

# TEXAS BORDER CITIES

## An Income Growth Perspective

Robert W. Gilmer, Matthew Gurch and Thomas Wang

Texas border cities are characterized by certain economic features: more transportation and distribution activity than in other U.S. cities, a relatively large retail sector and a large government sector. The six cities of Brownsville, Del Rio, Eagle Pass, El Paso, Laredo and McAllen fit this description. However, these cities also have differences that make it difficult to generalize about their future or the outcome of various policy proposals based solely on border location.

In this article, we track the progress of these cities from 1969 to 1997, focusing on their income growth compared with the rest of Texas and the nation.<sup>1</sup> We use per capita personal income to draw our comparisons because it offers the advantage of spotlighting the essential economic problem on the border—poverty.<sup>2</sup> The picture is not encouraging; it shows limited and selective progress over 28 years in raising per capita income relative to the nation as well as Texas.

### What Is a Border City?

What the six cities have in common are a Texas border location and a sister city in Mexico (Table 1). To see how common geography shapes the local economy, we compared the border cities with the United States and with Texas as a whole. The dominant factors are (1) a large transportation and distribution sector serving international traffic, (2) a retail sector inflated by serving two cities and (3) a government sector swollen by border enforcement and by public programs that address the high poverty levels.

To make these comparisons, we used 1997 employment data from *County Business Patterns* to compute location quotients.<sup>3</sup> Location quotients allow us to identify an unusual concentration of economic activity in a city or county relative to some standard for a highly

diversified place. In this case, we compared Texas and the six border cities with the United States, which is highly diversified to the extent that unusual concentrations of economic activity, such as autos in Detroit or oil in Houston, average out across the country.

The combined group of industries in *County Business Patterns* accounts for all private employment in a county. Government employment was added using data from the Bureau of Economic Analysis for the same year.<sup>4</sup>

If a sector's location quotient is 1, the sector has the same concentration as the diversified U.S. standard and its representation within the county or state is typical of what would be found across the country. If the location quotient is greater than 1, the sector is overrepresented, suggesting the region has a comparative advantage that allows it to export the overrepresented goods or services.

When we looked for a pattern of consistent industry overrepresentation in the location quotients for the six border cities and Texas, it was clear that border geography shapes these local economies. Table 2 highlights location quotients greater than 1.1, a figure we chose as a simple standard for overrepresentation. Note that except for high levels of transportation services and military employment, Texas as a whole has a smaller concentration of employment in typical border sectors.

Table 1  
Texas Border Cities

City	County	1998 county population	Mexican neighbor
Brownsville	Cameron	318,737	Matamoros
Del Rio	Val Verde	42,813	Ciudad Acuña
Eagle Pass	Maverick	45,763	Piedras Negras
El Paso	El Paso	688,626	Ciudad Juárez
Laredo	Webb	189,037	Nuevo Laredo
McAllen	Hidalgo	518,878	Reynosa



The high concentration of trucking and transportation services is due to international bridges and checkpoints that cause delays and require special handling of goods moving across the border. Laredo has by far the largest concentration of transportation activity, a product of its strategic location on the shortest truck route from the United States to Monterrey, Mexico's major industrial center.

The strength of border retail sales results from the throngs of Mexican shoppers who flock to the U.S. side. Brownsville and El Paso have large neighboring cities in Mexico. Laredo draws shoppers from nearby Nuevo Laredo but is best known as a destination for shoppers from the Mexican interior, particularly Monterrey.

Various sources contribute to the high government employment. Major military installations in El Paso and Del Rio provide both civilian government and military jobs. The border itself generates public sector jobs in immigration, naturalization, customs and border security. Finally, state and local governments provide unusually high levels of public assistance for income maintenance, medical care, education and training, and housing.

Transfer payments not only shape local employment patterns but also have played a large role in regional income growth since 1969. A closer look at the size and kind of transfers that flow through these communities aids understanding of their economies. Table 3 summarizes government payments made to Texas and the six cities in 1997.

The most striking feature of Table 3 is the high percentage of personal in-

Table 2

**Key Border City Characteristics**

Industry	Location quotient						
	Texas	Brownsville	Del Rio	Eagle Pass	El Paso	Laredo	McAllen
TCPU	<b>1.11</b>	.97	.59	<b>1.65</b>	.92	<b>3.26</b>	.69
Trucking/warehousing	.98	<b>1.17</b>	.95	NR	<b>1.11</b>	<b>3.52</b>	.94
Transportation services	<b>1.36</b>	<b>2.50</b>	NR	<b>5.31</b>	<b>1.63</b>	<b>26.03</b>	<b>1.42</b>
Retail	1.01	<b>1.16</b>	<b>1.12</b>	<b>1.28</b>	1.03	<b>1.26</b>	<b>1.32</b>
Building materials	.93	NR	NR	NR	NR	NR	<b>1.38</b>
General merchandise	1.08	<b>1.70</b>	<b>1.45</b>	<b>1.57</b>	<b>1.80</b>	<b>1.80</b>	<b>1.78</b>
Food stores	.96	<b>1.29</b>	<b>1.72</b>	<b>1.97</b>	<b>1.30</b>	<b>1.30</b>	<b>1.37</b>
Auto dealers	1.04	<b>1.11</b>	<b>1.38</b>	.91	<b>1.14</b>	<b>1.14</b>	<b>1.50</b>
Apparel	.98	<b>1.89</b>	NR	<b>4.31</b>	<b>2.67</b>	<b>2.67</b>	<b>2.23</b>
Furniture	.96	.92	NR	NR	<b>1.57</b>	<b>1.57</b>	<b>1.22</b>
Eating and drinking places	1.04	<b>1.13</b>	1.04	.95	1.04	1.04	<b>1.18</b>
Government	.97	<b>1.37</b>	<b>2.49</b>	<b>1.96</b>	<b>1.47</b>	<b>1.44</b>	<b>1.61</b>
Federal	.88	.73	<b>4.95</b>	<b>1.45</b>	<b>1.56</b>	<b>1.19</b>	.87
Military	<b>1.19</b>	.56	<b>5.86</b>	.74	<b>2.72</b>	.51	.61
State/local government	.95	<b>1.59</b>	<b>1.64</b>	<b>2.20</b>	<b>1.60</b>	<b>1.60</b>	<b>1.86</b>

NOTES: TCPU is transportation, communication and public utilities; NR is not reported. Quotients in boldface signify overrepresentation.

SOURCES: U.S. Census Bureau, *County Business Patterns*; authors' calculations.

come made up by government payments in all these cities. In Texas, 14.3 percent of personal income comes from government payments to individuals, while the shares for the six cities range from 22.2 percent in El Paso to 39.2 percent in Eagle Pass. We grouped the government payments into three broad categories that reflect features of border communities: poverty (P), military presence (M) and retirement benefits (R).<sup>5</sup>

Poverty-related payments include public assistance, income maintenance, unemployment insurance, and federal education and training programs. In terms of the share of such payments in personal income, all the border cities stand well above the statewide standard of 4.2 percent.

Military-related payments include military retirement, medical services (CHAMPUS), and retirements and medical payments to veterans. El Paso and Del Rio, the two cities with active military bases, are the primary beneficiaries of these payments, as significant numbers of military personnel retire in the area. The other cities have a smaller share than the state as a whole.

Retirement-related payments include civil service retirement, Social Security and Medicare for older recipients at the end of their working careers. Again, the

border cities all have a higher share of personal income stemming from this retirement income than does Texas. However, the higher share in most of these counties is probably related more to lower income levels than to a large aged population.

In addition to similarities, many differences also arise in the economic structure of these cities. Several have other important industrial niches. For example, retailing in Brownsville,

already active from border shopping, gets an additional boost from Padre Island tourism. Brownsville is the only one of the six cities with port activity and a fishing industry. It shares with McAllen a large agriculture sector (cotton, sugar cane, grain sorghum) as well as food processing and apparel factories. Some oil and gas activity is found near McAllen.

Laredo is primarily a transportation center, with several large banks that finance and complement the high volume of trade moving through the city. Substantial oil and gas extraction is associated with the South Texas oil and gas fields. Compared with the other cities, Laredo has little manufacturing or other export-related activity.

El Paso, in contrast, shows strength in a number of manufacturing sectors—apparel, leather, primary metals, and rubber and plastic. Of the six cities, it is the only one with a location quotient greater than 1 for overall manufacturing employment. El Paso also has a large personal-service sector, probably a companion to the city's vigorous retail activity. The large military presence at Fort Bliss adds 20,000 active-duty military and civilian jobs.

Del Rio is home to Laughlin Air Force Base, an air training facility providing more than 2,000 active-duty and civil-

Table 3

**Government Payments as a Share of Personal Income in Border City Economies, 1997**

Industry	Category	Percent of income						
		Texas	Brownsville	Del Rio	Eagle Pass	El Paso	Laredo	McAllen
All government payments		14.3	27.7	25.5	39.2	22.2	22.7	28.3
Retirement and disability		6.7	8.4	10.0	9.3	9.4	6.1	7.7
Military	M	.7	.5	2.1	.1	1.2	.2	.3
All other	R	6.0	7.9	7.9	9.2	8.2	5.9	7.4
Medical		5.3	12.3	8.6	18.6	7.7	9.0	13.0
Medicare	R	3.1	5.2	3.4	8.2	4.0	4.5	5.4
Public assistance	P	2.2	7.1	5.1	10.4	3.6	4.5	7.6
CHAMPUS	M	0	0	.1	0	.1	0	0
Income maintenance	P	1.5	5.6	5.3	9.9	3.5	5.2	6.3
Unemployment insurance	P	.3	.5	.5	.8	.2	.4	.6
Veteran's benefits	M	.4	.4	.7	.4	1.1	.3	.3
Federal education and training	P	.2	.5	.1	.2	.5	.4	.4
Poverty-related (P)		4.2	13.7	11.0	21.3	7.8	10.5	14.9
Military and veterans (M)		1.1	.9	2.9	.5	2.4	.5	.6
Retirement and Medicare (R)		9.1	13.1	11.3	17.4	12.2	10.4	12.8

NOTE: Dollar amounts of personal income and transfer payments from Bureau of Economic Analysis, *Regional Economic Information System*, 1969–97.

Table 4

### Per Capita Income in Texas and Six Border Cities

	Percent of U.S. per capita income			
	1969	1979	1989	1997
United States	100.0	100.0	100.0	100.0
Texas	87.7	96.7	87.9	92.6
Brownsville	51.9	56.3	49.0	51.0
Del Rio	66.6	62.7	57.9	55.3
Eagle Pass	35.1	41.6	36.2	37.7
El Paso	73.1	65.1	62.9	60.8
Laredo	51.8	51.8	46.8	52.1
McAllen	46.1	51.7	47.0	47.6

SOURCE: Bureau of Economic Analysis, *Regional Economic Information System*, 1969–97.

ian jobs. Del Rio lacks a strong transportation sector—a key trait of a typical border city—because the city center is four miles from the border, and Mexican and U.S. road networks favor other border crossings. Eagle Pass has a typical border city profile and little else to set it apart.

### Border City Income Levels

The six border cities are poor. Table 4 compares Texas and the six border cities (using county data) with the United States. Per capita personal income for Texas averaged 92.6 percent of the U.S. level in 1997, for example, while among the six cities only El Paso achieved as much as 60 percent of that level.

Texas and U.S. income levels converged rapidly in the 1970s, largely because of a major boom in oil and other natural resources. The 1980s bust virtually erased this gain, however. Since 1989, Texas has grown without interruption, gaining about 4.7 percentage points through 1997.

The picture is less encouraging for the six cities. Eagle Pass and McAllen are the only two posting gains of even 1 percent, and they have remained the poorest cities on our list since 1969. The two cities with a military presence show large relative losses over the period: El Paso, 12.3 percent, and Del Rio, 11.3 percent. Their long-term losses may result partly from the Vietnam War under way in 1969 and the post-Cold War military cutbacks in recent years. Whatever the reasons, little progress is evident relative to the state or nation.

Even in the 1990s—when NAFTA pushed these cities to prominence and maquila construction boomed in northern Mexico—the evidence remains mixed on relative improvement.

The lack of progress relative to the state or nation is disturbing because we might expect relatively low-income regions to make the most rapid gains. The long-term convergence of per capita income among the states and regions of the United States, for example, has been widely documented and studied.<sup>6</sup> To see the poorest regions of Texas fail to share in the state's relative gains points to deep-seated problems.

### What Made Income Grow?

To look more carefully at the sources of regional income growth, we divided the sources of per capita income growth into a number of categories and then asked what percentage-point contributions they had made to each city.

The categories listed in Table 5 follow standard conventions of accounting for regional income.<sup>7</sup> The first three categories—industry mix, differential regional earnings and jobs per capita—together account for total nonagricultural wage and salary income per capita. Industry mix refers to income gains from a shift of local industry to higher-wage jobs, and jobs per capita measures the local economy's ability to create jobs for local workers. The third component, differential regional earnings, is a residual that measures such advantages as location, unique resources, labor quality or institutional stability. The other-labor-income category is a companion to these wage and salary data and is primarily the value of the benefits that private employers offer their workers.

The rest of the categories are self-explanatory: agricultural wages and salaries; farm and nonfarm proprietor's

Table 5

### Three Top Factors in Income Growth for U.S., Texas and Six Border Cities, 1969–97

	U.S.	Texas	Brownsville	Del Rio	Eagle Pass	El Paso	Laredo	McAllen
<b>1969–79</b>								
Industry mix	•	•	•	•	•	•	•	•
Differential regional earnings			•					•
Jobs per capita	•	•	•		•		•	•
Other labor income	•	•		•		•		•
Agricultural wages and salaries								
Farm proprietor's income					•			
Nonfarm proprietor's income								
Property income				•				
Transfer payments						•	•	
<b>1979–89</b>								
Industry mix	•	•	•	•	•			
Differential regional earnings								
Jobs per capita	•					•	•	•
Other labor income		•		•		•	•	
Agricultural wages and salaries								
Farm proprietor's income								
Nonfarm proprietor's income								
Property income	•	•	•	•	•	•	•	•
Transfer payments			•		•			•
<b>1989–97</b>								
Industry mix	•	•	•	•	•	•	•	•
Differential regional earnings		•					•	•
Jobs per capita	•	•	•	•	•		•	
Other labor income								
Agricultural wages and salaries								
Farm proprietor's income								
Nonfarm proprietor's income		•				•		
Property income								
Transfer payments	•		•	•	•	•		•

SOURCE: Authors' calculations.

income earned by sole proprietorships, partnerships and tax-exempt corporations; property income from dividends, rent and interest; and transfer payments for no current service rendered.

Table 5 illustrates, for each region and period, which three factors were most important (which made the largest percentage-point contribution) to income growth. For all three periods, most of the action was centered on rising wages and salaries, including other labor income. Some combination of a shift to high-wage industry that improved job mix and an increased number of jobs was dominant in raising income levels.

The contribution of income growth relative to employment is a good news/bad news story. The good news is the rapid job growth, and the bad news is the rapid population growth that has offset the ability of job growth to raise per capita income. High population growth is the source of the seeming paradox between a booming job market and continued stagnation of income.

Table 6 compares job growth, population growth and the ratio of jobs per worker in the six border cities with the United States and Texas. Employment growth in the six cities is generally strong by national or Texas standards for 1969–79, mixed for 1979–89 and then strong again after 1989. The problem comes when we look at population growth in these cities. In every period, in every city, population growth always exceeds that in the United States and almost always exceeds that in Texas. The result is that the contribution of job growth to per capita income is quickly watered down. This probably explains why the ratio of jobs to population, the factor used to translate employment into a contributor to per capita income growth, typically lags the United States and Texas. Legal and illegal immigration and a high birth rate make it difficult to raise incomes in these six cities, despite what—at least from a labor market perspective—looks like solid economic progress.

The persistence of transfer payments as a major source of income growth in the 1990s, a period when the job market

Table 6  
**Employment and Population  
in Six Border Cities**

	Annualized percent change 1969–97		
	1969–79	1979–89	1989–97
<b>Job growth</b>			
United States	2.21	1.94	1.95
Texas	3.73	2.30	3.22
Brownsville	5.00	1.89	4.08
Del Rio	2.15	.81	1.65
Eagle Pass	5.10	1.46	4.74
El Paso	2.99	2.46	1.49
Laredo	3.26	3.40	5.15
McAllen	5.22	3.51	4.50
<b>Population growth</b>			
United States	1.10	.95	1.14
Texas	2.31	1.93	2.01
Brownsville	4.00	2.23	2.96
Del Rio	2.78	1.15	1.25
Eagle Pass	4.56	1.82	3.71
El Paso	2.59	2.09	2.25
Laredo	2.50	2.98	4.64
McAllen	2.60	3.19	4.09
<b>Jobs per worker</b>			
United States	1.11	.99	.81
Texas	1.42	.37	1.21
Brownsville	1.00	-.34	1.12
Del Rio	-.63	-.34	.40
Eagle Pass	.54	-.36	1.03
El Paso	.40	.37	-.76
Laredo	.76	.42	.51
McAllen	2.62	.32	.41

SOURCE: Bureau of Economic Analysis, *Regional Economic Information System*, 1969–97.

was booming, is one more sign of the paradox of growth without progress.

## Outlook

If history is a guide, the magnitude of problems facing the border region can be discouraging. A 1998 report from the Texas Comptroller of Public Accounts details a long list of regional ills: a poorly trained and uneducated workforce, inadequate educational and workforce development programs, substandard health and environmental conditions, and the continuing battle against illegal immigration.<sup>8</sup>

The comptroller's report also details dozens of specific recommendations to deal with the region's economic performance. Education tops the list, but there is no magic bullet, no one program that could turn the region around. Most of the proposals, however, strive

to raise the region's standards—in labor quality, infrastructure, housing, environmental conditions, public health and other key areas—and to integrate the cities' economies more fully into the high-wage U.S. labor market. Although NAFTA and free trade have moved these cities to center stage in recent years, the most direct path to significant gains for these cities still lies in broad and full participation in the economy to the north.

*Gilmer is a senior economist and vice president in the Houston Branch of the Federal Reserve Bank of Dallas. Gurch and Wang worked in Houston as interns and research assistants at the time the article was written.*

## Notes

- <sup>1</sup> Del Rio and Eagle Pass are cities located in Val Verde and Maverick counties, respectively. Brownsville, El Paso, Laredo and McAllen are one-county metropolitan statistical areas (MSAs). In all cases, we have examined county data, and the city and metro area names are used as shorthand for the reader. For a more detailed version of this article, contact the lead author.
- <sup>2</sup> Although per capita income has many shortcomings as a measure of social welfare, we broke it into enough components to give specific insight into how income growth is affected by regional wage levels, job growth and the locational advantages offered by these cities.
- <sup>3</sup> U.S., Texas and county-level data from various volumes of Department of Commerce, Bureau of the Census, *County Business Patterns*, 1996 and 1997.
- <sup>4</sup> Department of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*, 1969–98.
- <sup>5</sup> The data shown are selected from much more detailed information available in Bureau of Economic Analysis, *Regional Economic Information System*, 1969–98.
- <sup>6</sup> Daniel H. Garnick, "Accounting for Regional Differences in Per Capita Personal Income Growth, 1929–79," *Survey of Current Business* 62 (September 1982): 24–34.
- <sup>7</sup> Methodology used follows that of Garnick as cited in footnote 6 and Daniel H. Garnick and Howard L. Friedenber, "Accounting for Regional Differences in Per Capita Income Growth: An Update and Extension," *Survey of Current Business* 70 (January 1990): 29–40.
- <sup>8</sup> John Sharp, *Bordering the Future* (Austin: Texas Comptroller of Public Accounts, 1998).