

Texas Border Cities Illustrate Benefits and Challenges of Trade

By Jesus Cañas

ABSTRACT: Texas border cities, at the front line of North American Free Trade Agreement-driven economic changes, have found new paths to growth by taking advantage of trade-inspired commercial opportunities during the past two decades. Partly as a result, unemployment in the largest communities has declined.

International trade is important to Texas, the nation's No. 1 exporting state. A large part is an outgrowth of Mexico opening itself to trade in the 1980s and later signing the North American Free Trade Agreement (NAFTA).

Border cities have been the front-line for the resulting changing commercial patterns. After a period of adjustment that became more pronounced in the immediate aftermath of NAFTA's implementation in 1994, Texas border communities have capitalized on growth opportunities. Many opportunities have arisen from increased trade and investment as well as rising living standards on the Mexican side of the border.

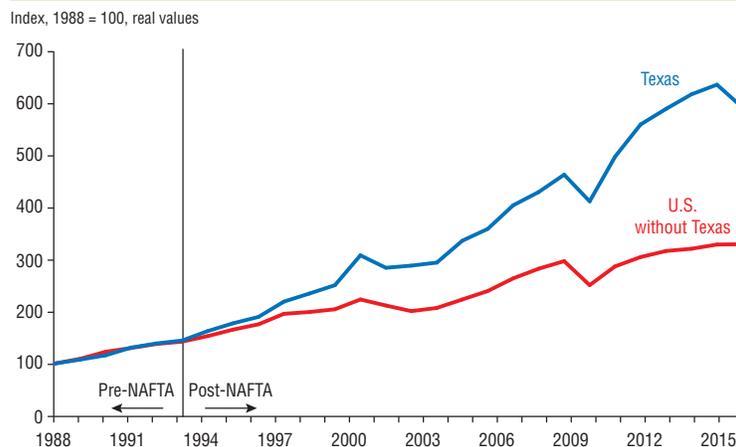
Texas exports reached \$247 billion in 2015—tops in the nation and followed by California at \$163 billion and Washington state, \$86 billion.¹ Texas has benefited from proximity to the international border and important seaports and inland ports, trading in oil-related products such as refined fuels,

petrochemicals, high-technology goods and transportation equipment. About 75 percent of U.S.–Mexico land trade—approximately \$343 billion in 2015—crosses via a Texas port of entry. Texas also borders four highly industrialized Mexican states that are richer and tend to grow faster than the rest of Mexico.²

Manufactured goods exports supported an estimated 990,000 jobs in Texas in 2015, equal to 8.2 percent of total employment, according to the International Trade Administration, U.S. Department of Commerce.³ The state is the third-most globalized in the U.S., reflecting export-based manufacturing and foreign-owned companies' employment. It is thus more dependent on foreign markets for economic growth than most states.⁴ Overall, Texas exports grew 13 percent per year while U.S. exports excluding Texas only grew 6 percent per year from 1994 to 2015 (*Chart 1*).

Trade expansion, while fueling overall growth and fostering the economy's global competitiveness, has not been achieved without dislocation

Chart 1 | Texas Exports Grow Faster in Post-NAFTA Period



SOURCES: WISERtrade; Census Bureau.

of workers, declines in certain industries and other difficult adjustments, notably among Texas border communities. More than 45 percent of an estimated 49,652 Texas job losses due to NAFTA were concentrated along the Texas–Mexico border, according to the U.S. Department of Labor.⁵

Border Cities' Transition

In the more than two decades of NAFTA, the identity of Mexico–U.S. border-city pairs (such as El Paso and Ciudad Juárez) as manufacturing and distribution centers has largely evolved to take better advantage of developing trade opportunities.

The border has become a part of a global phenomenon known as production sharing, in which companies—predominantly based in the U.S.—locate some operations in Mexico, thus achieving lower costs in the overall production process.⁶

Cross-border manufacturing operations have become an important part of U.S. corporate strategy to achieve competitively priced goods in the U.S. market as well as worldwide.

Formerly, manufacturing in the border region was heavily concentrated in low-value-added industries such as apparel. NAFTA, along with other

market forces and technological change, created different jobs in Texas as low-value-added manufacturing jobs were lost and as trade and investment increased. Border cities went on to gain far more employment than what they lost amid increased imports from Canada and Mexico and shifting production between the countries. Moreover, the unemployment rate went down in major Texas border cities following NAFTA implementation (*Chart 2*).⁷

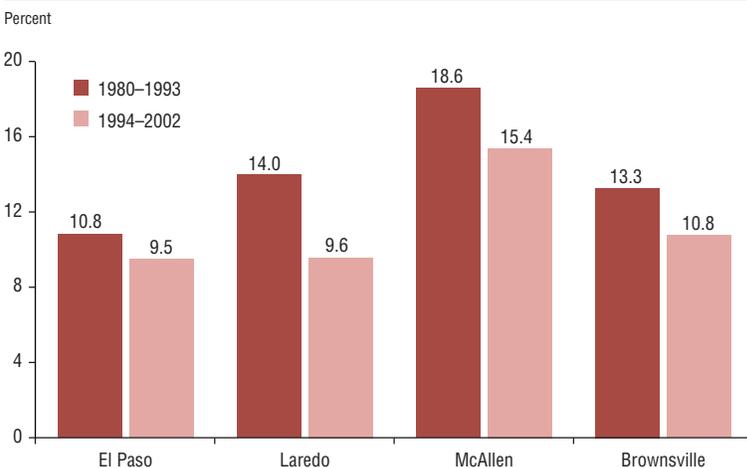
At the same time, Texas exports to Mexico grew 236 percent from 1994 to 2015, while U.S. exports to Mexico (excluding Texas) expanded 116 percent over the period. A significant share of this trade is in intermediate products—goods destined for assembly or other processing after which they are imported back into the U.S. Mexico is Texas' most important market, accounting for more than 40 percent of Texas exports in 2016. Computers, electronic products and electrical equipment make up one-third of Texas exports to Mexico, followed by transportation equipment, 12 percent, and petroleum and coal products, 11 percent (*Chart 3*).

Underlying Challenges

NAFTA accounts for only a part of the underlying trends driving economic

▶ *Texas, along with the rest of the nation, has undergone an economic evolution in which labor has shifted from manufacturing activities toward other sectors such as business services.*

Chart 2 Average Unemployment Rate Declines Along the Texas–Mexico Border After NAFTA

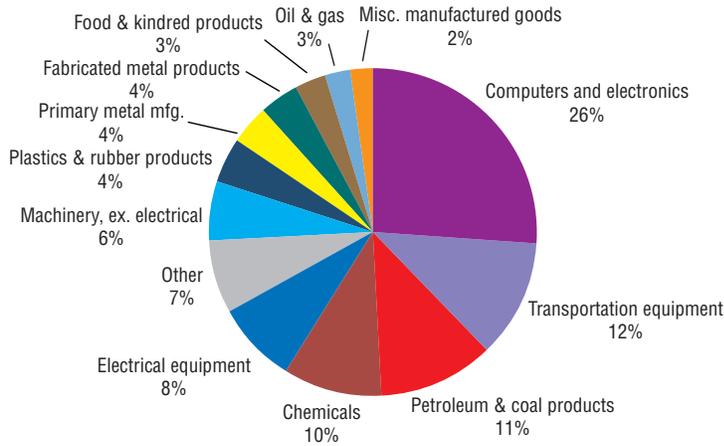


NOTE: Depiction of average for unemployment after 1994 ends in 2002, when China entered the World Trade Organization.

SOURCE: Bureau of Labor Statistics.

Chart 3

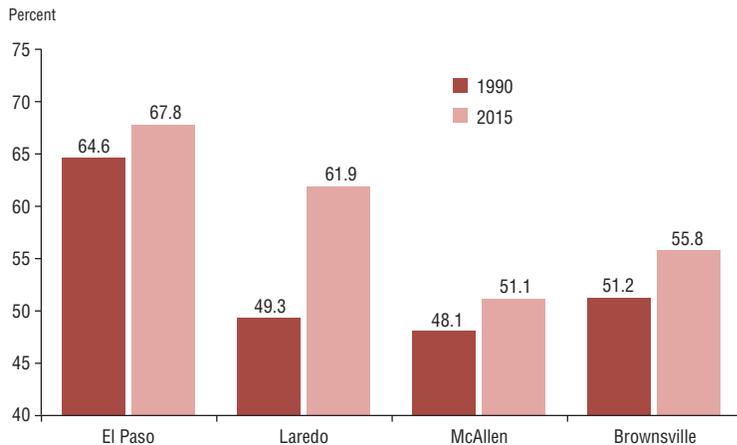
Texas Exports to Mexico Indicate Trade Diversity



NOTES: Data from 2015. "Other" includes all categories under 2 percent.
SOURCE: U.S. Trade Database, Census Bureau.

Chart 4

Texas Border Cities Narrowing the Income Gap with Nation (Income as a share of U.S. total)



SOURCE: Bureau of Economic Analysis.

change over the period. Texas, along with the rest of the nation, has undergone an economic evolution in which labor has shifted from manufacturing activities toward other sectors such as business services.

Much of the decline in manufacturing employment can be explained by automation; it is believed to be far more significant in this regard than offshoring and outsourcing. The El Paso, Brownsville and McAllen metropolitan statistical areas (MSAs) have transformed their economies in the last 20 years. Employ-

ment in the private service-producing sector represents 70 percent of those economies, up from between 55 and 59 percent (depending on the city) in 1994.

The federal government provides adjustment assistance to workers who are believed to have lost their jobs as a direct result of trade. The border faced a particular challenge in providing trade-adjustment training benefits to displaced workers because of the large numbers involved. In El Paso alone, 18,500 individuals were displaced between 1994 and 2014, representing 37

percent of the state total for that period. In addition, most workers requiring retraining had relatively low educational levels and limited English proficiency.⁸

Local leaders decided on a transition strategy aimed at attracting new jobs to replace those lost. The effort included upgrading the workforce by increasing accessibility to two-year associate degree programs in arts, science and general education in addition to short-term specific occupational skills certification.

Affected workers initially found jobs paying less than their former positions.⁹ Texas border cities have since progressed toward bringing local per capita income closer to the U.S. average (Chart 4).

Enhanced industry mix—moving people into higher-compensated sectors—has been the largest contribution to per capita income growth.¹⁰ Expansion of highly paid federal government jobs, such as in Customs and Border Patrol, has also contributed to that growth. Additionally, border communities have benefited from Texas' lower cost of living relative to other states.

Moreover, the nonprofit Pew Research Center has documented a growing middle class in McAllen, Laredo and Brownsville, while it held steady in El Paso from 2000 to 2014—a time when the middle class contracted in most metropolitan areas.¹¹

Economic Integration Benefits

Despite the initial weakness, border cities now benefit from servicing trade flows between Texas, Mexico and Canada. A 10 percent increase in manufacturing on the Mexican side of the border increases employment 2.2 percent in Brownsville, 2.8 percent in El Paso, 4.6 percent in Laredo and 6.6 percent in McAllen, Federal Reserve Bank of Dallas research shows.¹²

Texas' comparative advantage in manufacturing has grown with productivity increases over the past decade. While Texas manufacturing employment has fallen 9 percent since NAFTA implementation, manufacturing output has grown 4.1 percent per year between 1997 and 2015.

Comparative advantage refers to the ability of a country to produce a particular good or service at a lower opportunity cost than another provider. Texas' comparative advantage in energy-related industries such as petrochemical products has improved, consistent with the shale oil and gas boom that dominated state economic growth from the mid-2000s until 2014.

Texas also gained competitiveness in the automotive industry against states with a history of dominance in that sector, such as Ohio and Illinois. This is consistent with Texas' manufacturing linkages across the Rio Grande where automotive manufacturing is highly concentrated.¹³

NAFTA, the U.S. and Texas

Close to 710,000 jobs were lost between 1994 and 2014 as a result of increased imports from Mexico and Canada or due to shifts in production, a total of 0.6 percent of jobs, according to U.S. Department of Labor statistics generated under the NAFTA Transitional Adjustment Assistance program and the Trade Act of 2002. Texas was the second-most affected state (49,652 displaced workers), with North Carolina (51,243 displaced workers) leading the list and California (48,588 displaced workers) ranking No. 3.

Absent a similar count of jobs created by NAFTA, the job-loss number

should not be interpreted as the net employment effect of the trade agreement. Some studies suggest small aggregate U.S. welfare gains from NAFTA.¹⁴

On the other hand, recent research suggests that under NAFTA, blue-collar workers, whose industries have been most affected by Mexican imports—including along the border—experienced substantially lower wage growth than their counterparts in other industries.¹⁵

Meanwhile, the elimination of tariff and nontariff barriers under NAFTA increased total U.S. trade with Mexico 297 percent in inflation-adjusted terms from 1994 to 2015, while trade with Canada grew about 87 percent. In addition, trilateral foreign direct investment (FDI) rose more than fourfold in the post-NAFTA period.¹⁶

Role of Foreign Investment

Trade agreements such as NAFTA generate an incentive for FDI, as companies within the regional trade bloc as well as firms from outside seek to access the new and bigger markets they create. In Texas, the MSAs that suffered the greatest job losses due to NAFTA also have benefited the most from FDI.

Foreign-owned establishments accounted for 9 percent of private employment in El Paso (the high for Texas), 5 percent in McAllen and 4 percent in Brownsville during 2011, according to the Brookings Institution. They made up 8

percent of private employment in Houston and 5 percent in Dallas–Fort Worth (Chart 5).¹⁷

Overall, more than 462,000 jobs in Texas as of 2011 were in foreign-owned establishments. The Brookings study also shows that private employment in them is widespread among all sectors, with manufacturing accounting for nearly two out of every five foreign-owned establishment jobs. After manufacturing, foreign entities employ the largest number of workers in wholesale trade, retail trade, finance and insurance, and professional, scientific and technical services.

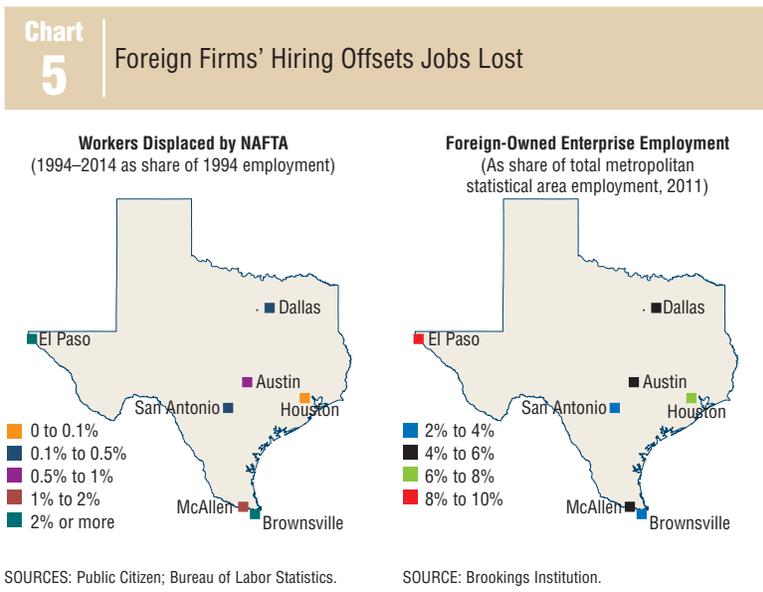
Openness for All

The Texas economy, mirroring the nation as a whole, has been transitioning toward a more service-based economy, with a lean and increasingly productive manufacturing sector. Such a transition has resulted in more than 4 million jobs gained in Texas between 1994 and 2015 and per capita real (inflation-adjusted) income growing from \$30,000 to \$47,000 over the period.

Texas border cities have been largely able to adjust to trade, taking advantage of geographic location to exploit NAFTA-derived opportunities and growth in northern Mexico.

Nationally, the benefits of trade and openness have not been equally distributed among regions. Thus, Texas and its border communities provide a useful case study of what attributes and strategies may help trade-impacted communities transition to the next level of economic development.

Cañas is a business economist in the Research Department of the Federal Reserve Bank of Dallas.



Notes

¹ State export data come from the Origin of Movement (OM) series compiled by the Census Bureau's Foreign Trade Division. A weakness of the OM series is that exports are designated to a state based on where they began their journey, not where production occurred. For a discussion, see "State Export Data: Origin of Movement vs. Origin of Production," by Andrew J. Cassey, *Journal of Economic and Social Measurement*, vol. 34, no. 4, 2009, pp. 241–68. State imports by source country are relatively new and less is known about the quality of the data. For

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more information about state imports, see <http://tse.export.gov/stateimports/TSIRReports.aspx?DATA=>.

² "Mexico's Four Economies Reflect Regional Differences, Challenges," by Jesus Cañas and Emily Gutierrez, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2015.

³ "Jobs Supported by State Exports 2015," by Jeffrey Hall and Chris Rasmussen, Office of Trade and Economic Analysis, International Trade Administration, U.S. Department of Commerce, May 31, 2016, www.trade.gov/mas/ian/build/groups/public/@tg_ian/documents/webcontent/tg_ian_005503.pdf.

⁴ "Texas Maintains Top Exporter Standing While Its Trade Remains Concentrated," by Janet Koech and Mark A. Wynne, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2015, pp. 16–20.

⁵ U.S. Department of Labor, NAFTA Transitional Adjustment Assistance (TAA) program data, www.doleta.gov/tradeact/dataoverview.cfm.

⁶ For more information about cross-border manufacturing, see "Texas Border Employment and Maquiladora Growth," by Jesus Cañas, Roberto Coronado and Robert W. Gilmer, *The Face of Texas: Jobs, People, Business, Change*, Federal Reserve Bank of Dallas, October 2005.

⁷ The reasons for the decline in unemployment are complex; some of the improvement has to do with the decline of agriculture in the Rio Grande Valley, which led to seasonal farm and agriculture workers finding year-round employment.

⁸ "Trade Adjustment Assistance: Experiences of Six Trade-Impacted Communities," U.S. Government Accounting Office, report no. 01-383, August 2001.

⁹ See note 8.

¹⁰ "El Paso and Texas Border Cities Close the Gap in Per Capita Income," by Robert W. Gilmer and Roberto Coronado, Federal Reserve Bank of Dallas *Crossroads*, no. 2, 2012.

¹¹ "America's Shrinking Middle Class: A Close Look at Changes Within Metropolitan Areas," Pew Research Center, May 2016.

¹² For more information about cross-border employment elasticity, see "The Impact of the Maquiladora Industry on U.S. Border Cities," by Jesus Cañas, Roberto Coronado, Robert W. Gilmer and Eduardo Saucedo, *Growth and Change*, vol. 44, no. 3, September 2013, pp. 415–42.

¹³ "Texas Comparative Advantage and Manufacturing Exports," by Jesus Cañas, Luis Bernardo Torres Ruiz and Christina English, in *Ten-Gallon Economy: Sizing*

up Texas' Economic Growth, by Pia M. Orrenius, Jesus Cañas and Michael Weiss, eds., Palgrave MacMillan, 2015.

¹⁴ "Estimates of the Trade and Welfare Effects of NAFTA," by Lorenzo Caliendo and Fernando Parro, *The Review of Economic Studies*, vol. 82, no. 1, 2015, pp. 1–44, and "NAFTA's and CUSFTA's Impact on International Trade," by John Romalis, *Review of Economics and Statistics*, vol. 89, no. 3, August 2007, pp. 416–35.

¹⁵ "Looking for Local Labor Market Effects of NAFTA," by John McLaren and Hakobyan Shushanik, *Review of Economics and Statistics*, vol. 98, no. 4, October 2016, pp. 728–41.

¹⁶ "NAFTA at 20: Shortcomings Suggest Trade Agreement Alone Isn't Enough," by Pia Orrenius and Jesus Cañas, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter, 2014.

¹⁷ "FDI in U.S. Metro Areas: The Geography of Jobs in Foreign-Owned Establishments," by Devashree Saha, Kenan Fikri and Nick Marchio, Brookings Institution, June 2014.

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Federal Reserve Bank of Dallas
2200 N. Pearl St., Dallas, TX 75201

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