Chapter 17:
Income in the Border Region, 1993–2010

James Gerber

James Gerber, professor of economics at San Diego State University, discussed "Income in the Border Region, 1993–2010." His presentation cited his 2008 book, *Fifty Years of Change on the U.S.-Mexico Border: Growth, Development, and the Quality of Life,* co-authored with Joan Anderson. He focused the presentation on trends in income levels and growth in the U.S. and Mexican border region over the two decades following NAFTA's entry into force. After examining income levels both between neighboring U.S. and Mexican cities and between the two countries at the national levels, Gerber discussed multiple reasons for the income divergence seen between the two countries.

Gerber's first conclusion is that besides the popular explanation, which points to differences between institutions across the two countries, diverse other reasons—such as political, socioeconomic and macroeconomic factors—underlie the marked increase in income gaps between the United States and Mexico in the 2000s. Since many of these factors are largely determined by national-level policies (as opposed to local ones), Gerber's second conclusion suggests that those policies—for instance, vulnerability to U.S. economic cycles and China's entrance into the WTO—could also have an extractive effect on Mexican border municipalities, which saw a decline in income growth in the 2000s.

Gerber first pointed to the failure of an assumption seen in the Heckscher-Ohlin model[30] for international trade to explain why Mexican and U.S. income levels were unable to converge after NAFTA entered into force. The Heckscher-Ohlin Model assumes that wages and returns to capital should equalize in the U.S. and Mexico because the process of trading goods and services is equivalent to trading factors. This process should drive returns to capital and wages to equivalence, if all goes according to theory. Gerber commented:

> We know that doesn't happen, but the interesting question is, really, why doesn't that happen? What the factor proportion theory and the factor price equalization theorem tell us is that we assume that Mexico and the United States had the same technologies. I think that's the key assumption that's not at work in this case.

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[30] The Heckscher-Ohlin Model and its corollary of factor price equalization assumes that wages and returns to capital should equalize in the U.S. and Mexico because of process of trading goods and services is equivalent to trading factors. This process should drive returns to capital and wages to equivalence, if all goes according to theory.

To explore the idea of differences in technologies, he cited Acemoglu and Robinson's 2012 book, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. The book examines the importance of institutions—which in turn govern technological development via education, regulatory environment, access to capital, rule of law, etc.—in determining national income levels.

However, Gerber contended that only some of the divergence seen between the United States and Mexico is attributable to differences in institutions. He noted that although there was a brief period of income convergence between certain U.S. and Mexican neighboring municipalities between 1993 and 2000, all major neighboring Mexican and U.S. border municipalities witnessed a marked increase in income disparities between them by 2010 (table 1). But the income discrepancy between many neighboring border municipalities equals only one-third of the U.S.-Mexico income level discrepancy overall. Gerber argued that, given the cultural, linguistic, and geographical similarities between these neighboring cities, the sole characteristic separating the cities—institutions—accounts for only a part of the difference between U.S. and Mexico income levels.

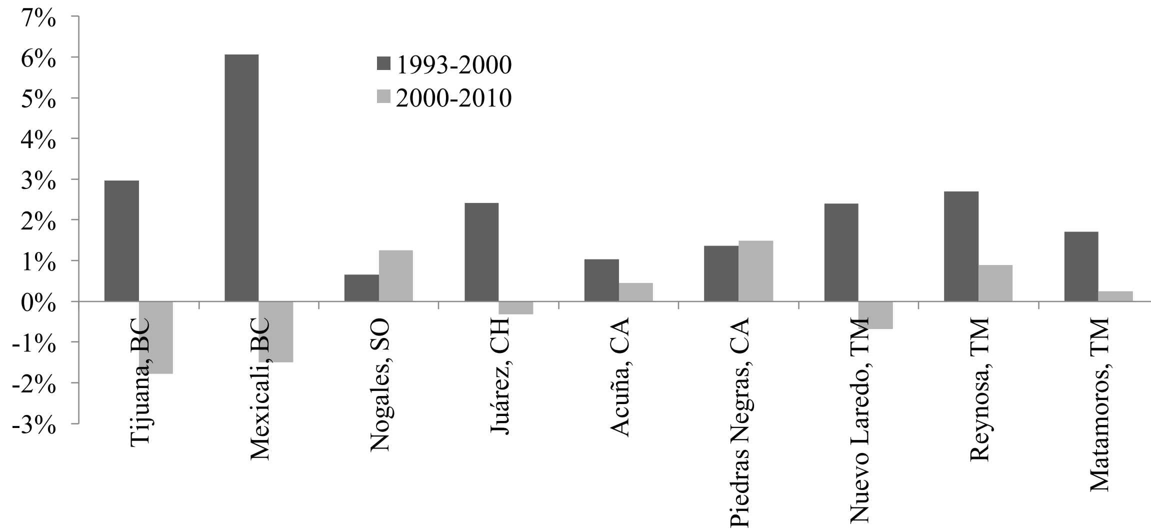
Table 1. Income Differences Between U.S. and Mexican Neighboring Municipalities, 2005 U.S. dollars

Neighboring Municipalities (U.S.–Mexico)	**1993**	**2000**	**2010**
San Diego-Tijuana	23,499	30,375	36,090
Imperial-Mexicali	16,874	11,822	18,482
Santa Cruz-Nogales	8,619	10,356	10,364
El Paso-Juárez	12,918	13,390	20,326
Val Verde-Acuña	6,150	7,382	16,759
Maverick-Piedras Negras	920	2,354	7,898
Webb-Nuevo Laredo	8,081	7,497	14,798
Hidalgo-Reynosa	6,887	5,888	10,206
Cameron-Matamoros	8,428	8,155	13,132
U.S.-Mexico	**24,155**	**28,640**	**29,985**

Source: Gerber (2014)

Turning to growth rates in income on the U.S. and Mexican sides of the border, he drew on some other hypotheses for the divergence. He first showed that growth on the Mexican side of the border was higher in the 1990s than in the 2000s (Figure 1). Gerber suggests that factors such as the drug wars, long wait times to cross the border, deportations by the United States, the flight of skilled and middle-class Mexicans to the United States, vulnerability to U.S. economic cycles, and China's entrance into the WTO could all be to blame for the slowdown in growth in Mexican border cities in the 2000s.

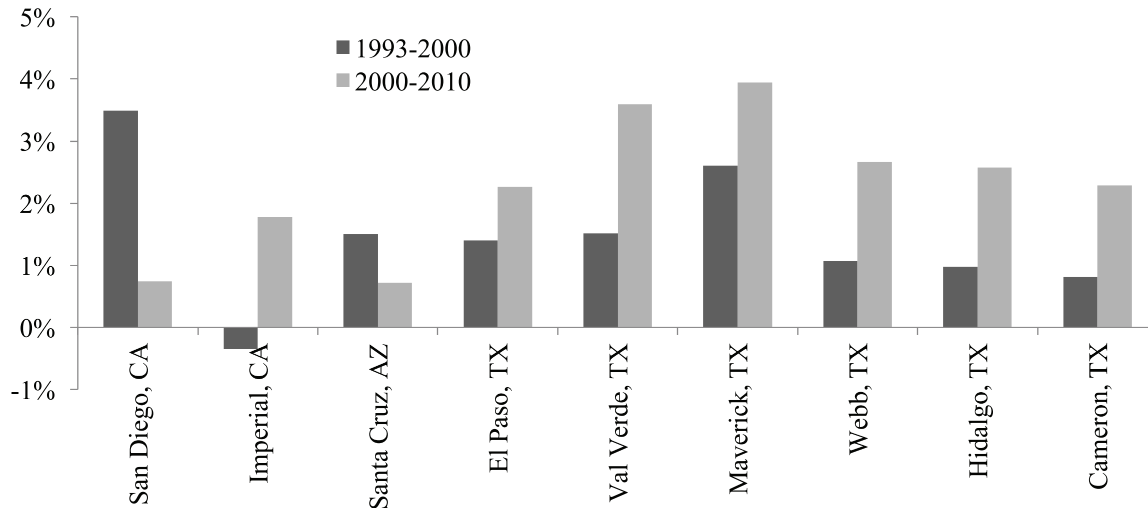
Figure 1. Growth on the Mexican Side of the Border, 1993–2010, Average Annual Compound Growth, Percent



Source: Gerber, 2014.

Other factors explain the increase in growth in the 2000s for U.S. border cities, after they generally had already experienced positive growth in the 1990s (figure 2). Texan border cities' escaping the subprime loan crisis, the shale gas boom, the lack of dependency on cross-border traffic for retail sales, and the relocation of the Mexican middle class, Gerber said, are all likely contributors to the boost in income growth seen in the 2000s.

Figure. 2 Growth on the U.S. Side of the Border, 1993–2010, Average Annual Compound Growth, Percent



Source: Gerber, 2014.

For both U.S. and Mexican border municipalities, Gerber pointed out that many of the factors that determine income are decided outside of the border region itself. So, he suggested looking at the border as "almost as a bi-national institution." He noted:

> There are things like U.S. migration policy, like drug policy, these are outside the hands of people that live in the border region. But, and this is key, these things have a disproportionally large impact in terms of the spillover effects and in terms of the externalities they generate on residents of the border region. That this has a very decided impact on people that live in Laredo in a way that it does not have on people that live in Des Moines, Iowa, or that live in Spokane, Washington. It just simply isn't a symmetry or a uniformity in these types of impacts. So, many of the policies that the U.S., in particular, has implemented, I think, have had disproportionally large impacts."

In conclusion, referring again to Acemoglu and Robinson's book, Gerber posed the question whether or not the U.S.-Mexican border is an extractive institution. In considering the question, Gerber pointed out that in the 1980s and 1990s, Mexican border cities had a trading advantage —and saw growth in income—because of their close proximity to the U.S. marketplace. However, as a result of changes in U.S. domestic policy in the 2000s, those advantages Mexico enjoyed became disadvantages—because of the presence of the border itself.

References

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