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The United States-Mexico Borderland: »Where North Meets South« or »Marriage of Convenience«*

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This article summarizes the demographic characteristics of the United States-Mexico borderlands, outlines the role of the maquila (assembly) industry as the cornerstone of an ongoing regional economic integration, highlights its implications for the crossborder dependency and points to new developments under the North American Free Trade Agreement. Reference is made to a unique attempt at transborder economic development planning process under the auspices of governments of Arizona, U.S.A., and Sonora, Mexico.

Key Words: the maquila (assembly) industry, crossborder interdependency, regional economic integration, the North American Free Trade Agreement (NAFTA), transborder cooperation.

Američko-meksička pogranična regija: »Gdje sjever sastaje jug« ili »Brak iz računa«

Članak sažimlje osnovna demografska obilježja američko-meksičke pogranične regije, zacrtava ulogu maquila industrije (sastavljane komponenata) kao osnovice regionalne ekonomske integracije, naglašava njene posljedice za prekograničnu međuovisnost i ukazuje na nove razvojne tendencije unutar Sjevernoameričkog ugovora o slobodnoj trgovini. Članak se osvrće na jedinstveni primjer plana za transgranični ekonomski razvoj pod pokroviteljstvom državnih vlada Arizone u SAD i Sonore u Meksiku.

Ključne riječi: maquila industrija (industrija za sastavljanje komponenata), prekogranična međuovisnost, regionalna ekonomska integracija, Sjevernoamerički ugovor o slobodnoj trgovini, prekogranična suradnja.

INTRODUCTION

The two subheadings – *Where North Meets South*, borrowed from Lawrence Herzog (1990), and *Marriage of Convenience* from Sidney Weintraub (1990) – succinctly describe the framework within which contemporary processes shape the United States-Mexico border region. For most observes of Mexico, a free trade agreement between the rich »North« and poor

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»South« seemed unlikely not only because of enormous differences in degree of economic development, but also because of a traditional mistrust that has dominated the political relationship between these two neighbors that share one of the largest international borders of almost 2 000 miles (3 200 Km). Yet, on January 1, 1994, Mexico joined the United States and Canada to form one of the largest regional trade blocks, known as the North American Free Trade Agreement (NAFTA).

For a long time, the borderland has lived in isolation from the national centers of economic and political powers, developing unique transborder ties and informal strategies to cope with scarce economic resources, growing inequalities (Martinez, 1990) and sometimes hostile international relationships between their federal governments (Williams, 1992). When Mexico joined other less developed countries in accepting the global production sharing[1] as one option of its economic development strategy, it opened its northern border region to foreign companies. The assembly plants for exportation became the backbone of the industrialization of the northern Mexico. The borderland was drawn into the interest sphere of the mature industrial regions of the Northeast and Midwest in the United States, and linked to them through supply of capital, equipment and components for assembly.

With the passage of NAFTA, the United States-Mexico borderland is redefining its role as the frontline of free trade. It has yet to develop strategies to deal with pronounced regional differences in the context of increasing economic integration; it can learn from other border regions facing similar challenges, but at the same time, it can serve as a unique example of transborder cooperation.

This article summarizes basic geographic and economic characteristics of the United States-Mexican border, outlines regional implications of an ongoing economic integration, and points to new developments under the NAFTA framework. The paper concludes with a reference to a unique transborder regional economic planning process involving the states of Arizona, U.S.A., and Sonora, Mexico.

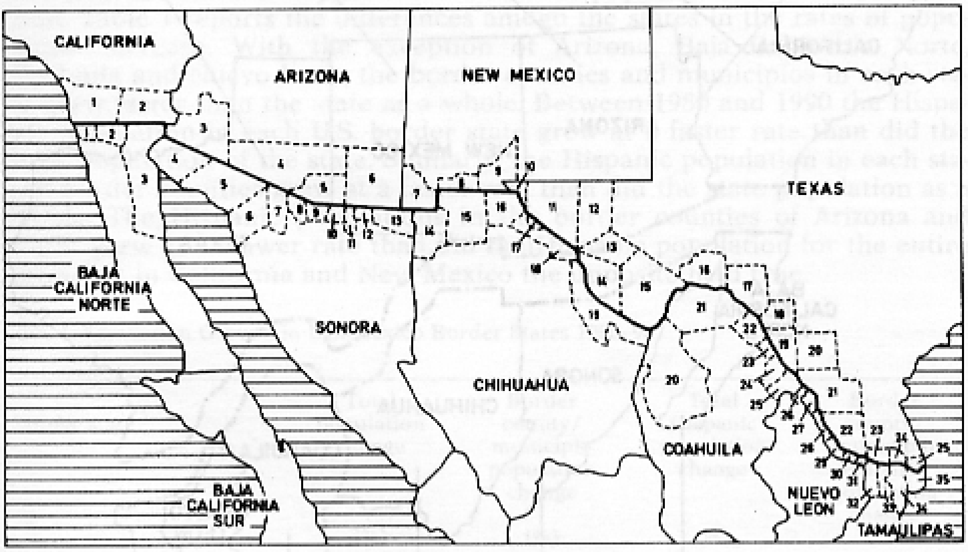
BORDERLANDS' POPULATION

In a broader sense, the border region encompasses four border states in the United States – California, Arizona, New Mexico and Texas – and six states in Mexico – Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon and Tamaulipas. In a narrower sense, the borderland is basically limited to 25 counties in the United States and 35 *municipios* in Mexico that are adjacent to the international boundary (Figure 1).

Figure 2 visually compares the border states by size and provides basic information[2] on demography of the region. The ten border states have a combined population of approximately 65 million people[3], with 52 million (or 80 percent of combined border population) residing in the United States. The counties and *municipios* along the border have a population of only 9,2 million, with 57 percent of this population residing on the U.S. side.

UNITED STATES COUNTIES

1. San Diego	8. Luna	15. Brewster	22. Zapata
2. Imperial	9. Dona Ana	16. Terrell	23. Starr
3. Yuma	10. El Paso	17. Val Verde	24. Hidalgo
4. Pima	11. Hudspeth	18. Kinney	25. Cameron
5. Santa Cruz	12. Culberson	19. Maverick	
6. Cochise	13. Jeff Davis	20. Dimmit	
7. Hidalgo	14. Presidio	21. Webb	



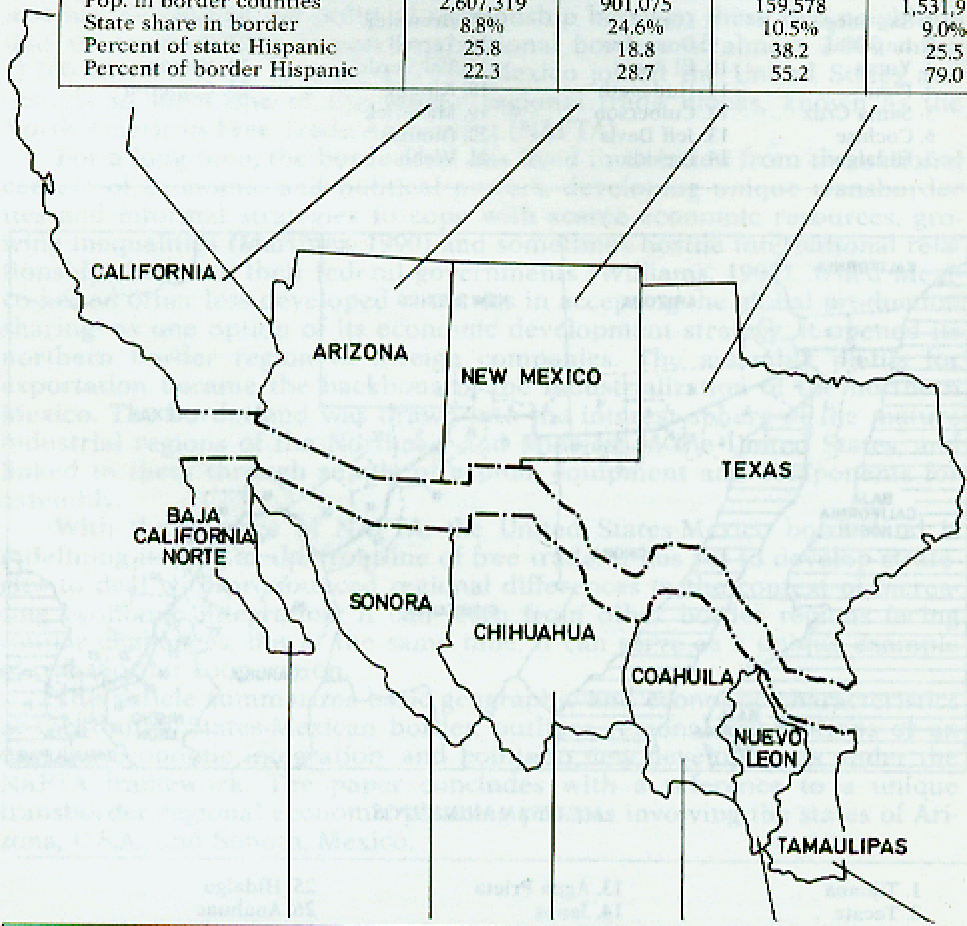
MEXICAN MUNICIPOS

1. Tijuana	13. Agua Prieta	25. Hidalgo
2. Tecate	14. Janos	26. Anahuac
3. Mexicali	15. Ascensión	27. Nuevo Laredo
4. San Luis R. C.	16. Juárez	28. Guerrero
5. Puerto Penasco	17. P. G. Guerrero	29. Mier
6. Caborca	18. Guadalupe	30. Miguel Alemán
7. Altar	19. Ojinaga	31. Camargo
8. Saric	20. Ocampo	32. Reynosa
9. Nogales	21. Acuna	33. Río Bravo
10. Santa Cruz	22. Jiménez	34. Valle Hermoso
11. Cananea	23. Piedras Negras	35. Matamoros
12. Naco	24. Guerrero	

Fig. 1 The United States – Mexico borderlands.

Sl. 1. Američko-meksička pogranična regija.

Population	29,760,021	3,665,228	1,515,069	16,986,510
Pop. in border counties	2,607,319	901,075	159,578	1,531,958
State share in border	8.8%	24.6%	10.5%	9.0%
Percent of state Hispanic	25.8	18.8	38.2	25.5
Percent of border Hispanic	22.3	28.7	55.2	79.0



Population	1,657,927	1,657,927	2,439,954	1,971,344	3,086,466	2,244,208
Population in border municipios	1,397,022	384,035	866,799	174,344	17,248	1,151,186
State share in border	84.3%	23.2%	35.5%	8.8%	0.5%	51.3%

Fig. 2 U. S.–Mexico border states population 1990.

Sl. 2. Stanovništvo u graničnim državama SAD i Meksika (1990).

Approximately 26 percent of the total population in the U.S. border states is Hispanic[4]. Importantly, and illustrating the historic and cultural development of the border, 41 percent of the population in the counties adjacent to the boundary is Hispanic. This concentration of Hispanic population in border counties systematically increases eastward of California, going from 22 percent in California border counties, to 29 percent in Arizona, to 55 percent in New Mexico, and 79 percent in Texas.

The border states in the United States had a combined population increase of 24 percent between 1980 and 1990, and, at the same time, the border counties and *municipios* had a combined population increase of 30 percent. Table 1 reports the differences amogn the states in the rates of population increase. With the exception of Arizona, Baja California Norte, Coahuila and Nuevo Leon, the border counties and municipios in each state grew faster than the state as a whole. Between 1980 and 1990 the Hispanic population in each U.S. border state grew at a faster rate than did the total population of the state. Similarly, the Hispanic population in each state's border counties grew at a faster rate than did the state population as a whole. The Hispanic populations in the border counties of Arizona and Texas grew at a slower rate than did the Hispanic population for the entire state, but in California and New Mexico the opposite held true.

Tab. 1. Population Growth in U.S.-Mexico Border States 1980–90

Border state	Total population change (%)	Border county/ municipio population change (%)	Total Hispanic population change (%)	Border county/ municipio Hispanic population change (%)
United States				
Arizona	34,8	26,2	56,2	46,6
California	25,7	33,4	69,2	78,4
New Mexico	16,3	35,3	21,4	48,7
Texas	19,4	26,7	45,4	36,8
Mexico				
Baja California	40,8	22,2	n.a.	n.a.
Chihuahua	21,7	37,3	n.a.	n.a.
Coahuila	26,6	23,2	n.a.	n.a.
Nuevo Leon	22,8	4,7	n.a.	n.a.
Sonora	20,4	23,1	n.a.	n.a.
Tamaulipas	16,6	38,1	n.a.	n.a.
Total border	24,0	30,0	n.a.	n.a.

n.a. = not applicable

Source: Worden et al. (1992)

Asymmetrical distribution of population along the United States-Mexico border is most striking in the case of border twin cities. From the Pacific coast in the west to the Golf of Mexico in the east, there are nine major twin cities[5]: San Diego/Tijuana, Calexico/Mexicali, San Luis/San Luis

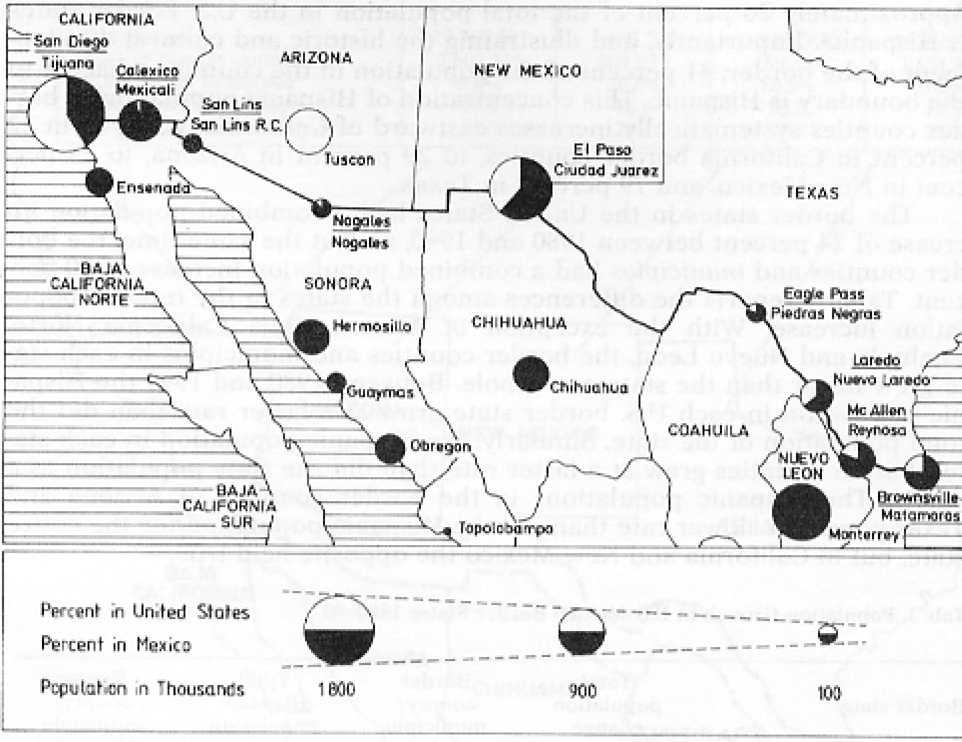


Fig. 3 Distribution of major urban centers in the U. S.–Mexico border.

Sl. 3. Raznještaj glavnih urbanih centara u američko-meksičkoj pograničnoj regiji.

Rio Colorado, Nogales/Nogales, El Paso/Ciudad Juarez, Eagle Pas/Piedras Negras, Laredo/Nuevo Laredo, McAllen/Reynosa, and Brownsville/Matamoros. With the exception of the San Diego/Tijuana area, the majority of population in border twin cities lives south of the border (Figure 3). As the Southwest developed into a dynamic economic region, coupled with changes in technology, communications, and transportation, and given the relatively porous nature of the U.S.-Mexico border, Mexican cities located along the border became important »interim destinations for migrant workers« (Herzog, 1990). The expansion of the maquila industry since mid 1960s has also been regarded as an important factor of the population boom in the Mexican border cities. Labor migration toward the United States, argues Alba (1984), »constitutes a key element in shaping events in which people cross the border or the fact that those who are deported are, for the most part, deposited in the cities along the border«. The sizable drop in real wages during Mexico's economic crisis 1982–88 increased the incentives for Mexican labor to migrate to the United States (Reyes, 1991).

THE ECONOMIC CONTEXT

The post World War II industrialization of the United States-Mexico borderlands is closely related with two major trends: (a) relocation of manufacturing and population from the Frostbelt to the Sunbelt states[6], and (b) the growth of the maquila industry in Mexico.

While mild climate and abundance of sunshine are important factors in the migration toward southern border states, many analysts agree that lower wages and nonunionized labor were the major factors for the relocation of manufacturing from the mature, heavily unionized, northern industrialized regions in the United States (Hansen, 1984). In that sense, many view the maquila industry as a part of basically the same process, in which capital constantly moves to areas of lower production costs (Grunwald and Flamm, 1985, Henderson and Castells, 1987).

Tab. 2. Selected Economic Indicators for U.S. Border States

	Arizona	California	New Mexico	Texas
State				
Manufacturing employment	173 800	1 996 900	40 300	981 100
As % of total employment (1991)	11,4%	15,5%	6,8%	13,5%
Manufacturing growth (1985–91)	3,8%	0,2%	16,7%	–2,0%
Exports to Mexico ($millions)	850	4 670	17	13 288
% share of all US exports to Mexico (1990)	3,0%	16,5%	0,1%	46,8%
Border Counties				
Manufacturing employment	29 150	139 225	N.A.	69 325
As % of total employmet (1991)	7,4%	13,4%	N.A.	14,2%

N.A. = not available

Source: Worden et al. (1992)

Table 2 shows selected economic indicators for the border states. California has the largest share of labor force engaged in manufacturing as percent of total employment (16%), followed by Texas (14%) and Arizona (11%). New Mexico, with only 7 percent of manufacturing employment, however, experienced the largest increase in manufacturing employment (17%) during 1985–91. The manufacturing in U.S. border states has experienced a continued growth while the rest of the nation was losing manufacturing jobs absolutely and as a share of total employment[7].

Industrialization of the northern Mexican border region is closely related to the maquila industry and Mexico's participation in the globalization process.

The Maquila Industry. Several works provide comprehensive reviews of the nature of the maquila industry and its growth (Grunwald and Flamm 1985, Stoddard 1987, Sklair 1989, Wilson 1992). The terms *maquila*[8] (for industry) and *maquiladora* (for a plant) are specifically used in Mexico for assembly plants of foreign components that are reexported to developed countries. The Maquila Program was introduced by Mexican government in 1965 in reaction to a severe unemployment in the northern border area caused largely by the termination of the Bracero Program[9] in the United States.

The Maquila Program has allowed foreign companies to import duty-free equipment, components and packaging materials for purpose of exportation; duty is paid only on the »value added«, i.e. mainly labor and services used in Mexico. In the United States, complementary customs regulations have allowed reimportation of U.S.-made components duty free. The combination of these regulations have had profound spatial implications, both in terms of location of the maquila plants and trade flows between the two countries. The original Maquiladora Decree restricted maquiladoras to a narrow border zone, and consequently cities like Ciudad Juarez, Tijuana, Nogales and other became major concentrations of the assembly plants. Access to Mexican markets has been severely restricted until recently, which in combination with the U.S. Customs provisions, encouraged maquiladoras to locate as close as possible to their parent companies and other suppliers in the United States (South, 1990).

Competitive labor costs in Mexico together with locational advantages relative to main industrial regions in the United States soon made Mexico one of the fastest growing locations for U.S. owned assembly plants abroad. Revenues generated by the Maquila Program soon became the second major source of foreign currency for the Mexican government, surpassing the tourism industry and becoming second only to the petroleum industry. The oil crises of the 1980s coupled with rising unemployment forced the Mexican government to abandon its import substitution policy in favor of an export based industry model, and consequently ease the restrictions on foreign ownership and location of maquila plants from the original narrow border zone. Through a series of peso devaluations, Mexican labor costs became among the lowest in comparison with other less developed countries in mid 1980s, and are considered one of the major factors of an explosive growth of the maquila industry during last decade (Wilson, 1992). In 1993 there were 2 150 maquiladoras employing approximately 600 000 workers (Hansen, 1994).

Tab. 3. Spatial Distribution of Maquila Employment in Mexican Border States 1991

State	State maquila employment	Border maquila employment	
		Number	% of state
Baja California Norte	102 343	96 637	94,4
Chihuahua	164 482	135 275	82,2
Coahuila	30 113	21 247	70,6
Neuvo Leon	15 811	0	0
Sonora	39 914	32 814	82,2
Tamaulipas	89 818	89 818	100,0
Total	442 481	375 791	84,9

Source: Worden et al. (1992)

Despite incentives provided by the Mexican government to locate in the interior of Mexico, the maquila industry remains largely concentrated in border states, and more specifically, within border *municipios* (Table 3).

The role of the maquila industry as a factor of regional economic development has been debated at large in both. U.S. and Mexican literature. Most analysts agree that the Maquila Program was instrumental in generating industrial jobs in the border; in some border cities maquiladoras account for more than 50 percent of the total employment[10].

However, it has been argued that because of predominantly low wages[11], the Maquila Program did not increase the well-being of the border population. Despite an increase in technical and administrative positions held by Mexican nationals, the majority of jobs remain in the production workers category[12]. Women comprise majority of the maquila work force, although their share has dropped in comparison with the early years.

Another problem is the weak backward linkages of the maquila industry with the local economy. Inputs of Mexican-made components still make less than 5 percent of total inputs. Wilson[13] (1992: 23) rightly points out:

> From the host country's point of view, the viability of an export-led development strategy based on the assembly industry depends on the extent to which the industry can create beneficial links with the host economy in addition to the direct employment and foreign exchange generated.

Crossborder Interdependency. The spatial relationship to Mexico's maquila industry in the United States is often referred to as the »twin plant« concept, suggesting a production sharing between plants on both sides of the border. While a number of twin plants were established in U.S. border cities to supply, oversee and coordinate the labor intensive assembly across the border in the maquiladoras, the concept did not realize in its full meaning. Maquiladoras in northern Mexico remain largely related to the parent companies in Northeast and Midwest (South 1990, Pavlakovich and Silvers 1988)[14]. Instead of twin plants, the U.S. border cities serve mainly as locations for offices and warehousing and distribution of supplies to and assembled products from the maquiladoras[15].

Despite a rather tight relationship between the maquila plants and their parent companies in terms of components and supplies, there has been empirical evidence that considerable amount of industrial supplies and services are being supplied by businesses in the border states (Border Trade Alliance 1987, Mitchell and Vargas 1987, Patrick 1989, Silvers and Pavlakovich 1991).

Texas and California are the leading exporters to Mexico, accounting for more than 60 percent of the total U.S. exports to Mexico. Arizona jumped from a long held 5th place to 3rd place in 1992, surpassing Michigan and Illinois[16]. Three manufacturing sectors dominate border states exports to Mexico: 25 percent in electronic and other electrical equipment, 11 percent in industrial and commercial machinery and computer equipment, and 10 percent in transportation equipment[17]. Giving the nature of the maquila industry and its role in U.S.-Mexico trade[18], it is not surprising that the composition of Mexico's manufacturing exports to the United States is similar to the composition of U.S. exports to Mexico.

The maquila industry profoundly affected the border cities landscape. In Mexico, border cities and *municipios* became and still are the prime locations for maquiladoras; maquiladoras are largely concentrated in industrial parks, sparked increased migration toward the border, contributed to an ever increasing imbalance between the population and physical[19] and social infrastructure, and are largely blamed for increased pollution along the border.

In U.S. border counties, a modest increase in manufacturing employment and diversification of the economic base (manufacturing industries and services alike) can be directly and indirectly linked to the expansion of the maquila industry south of the border[20]. However, the proportion of the labor force engaged in manufacturing remains below the states averages, with the exception of Texas, and there only slightly above.

The major source of employment in U.S. border counties is retail trade, largely dependent upon Mexican shoppers. Maquila employees used to spend up to 70 percent of their monthly incomes in U.S. border cities. Devaluations of Mexican currency[21] drastically reduced individual's purchasing power. A survey in Sonora, for example, suggested that by late 1980s maquiladora workers spent on average 30 percent of their monthly incomes across the border (Pavlakovich and Kim 1990, Lara and Pavlakovich 1991). The drop in individual purchasing power was partially compensated by an increase in the number of shoppers, following the expansion of the industry in the mid 1980s.

While general wisdom tends to link the crossborder outshopping by Mexican nationals to increasing consumerism and appeal of the U.S. made products, some authors like Anderson and de la Rosa (1991) see it primarily as a strategy used by border residents in coping with harsh economic situation along the border. They argue that the economic crisis in Mexico since 1982 was more severe in the border cities than in the rest of Mexico due to their position on the U.S. border. »The highly dollarized economy on the border has translated to higher rates of inflation than in the interior of Mexico, due to the falling value of the peso. Many services are priced either implicitly or explicitly in dollars; medical, car repair, housing, etc. Those earning pesos, especially by the central government, are caught in a bind«. For them, the abundance of inexpensive clothing, largely imports from Third World countries, and selected food items in American stores across the border, help stretch their meager incomes. Similarly, low income families on the U.S. side cross the border in search for less expensive medicine, groceries and restaurants in Mexico[22].

Despite the existing differences in economic, political and cultural systems, a new transboundary urbanized system is emerging. It is based on a set of social, economic and ecological linkages that connect households, industry, interest groups and local governmental organizations across the existing political boundary, and is »fused into a single functional spatial domain that transcends the international border« (Herzog, 1990). The visible incrase in the intermarriage and cultural integration of the populations and the continued use of Spanish and English in business, schools and advertisements on both sides of the border, as well as the crossborder transmission of cultural traditions such as food, clothing and music have given way to what Martinez (1990) describes as a »binational« and »bicultural« regional complex in the borderland.

THE NAFTA FRAMEWORK

After a relatively short period of negotiations, the governments of Mexico and the United States drafted a free trade agreement. Since Canada was already in a free trade union with the United States, it was only logical that Canada join the negotiations. The striking difference between the three economies is shown in Table 4. The debate about the likely impacts, however, has focused primarily on the relationship between the United States and Mexico.

In effect since January 1, 1994, NAFTA regulates free movement of goods, services and capital. It outlines the elimination of import tariffs[23] and quotas on most manufacturing products within next 15 years (Executive Office 1993). A major concern in the United States has been the impact that NAFTA will have on American jobs given the difference in manufacturing wages and anticipated movement of capital to Mexico. In Mexico, concern has been primarily with likely impacts of stiff competition with foreign owned companies and American products. Concerns with increased environmental degradation resulting from increased industrialization and anticipated flight of U.S. companies to Mexico where the implementation of environmental regulations is less stringent than in the United States, were high on both sides[24].

Tab. 4. The NAFTA members: Comparative statistics

	United States	Canada	Mexico
Population, 1990 (millions)	250	27	88
Population rank	4	31	11
Annual % change, 1980–90	0,9	1,0	2,3
% population < 15 years old	21,6	20,8	38,6
GDP, 1991 ($billions)	5 673	501	283
Per capita income, 1991 ($)	22 400	21 980	3 400
Crude birthrate, 1990	14,9	14,0	29,0
Infant mortality rate, 1990	10,4	7,3	32,7
Persons per car, 1988	1,8	2,1	15,0
TVs per 1 000 people, 1988	812	586	124
Steel consumption PC, 1987 (Kg)	417	507	93
Energy consumption PC, 1988 (Kw)	10 015	10 540	1 651

GDP = Gross Domestic Product
PC = per capita

Source: Worden et al. (1992)

Results of numerous econometric models and qualitative analyses predicting the impacts on jobs, remain largely inconclusive. Generally, it was suggested that at the national level the total employment impacts will be very small in the United States, and somewhat larger in Mexico, given the sizes of their respecive economies. However, more profound shifts in employment were expected at sectoral and regional levels. The USITC 1992 report suggested that the high technology sectors and high skilled jobs should be the winners in the United States; Mexico, on the other side, would attract capital investment in labor intensive production, including the agriculture sector. Consequently, the United States would lose low skilled jobs to Mexico, but the loss would be compensated by an increase in Mexico's demand for equipment, high technology products, consumer goods, and services[25].

U.S. border states generally anticipated positive net economic impacts due to NAFTA (Armstrong et al. 1991, Clement and Gerber 1991, Hansen 1994, Pick and Stephenson-Glade 1994, Silvers and Pavlakovich 1991, Silvers 1992). The three highest-ranking exporters to Mexico were the border states of Texas, California and Arizona, which had the highest amount of employment from trade with Mexico (Hansen 1994)[26]. Large metropolitan areas, such as Los Angels and San Diego in California, Phoenix and Tucson in Arizona, Albuquerque in New Mexico, Dallas/Fort Worth, Houston, Austin and San Antonio in Texas, are generally likely to gain most from increased exports to Mexico because of their current role as leading centers of economic activity within each state's economy.

Unlike major metropolitan areas, border cities represent a mixed bag of anticipated gains and loses. The maquiladora activity has spawned the beginnings of a potentially significant manufacturing-based components, parts and materials supply industry in most. U.S. border cities. However, some observers argue that border communities are short of the skilled labor and resources necessary to prepare for employment opportunities created by NAFTA. Predominant transit function in its present form tends to generate only limited benefits for the border communities, and they are rightly looking to the state and federal government for funding of projects that can ease traffic congestion and provide better access to major transportation arteries. It is unclear how the reduction of import tariffs will affect the border retail sector; some analyst predict that the availability of American products in Mexican shops will decrease need for transborder outshopping and drastically reduce revenues to U.S. border cities (USITC 1992).

The NAFTA provisions will affect the maquila industry in several ways. The special privileges that the maquila industry has been enjoying during the last three decades will be abolished by year 2001; other American and Canadian firms will enjoy the same conditions. As the restrictions on selling to Mexican markets are gradually removed, it is expected that this will encourage the location of maquiladoras closer to the population centers and further from the border. Until major improvements in Mexico's transportation system are completed, the maquila industry and new manufacturing growth are likely to remain concentrated in the border region (Hansen 1994, Pick and Stephenson-Glade 1994).

STATE-LEVEL TRANSBORDER COOPERATION

Increasing competition among the border states regarding potential locations of national and international businesses, forced state governments to get more active in shaping the economic policies. With prospects of NAFTA, the competition stiffened and alliances were formed between government, businesses and the universities, to »prepare« for implications of free trade with Mexico; to attract more business to and from Mexico, and seek ways to alleviate negative impacts of sectoral and regional restructuring. For example, California's State World Commission undertook a survey of businesses as early as 1989 to identify areas of concern and to communicate these to the negotiators, while at the same time, disseminating information to the business community. Texas Legislature passed a bill in 1991 that mandated cooperation between the state's academic and economic-development organizations resulting in formation of the Texas Consortium on Free Trade. NAFTA was made a priority on the policy agenda and major studies were designed to identify problems and opportunities, develop specific strategies to follow up with lobbying efforts in the nation's capital (Pavlakovich and Waits 1992).

Arizona was at first relatively slow in responding with a state-wide organized effort, although a number of organizations were dealing with NAFTA-related issues. In 1992, the First Summit of Free Trade Organizations was organized where the six existing organizations were selected to coordinate the efforts[27] and help design the state's free trade plan (Wright 1992). Soon, Arizona went a step further, and ahead of other border states. Utilizing its long economic and cultural ties with the neighboring state of Sonora[28], it was proposed that the two states develop a joint, bi-national, crossborder strategy for economic development in a free trade environment. Known as the »Strategic Economic Development Vision for Arizona-

Sonora Region« (SEDVASR), the project was launched in Spring 1994 involving researchers from the university consortia in Arizona (four institutions) and Sonora (six institutions) in close cooperation with binational advisory committees representing government and private sectors.

The main objective of SEDVASR is to »develop Arizona and Sonora as a single economic region with a comparative advantage in the global market« (SEDVASR 1994). It is focused on functional integration of the regional resources for the purpose of their potential contribution to the wider economy (Arizona-Sonora). It does not address existing regional inequalities nor specific needs of the most affected border counties and municipios[29]. Despite this limitation, SEDVASR represents an unprecedented attempt of developing the crossborder economic strategy in the United States-Mexico border, and is definitely ahead of the binational cooperation at the national (federal) level[30].

CONCLUSION

This paper reviewed major factors of global change and their affect on the U.S.-Mexico borderlands's transformation from a frontier region of conflict and local accommodation to a frontline of trade and international cooperation.

The Arizona-Sonora segment of the border between the United States and Mexico has been presented as an example of newest government-sponsored economic integration strategy aimed at enhancing the competitive position of both states as one economic region within the NAFTA framework. However, spatial-geographical implications of increased interdependency and integration are not yet clear.

The path described may well fit what Kenichi Ohame (1993) refers to as the emerging »region-state«. He argues that »the boundaries of the region state are not imposed by political fiat. They are drawn by the deft but invisible hand of the global market for goods and services. They follow, rather than precede, real flows of human activity, creating nothing new but ratifying existing patterns manifest in countless individual decisions«.

In conclusion, restatement of what Alan Sweedler recently summarized so well is appropriate (1994:12):

> »It is hoped that by conducting comparative border studies, policy makers and analysts in different border areas throughout the world may be able to adopt relevant experiences from one region to another. Moreover, by studying emerging cross-border linkages, insight may be gained into the growing role that border and peripheral regions play in the evolution of foreign policy«.

ENDNOTES

1. The term »production sharing« was coined in 1970s to describe the relocation of laborintensive production operations from the mature industrial regions to less developed countries with abundant supoly of cheap labor. Global production sharing is associated with multinational companies and free trade zones. See Grunwald and Flamm (1985) and Henderson and Castells (1987).

2. This portion is based on Worden, M. et al. 1992.

3. The combined total population of the United States and Mexico was 338 million in 1990; the ten border states accounted for 16.7 %.

4. According to U.S. Census definition, persons of Hisapnic origin can be of any race. Out of more than 22 million Hispanics in U.S. in 1990, 60 percent were of Mexican origin, 12 percent of Puerto Rican, 5 percent of Cuban, and 23 percent of »other« origin. In the border states, 82 percent of all Hispanics were of Mexican origin (U.S. Bureau of Census 1993).

5. Combined population of more than 100,000.

6. The Sunbelt states include the four border states plus Louisiana, Mississippi, Alabama, Georgia, Florida, and the two Carolinas.

7. Currently at 17 percent nationally.

8. Terms *maquila* (for industry) and *maquiladora* (for a plant) are used specificaly in Mexico for assembly plants of foreign components that are reexported to parent companies in industrialized countries. Majority of Mexico's maquiladoras are owned by U.S. companies, smaller number by Japanese and European companies. Maquiladoras are concentrated in four major sectors accounting together for more than 70 percent of total maquila employment in Mexico: electronic products (24 percent), transportation equipment (22 percent), electrical machinery (16 percent) and apparel and textiles (10 percent). Source: Shaiken (1990).

9. Under the Bracero Program Mexican workers were allowed to work temporarily in U.S. agriculture, mainly in border states.

10. Based on data for Nogales and Agua Prieta in Sonora. Source: INEGI.

11. The minimum wages in Mexico, including those paid in the maquila industry, are being determined by the Mexican government. Keeping wages low is part of the government plan to fight inflation. Its centerpiece during last seven years has been the government-business-labor pact – »pacto social«. Recently, the pact has been renewed to control prices and wages during the coming year.

12. For example, out of the total maquila employees in Sonora in 1992, 80 percent were production workers, 14 percent technicians, and the remaining 6 percent fell into the administrative category (INEGI 1993).

13. Patricia Wilson (1991) analyzed the differences between Mexico and the Asia's newly industrialized countries (NIC) – Taiwan, South Korea, Hong Kong and Singapore – that in the sixties accepted the assembly industry as an economic development alternative, and were able to use it as the basis for developing world competitive manufacturing with strong linkages to local industry. She found that a combination of public policy, the social and political context and the historical period were responsible for Mexico's inability to reach similar status.

14. California is an exception; about 90 percent of all maquiladoras in Baja California Norte are related to the California-based parent companies.

15. However, it is not without saying that some companies actually relocated (including the headquarters) to the border states in order to capitalize on the closeness to the maquiladoras across the border. Closeness to Mexico has been a strong argument in the state's economic policies designed to attract new businesses.

16. Note, that this does not necessary mean that all products were manufactured in Arizona, but to a great extent these products originated in other regions, and were shipped to Mexico through Arizona.

17. Source: Worden et al. (1992).

18. Approximately 24 percent of U.S. exports to Mexico and 45 percent of Mexico's exports to the United States were related to the maquila industry.

19. Shortage of housing and lack of quality drinking water combined with inadequate sewer facilities plague the Mexican border cities. Surveys have repeatedly shown that large num-

ber of the maquila workers live in squatter neighborhoods with no running water, no sewer and no electricity.

20. See for example, Lucking (1988) regarding the Arizona's border counties.

21. Especially drastic impacts on the U.S. border retail were caused by the 1982 devaluation of peso.

22. Survey in Nogales, Sonora, 1991.

23. At the time of the signing of NAFTA, import tariffs between the Unites States and Mexico were already very low; on average 10 percent on imports from Mexico, and between 10 and 20 percent on imports from U.S. As shown earlier, large portion of trade between U.S. and Mexico occurs under the maquila program, which is duty-free. Therefore, the removal of quotas and other restrictions will have a more profund impact (USITC 1992).

24. In U.S., the alliance between labor unions and environmental groups were formed, although their agenda were different. Some analysts argue that it was labor unions' last resort to adhere to protectionism. However, this eventually led to two side agreements amended to NAFTA, on environment and labor issues.

25. Shaiken's (1990) work in Mexico has shown support for those analysts who argue that Mexico is capable of successfully operating advanced production processes. »As developing economies narrow or even eliminate the productivity and quality gap with industrial economies, low wages translate into low unit costs and make high-tech industry increasingly attractive.« Similarly, in a recent survey of global economy, The Economist (1994) argues that »it is an oversimplification to think that developing countries will make only low-tech, labor-intensive goods while industrial countries keep the high-tech production ... Nor will relocation be limited to manufacturing.«

26. However, the highest rates of growth in exports during 1987–92 were found in Illinois (384 percent), Pennsylvania (310 percent) and Florida (203 percent). Source: Hansen (1994).

27. One of them was the newly created Arizona University Consortium of the three state universities and a private graduate school of international management.

28. Instrumental in this process was the Arizona-Mexico Commission and its counterpart organization, Sonora-Arizona Comision. In existence for more than thirty years, the Commission has been facilitating and promoting people-to-people and business-to-business contacts between Sonorans and Arizonans. The Commission is organized in several committees (industry, education, agriculture, etc.) with members from private business, government and academia.

29. See for example Pavlakovich, V.K. »Regional Inequalities, Border Infrastructure and Economic Integration: Policy Implications for the Arizona-Sonora Border«, presented at Seminario: La Investigacion acerca de la Region Sonora-Arizona: Estado Actual y Perspectivas. Nogales, Sonora, July 10, 1994.

30. Assessment by the Arizona Congressmen Jim Kolbe, at the Plenary Session of the Arizona-Mexico Commission, in Tucson, October 13–15, 1994.

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SAŽETAK

Američko-meksička pogranična regija: »Gdje se Sjever sastaje s Jugom« ili »Brak iz računa«

Vera Koči-Pavlaković

Podnaslov ovog članka je kombinacija naslova dviju nedavno objavljenih knjiga (Lawrence Herzog, 1990; Sidney Weintraub, 1990) koji sažimlju glavne procese u formiranju suvremene pogranične regije između Sjedinjenih Američkih Država i Meksika. Prvi aludira na izrazite regionalne razlike u stupnju ekonomskog razvoja između razvijenog »Sjevera« i nedovoljno razvijenog »Juga«, dok drugi ukazuje na nužnost prekogranične kooperacije u uvjetima globalne ekonomije.

Kroz relativno duže razdoblje, ova pogranična regija se nalazila u izolaciji u odnosu na matična središta političke i gospodarske moći, što je u uvjetima organičenih gospodarskih izvora, povećavajućih razlika u gospodarskom blagostanju te, uglavnom, hladnih međunarodnih odnosa između vlada u Washingtonu i Mexico City, potaklo razvoj specifičnih prekograničnih veza. Sredinom šezdesetih godina Meksiko se pridružuje nizu nedovoljno razvijenih zemalja »Trećeg svijeta« koje otvaraju vrata stranom kapitalu za osnivanje pogona za sastavljanje uvoznih komponenata za strano tržište, kao jednoj od alternativa gospodarske politike. Poznata pod nazivom *industria maquiladora* u Meksiku, to je prvi u nizu faktora koji uvjetuju bitne promjene u geografsko-ekonomskoj strukturi regije kao rezultat uključivanja u globalnu ekonomiju. Nedavno potpisani ugovor o slobodnoj trgovini između Sjedinjenih Američkih Država, Meksika i Kanade (The North American Free Trade Agreement ili NAFTA), iako u velikoj mjeri sankcionira već postojeću trgovinsku praksu, predstavlja novi element u geografsko-ekonomskom razvoju regije.

U prvom dijelu članak analizira demografske karakteristike pogranične regije, definirane u smislu četiri države na američkoj strani (California, Arizona, New Mexico i Texas) i šest država na meksičkoj strani (Baja California Norte, Sonora, Chihuahua, Coahuila, Nuevo Leon i Tamaulipas) uz 3 200 km dugu međunarodnu granicu. Od ukupno 65 miliona stanovnika u pograničnoj regiji, oko 80 posto se nalazi na američkoj strani granice. Nešto više od četvrtine stanovništva u američkim pograničnim državama porijeklom je iz Meksika i drugih latinsko američkih zemalja, dok se taj postotak povećava neposredno uz granicu od 22 posto u pograničnim općinama Kalifornije, preko 29 posto u Arizoni i 55 posto u Novom Meksiku, do 79 posto u Teksasu.

Pogranični gradovi »blizanci«, od kojih devet ima više od 100 000 stanovnika – San Diego-/Tijuana, Calexico/Mexicali, San Luis/San Luis Rio Colorado, Nogales/Nogales, El Paso/Ciudad Juarez, Eagle Pas/Piedras Negras, Laredo/Nuevo Laredo, McAllen/Reynosa i Brownsville-/Matamoros – predstavljaju asimetrične konglomeracije s izrazitom većinom stanovništva na meksičkoj strani (s izuzetkom San Diego/Tijuana područja). Eksplozivan rast stanovništva meksičkih gradova u zadnjih tridesetak godina povezan je djelomično s industrijalizacijom pogranične regije, dok mogućnost migriranja u SAD ostaje važan faktor privlačnosti za radnu snagu iz unutrašnjosti, pogotovo nakon gospodarske krize početkom osamdesetih godina.

U drugom dijelu članak razmatra geografsko-ekonomske posljedice *maquila* programa kojeg je meksička vlada uvela sredinom šezdesetih godina s ciljem povećanja zaposlenosti u sjevernoj pograničnoj regiji. Niske nadnice u kombinaciji s devaloriziranom meksičkom valutom i blizina SAD ističu se kao glavni faktori ekspanzije maquila industrije nakon 1980. Iako je program prerastao iz regionalnog plana u osnovnu strategiju nacionalnog gospodarskog razvoja, oko 80 posto od 2 150 pogona sa 600 000 radnika (1993) za preradu uvezenih komponenata za strana tržišta ostaje koncentrirano u uskoj pograničnoj zoni.

Maquila industrija je znatno pridonijela promjenama pograničnog urbanog krajolika; ne samo da su industrijske zone postale novi element u urbanoj strukturi, i da je prekogranični promet povećan, nego je bitno narušen već postojeći nesrazmjer između rastućeg stanovništva i postojećeg stambenog fonda te ostale infrastrukture u pograničnim gradovima. Pretežno niske nadnice nisu u mogućnosti podići opći standard zaposlenog stanovništva, dok slaba povezanost s lokalnom gospodarskom bazom ima ograničen utjecaj na razvoj dodatnih gospodarskih aktivnosti. Pogranični gradovi na američkoj strani zabilježili su porast aktivnosti i usluga u vezi s maquila industrijom južno od granice, iako i dalje ostaju u velikoj mjeri ovisni o kupovinskoj moći meksičkih potrošača.

Usprkos ekonomskim, političkim i kulturnim razlikama, pogranični gradovi prerastaju u jedinstvene transgranične urbane sisteme koji djeluju kao funkcionalne prostorne cjeline u kojima domaćinstva, privatna poduzeća i lokalni organi uprave uspostavljaju veze neovisno od međunarodne granice.

Članak završava s osvrtom na povijesno jedinstveni pothvat između dviju pograničnih država – Arizone i Sonore – u kojem se pokušavaju uskladiti ciljevi ekonomskog razvoja u okviru sporazuma o slobodnoj trgovini, a pod pritiskom povećane konkurencije na svjetskom tržištu.

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