰ Texas A&M Transportation Institute. (2023). Border Delay Costs and Texas-Mexico Trade Competitiveness. https:// static.tti.tamu.edu/tti.tamu.edu/documents/TTI-2023-5.pdf

¹¹ El País. (2025, May 4). Uno de cada cuatro mexicanos trabaja más de 48 horas a la semana. https://elpais.com/mexico/2025-05-04/ uno-de-cada-cuatro-mexicanos-trabaja-mas-de-48-horas-a-lasemana-las-jornadas-laborales-en-cinco-graficos.html; World Bank. Mexico Overview; World Bank. GDP per capita; World Bank. Official exchange rate

 ¹² Dallas Federal Reserve Bank. (2024). U.S.–Mexico Economic Integration and Outlook. https://www.dallasfed.org/news/ speeches/speeches-leaders/2024/240412coronado
¹³ Frankel & Romer (1999).

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