INSIDE:
China’s Growing Economic Influence in East Asia after WTO

Growth on the Border or Bordering on Growth?

The Texas–Mexico border tends to grow quickly in terms of population and jobs. Gains in well-being, however, are best captured by lower unemployment rates and growth in real incomes. In the past, border unemployment rates have been among the nation’s highest, and border per capita income has been about half the national average. When border incomes have made tenuous gains, progress has often been swept away by a Texas recession or a Mexican peso devaluation. Interestingly, border progress in the late 1990s seems to have broken with the past in many ways. The border boom came about as the Texas and Mexico economies grew in synchrony. Now, with both economies stalling, some questions come to mind: What are the border’s most recent gains? How were they achieved? This time, are they here to stay?

Recent Gains in Border Well-Being

Falling Unemployment and Rising Income. As the border economy grew in the 1990s, unemployment rates fell and incomes rose. Although the

A Dose of Market Discipline:
The New Education Initiatives

In the New Economy, growth increasingly depends on the skills of the labor force. Given education’s role in the development of such skills—and the widely recognized shortcomings of our educational system—upgrading America’s schools could boost economic growth. So it is not surprising that the Bush administration has devoted a large part of its domestic agenda to injecting a dose of market discipline into the public school system.

On Jan. 8, President Bush signed into law the No Child Left Behind Act of 2001 (NCLBA). Together with the expansion of education IRAs as part of last year’s tax cut, the NCLBA has the potential to significantly improve both student performance and economic growth.

There is little doubt that the public school system in the United States falls

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Unemployment rates for the border cities continue to be higher than the unemployment rate in Texas and the nation, the past decade witnessed record improvements. As Chart 1 illustrates, there is a stark downward trend for unemployment rates across all border cities between 1990 and 2000. McAllen, which has historically had the highest unemployment rate among the border cities, showed the greatest improvement. Between 1990 and 2000, the McAllen unemployment rate dropped from 25 percent in February 1990 to 12.5 percent in December 2000, a 50 percent decline. Laredo, which for the most part has had the lowest unemployment rate among the border cities, saw its unemployment rate fall from around 12 percent in 1990 to its historic low of 6.3 percent in December 2000.

Border unemployment rates have held up well even in the current economic slowdown. Although the Texas rate has climbed to a six-year high of 5.8 percent, the unemployment rates in El Paso, Laredo and McAllen have remained flat or falling over the past year. While unemployment rates rose in early 2001 in Brownsville, McAllen continued to see improvements, with rates dropping throughout last year. Laredo’s seasonally adjusted unemployment rate is back to 6.9 percent, where it was a year ago, and the El Paso rate has remained generally flat, rising slightly from 8 percent to 8.2 percent between March 2001 and March 2002.

Much like unemployment, income levels on the border do not compare favorably with Texas and U.S. averages. However, like the changes in unemployment, border incomes also improved in the 1990s. In fact, per capita income in every border city except El Paso rose faster than U.S. income between 1990 and 1999 (Chart 2). Border city per capita income rose 12.7 percent in real terms compared with 11.6 percent for the nation. Laredo registered the most impressive gains, followed by Brownsville and McAllen. El Paso had the slowest income growth of the four border metropolitan areas, growing 9 percent in real terms between 1990 and 1999.

What Explains Falling Unemployment and Rising Income? In general, unemployment rates fell as jobs grew more quickly than the population, and incomes rose as two things happened: Wages increased within certain industries, and jobs grew in industries that pay relatively high wages. As Chart 3 details, employment growth outpaced rapid population growth in all the border cities, leading to the declines in the unemployment rate. Another important factor in the Rio Grande Valley has been the declining importance of agriculture. Farm work is typically seasonal and low-paying. The shrinking of the sector has reduced the number of farm workers and contributed to falling unemployment rates in McAllen.
and Brownsville. At the same time that farm work has shrunk in South Texas, opportunities for other low-skilled work across the country have risen. This may have led to out-migration of seasonal workers from this region to year-round employment in expanding industries such as poultry production and processing in the Southeast and meat packing in the Midwest.

The rise in border incomes, meanwhile, can be traced to an increase in average earnings, particularly in certain growth industries, as well as a rise in employment in high-paying industries. Key industries are determined by the border’s unique function as gateway to international trade and destination for consumers from Mexico. As a result, there is a larger than average share of employment in sectors such as government, transportation, and retail and wholesale trade. Transportation and government—along with finance, insurance and real estate (FIRE)—were the big growth sectors that set the border apart from the rest of the country by exceeding U.S. job growth rates in the 1990s (Chart 4). All three of these industries pay more than the average border job.2

Key industries are determined by the border’s unique function as gateway to international trade and destination for consumers from Mexico.
Several of these industry sectors were also among those experiencing the biggest increase in earnings over the decade. As shown in Chart 5, average earnings per worker in FIRE, mining, federal government and wholesale trade grew at above-average rates (62, 34, 15 and 11 percent, respectively).

The expansion in federal government employment, such as record growth in the U.S. Border Patrol as part of a border crackdown on illegal immigration, likely led to the earnings increases in this sector. Ironically, while some border sectors gain from keeping people out, others, such as wholesale and retail trade, gain from letting them in. The wholesale and retail trade sectors are clearly dependent on the inflow of Mexican shoppers. Note, for example, the impact of the peso devaluation in late 1994 on these industry earnings (Chart 5). These sectors do not begin to recover from this shock until after 1996.

Interestingly, among all industries over this time, the most impressive earnings gains are made in the FIRE sector—average earnings grew 62 percent between 1990 and 1999. The tremendous growth in population, and an accompanying increase in the demand for housing, contributed to this sector’s remarkable growth. As Chart 3 illustrates, three metropolitan areas on the Texas–Mexico border exceeded both U.S. and Texas population growth rates, while El Paso grew faster than the United States (although slower than the state).

Most of the border population growth can be attributed to high rates of natural increase (births minus deaths), accounting for about 62 percent of the population increase in McAllen and Laredo and 77 and 98 percent of the increase in Brownsville and El Paso, respectively. There is also substantial international immigration, both legal and illegal, to the border cities. Laredo and McAllen experienced domestic in-migration as well, accounting for about 9 percent of the population increase versus 29 percent through international immigration in both cities.

The border population boom fueled a construction boom that brought down the real cost of housing in almost every border city during the 1990s. Single-family building permits increased 54, 53 and 57 percent in Brownsville, El Paso and McAllen, respectively, between 1992 and 1999. A significant share of residential building and home sales has been for maquiladora executives and managers...
who live on the U.S. side of the border and commute to work.

**Despite Progress, Poverty Remains.** Despite above-average border income growth in the 1990s, the decade did relatively little to move border incomes closer to state and national averages. In 1999, the average Texas border city per capita income was $14,737, compared with $26,266 for Texas and $27,859 for the nation. As a result, border poverty rates are well above the national average, and the perception of the border is one of chronic poverty.

What gets less attention, however, is that a large share of the income differential can be explained by the demographic characteristics of the border population. About 86 percent of the border’s (urban) population is of Hispanic origin, compared with 32 and 12 percent in Texas and the United States, respectively. If instead of comparing the average border income with the national average, we compare the average border income with the average income of Hispanics in the United States, the income differences disappear. According to 2000 census data, self-reported income per household member among Hispanics is $12,271, compared with $25,318 among non-Hispanic whites. This is only a rough comparison, but it illustrates the point that border income per capita is not markedly lower than elsewhere once sociodemographic factors are held constant.

On the other hand, explaining income differences by simply stratifying on ethnic origin does not get to the underlying reasons why border incomes are lower. Border households are not only more likely to have larger families, but they are also younger on average—relatively young people who have not yet reached their full earnings potential. Other factors contributing to lower incomes are low rates of labor force participation, low education levels, elevated school dropout rates and large shares of the workforce that are foreign-born and have limited English fluency. Another reason incomes on the border are low is because of the large population of migrant workers, especially in the Rio Grande Valley. Migrant workers travel to the Midwest and Southeast during the growing season. Their out-of-state earnings are not captured by the border income statistics used here, leading to a downward bias in measured income.

Moreover, due to the lack of skilled workers, few high-paying industries locate on the border. Traditionally, this region has drawn firms seeking low-skilled workers, such as the apparel industry in El Paso or, more recently, call centers in the Rio Grande Valley. The agricultural sector, characterized by relatively low earnings and only seasonal
work, further depresses border per capita income.7

How Were the Border Gains Achieved?

Historically, the border economy’s success or failure has depended on the strengths and weaknesses of the much larger economies surrounding it. The U.S., Mexican and Texas economies have alternated in the role of savior and villain on the border. Of the four border recessions since 1980, two have been the result of recessions in all three economies (1982, 2001), one was just Mexico and Texas (1986) and one—the 1995 Tequila Crisis—was uniquely Mexican.8 Chart 6 illustrates the extent to which year-over-year border job growth fluctuated with the U.S., Texas and Mexican economies over this period. Again, the various border cities have fared differently during the business cycles. Before the late 1990s, Laredo employment growth was the most procyclical by far, averaging a 6 percent increase in foreign direct investment, NAFTA in 1994, Mexico–U.S. trade grew in volume and underwent rapid compositional change as well. Both developments benefited the border economy.9 The increased volume of two-way trade is processed on the border, not only by U.S. and Mexican customs and many other government agencies, but also by transporters, freight forwarders, customs brokers, insurance agents, bankers and bridge operators. It is difficult to imagine any business not directly or indirectly affected by international commerce on the Texas–Mexico border.

The compositional change in Mexican exports, from raw materials such as silver and coffee to manufactured products such as auto parts and electronics, has also benefited the border by leading to more rapid employment growth in maquiladoras. Most maquiladoras are located just across the border in the Mexican sister cities of Matamoros (Brownsville), Reynosa (McAllen), Nuevo Laredo (Laredo) and Ciudad Juárez (El Paso). Maquiladora employment in these cities increased 83 percent on average during the 1990s.10 Given the cross-border interdependencies in retail, banking, insurance and real estate, rapid job and earnings growth on the Mexican side leads to greater demand for these goods and services on the U.S. side.

Although all border cities have benefited from liberalized trade with Mexico and the growth of maquiladoras, their individual experiences have been quite different. For example, McAllen’s proximity to the third-largest city in Mexico—Monterrey—and the phenomenal maquiladora expansion in McAllen’s sister city, Reynosa, both fueled McAllen’s growth spurt. Laredo, through its unique location along what is dubbed the NAFTA superhighway, currently processes 40 percent of land-based trade with Mexico. U.S.–Mexico trade grew an average of 12 percent per year between 1990 and 2000, spurring Laredo’s growth. Brownsville, strategically located on the Gulf of Mexico with both a seaport and a tourism industry, has similarly gained from the growth in U.S.–Mexico trade and the inflow of Mexican shoppers.

El Paso is a slightly different case. With 40 percent of manufacturing employment in the apparel industry before 1994, the city’s economy was vulnerable to NAFTA’s reduction of tariffs on apparel from Mexico. In light of this, El Paso’s relatively weak job performance in the 1990s (compared with the other border cities) is actually impressive. El Paso has undergone a structural change over the past decade, largely driven by consumers and industries in Ciudad Juárez.11

Mexico’s Macroeconomic Stability and the Strong Peso. One positive outcome of Mexico’s 1995 recession was a commitment to a stable macroeconomy and the switch to a floating-exchange-rate regime.12 Such a regime does not remove the possibility of a currency’s depreciation, but it does make large and sudden devaluations more rare. Mexican devaluations have devastated the border economy many times in the past. Now, however, the exchange rate regime is accompanied by an inflation-fighting central bank. Together with NAFTA-induced increases in foreign direct investment, particularly in the maquiladora sector, these changes have led to a remarkably strong Mexican peso in the years after the Tequila Crisis.
The strong peso is another underlying reason for improvement in the Texas–Mexico border economy. Despite the recent economic slowdown, the peso has not weakened much and continues to play a vital part in the border boom. Because the peso directly affects the purchasing power of Mexicans, which in turn influences the demand for U.S. goods and services, its importance to the border economy cannot be overemphasized.

The peso’s strength has the most direct impact on U.S. border retail sales. Moreover, the manner in which the retail sales level varies with the peso–dollar exchange rate is a good measure of the Mexican consumer’s influence on the border economy. As Chart 7 demonstrates, retail sales in all four border metros dipped sharply in 1994–95 as a result of the Tequila Crisis devaluation. The downturn in the retail sector was particularly severe in Laredo. The 60 percent decline in the peso’s value between January 1994 and December 1995 significantly diminished Mexicans’ purchasing power.

However, starting in early 1996, retail sales began to grow again and, with the exception of Laredo, have surpassed their pre-1995 levels. As the largest city on the border, El Paso has the highest county retail sales. McAllen has the second highest and the fastest-growing. In addition, McAllen leads in “exported” retail sales—sales to Mexican nationals—largely as a result of its proximity to Monterrey, home to nearly 4 million people.15

**Will Border Economic Growth Be Sustained?**

In the past, border booms have often come to an abrupt halt. The 2001 recession, however, does not seem to threaten the ongoing border expansion. This is due to fundamental improvements in the underlying determinants of border economic growth as discussed above—such as macroeconomic stability in Mexico and liberalized trade. Nonetheless, serious challenges still confront the border economy. Simultaneous changes in the maquiladora outlook, security measures in the wake of September 11 and impending truck safety inspections will all pose challenges for continued growth and progress.

The peso’s strength, although a positive development in many ways, has put more pressure on maquiladoras to save on labor costs, perhaps by reducing employment more than they would if the peso were weaker or slowly depreciating. A strong peso increases the relative cost of Mexican labor and makes labor-intensive Mexican producers less competitive. In addition, although the 2001 recession has been mild by both U.S. and Mexican standards, it nonetheless led to record layoffs in the maquiladora industry. As of January 2002, 240,000 maquiladora workers had lost their jobs in the previous year. This represents a loss of 19 percent of total maquiladora employment in just one year.

Even as the economic recovery takes hold, there is speculation that not all maquiladora workers who have lost their jobs will be rehired. Anecdotal evidence suggests that producers are taking advantage of the downturn to make changes that will make them more competitive: upgrading to less labor-intensive technology, expanding farther south in Mexico (away from the border) or even relocating to lower-wage countries in Central America and Asia. All these changes imply slower job growth on the Mexican side of the border with some coincident negative effects on the U.S. side as well.

Another risk to the border economy prognosis is the crossing delays caused by continued security measures as a result of the September 11 attacks. Security measures implemented immediately following the attacks virtually halted cross-border traffic. As random vehicle checks were replaced by universal searches, wait times doubled and tripled. At the time of the terrorist attacks, vehicle crossings were already down due to the recession, after rising steeply throughout the 1990s (Chart 8). After the attacks, crossings dropped further. The falloff in vehicle crossings entailed a drop-off in the total number of northbound cars, trucks and people. This, in turn, had a negative impact on U.S. border cities for all the reasons previously mentioned.

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**Chart 7**

**Border Retail Sales Vary with Peso Strength**

<table>
<thead>
<tr>
<th>Year</th>
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<th>Brownsville</th>
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<th>Laredo</th>
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<td>2002</td>
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</tbody>
</table>

* Seasonally adjusted.

**SOURCES:** County level data from Texas Comptroller of Public Accounts; International Financial Statistics; Federal Reserve Bank of Dallas.

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**Chart 8**

**Northbound Border Vehicle Crossings Grow in 1990s**

Number of vehicles (in millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Vehicles</th>
</tr>
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<td>1994</td>
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<td>1995</td>
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**NOTE:** Crossings are through Brownsville, Del Rio, Eagle Pass, El Paso, Harlingen, Laredo, McAllen–Hidalgo, Presidio, Progreso, Rio Grande City and Roma.

**SOURCE:** Texas A&M International University.
The drop-off in northbound crossings is perhaps best illustrated in El Paso, where the recession has had a slightly bigger impact than in the other border cities. As Chart 9 shows, northbound border crossings in El Paso fell drastically in spring 2001 and then again in September. The decline in crossings seems highly correlated with maquiladora layoffs, but given the drop in September crossings and the lack of a rebound, security checks and ensuing waits have also played an important role.

It bears mentioning, however, that further complicating border crossings last fall was the required switch to a new high-tech border-crossing pass, a so-called laser visa, for Mexican commuters. Many border crossers missed the deadline for the conversion or simply could not afford the $45 fee. The result was confusion and fewer total crossings. Taken together, these various factors have had a negative impact on U.S. border economies like El Paso's. The extent to which retail sales have held up has been primarily due to the peso's strength and to economizing Mexicans who now make fewer trips and buy more on each trip.

A final upcoming challenge on the border is the NAFTA trucking agreement scheduled to come into effect this summer. Although the law is designed to make cross-border trucking less cumbersome by allowing Mexican trucks into the U.S. interior, the law also mandates extensive truck safety inspections and stringent requirements for drivers. Truck safety inspection stations are going up all along the border. These stations are to be placed on the actual border and not at the perimeter of the border commercial zone (typically 5 to 20 miles from the Rio Grande). Northbound short-haul trucks will probably be inspected along with Mexican long-haul trucks.

Given the prominent use of short-haul carriers for brief cross-border trips, and considering that these vehicles are often older and more worn, there is concern that the inspections will cause longer lines, delays and more congestion at border crossings. The U.S. Department of Transportation has already said, however, that if an inspection facility becomes backed up with out-of-service vehicles, they will close the facility until it is free again to do more inspections.

In the medium to long run, the new law and the safety inspections will be positive developments on net—bringing border trucks up to code and lowering the cost of cross-border trade by eliminating some of the short-haul industry. In cities such as Laredo, however, more streamlined trade will mean less need for transportation services and warehousing. These sectors have been big drivers of the Laredo economy.

**Conclusion**

The Texas–Mexico border economy did well in the 1990s. Border residents saw greater employment opportunities, improved earnings potential and higher incomes. Texas border cities grew in size and scope. This time, growth was based on good fundamentals—a sound Mexican economy and North American free trade—that should secure future growth as well. The border will see more changes: slower population and job growth on the Mexican side of the border, tighter security and inbound Mexican long-haul trucks. These changes can be positive if, for example, slower population growth translates into higher living standards, if tighter security is implemented through better technology that does not extend border crossing times, and if streamlined trucking increases the flow and efficiency of U.S.–Mexico trade.

Other developments not detailed in this article played a vital role in border well-being during the 1990s—increased access to affordable housing, improved health care, and more well-funded schools and colleges. The border’s future must include continued investment in the human capital of border residents through an emphasis on access to these services, most importantly education and job training. In the long run, raising income to state and national levels can only be achieved by upgrading the skills of the border’s work force.

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**Notes**

The authors would like to thank Keith Phillips for sharing his insights on this topic and providing valuable comments.


2. In 1999, average earnings per job by sector were as follows: federal civilian government $62,925; mining $39,738; transportation $34,344; wholesale trade $32,152; state and local government $30,506; FIRE $27,740; manufacturing $27,097; services $20,800; construction $20,659; retail trade $17,067. Earnings include wages and salaries, other labor income (mostly benefits) and proprietor’s income. Averages are by job (not by individual) and may understate individual earnings since some workers hold more than one job.


7. An alternative approach to comparing income, which gets away from issues such as family size and labor force participation, is to look at average earnings per job, much as Dittmar and Phillips do in the article mentioned in Note 1. In 1999, border earnings per job were about 70 percent of the national average.

8. A border recession is loosely defined in this context as a year of zero or negative employment growth.


10. Between 1990 and 1999, maquiladora employment grew 161 percent in Reynosa, 79 percent in Ciudad Juárez, 54 percent in Matamoros and 37 percent in Nuevo Laredo.

11. See the article mentioned in Note 3.

12. Other beneficial reforms included a liberalized banking sector allowing foreign ownership of Mexican banks.