Chapter 3

Comparative Integration Patterns: Transatlantic Lessons

Raúl Hinojosa-Ojeda*

How should one understand the process of economic integration and its asymmetrical effects on developed and developing countries? What lessons do policy experiences from around the world teach about the best mechanisms for distributing the benefits of regional integration among and within countries? Most importantly, which strategies can create more optimal patterns of economic integration and institutional development to promote rapid growth and a symmetrical upward convergence of income and productivity levels in both rich and poor lands? This chapter explores these questions in the context of the North American Free Trade Agreement (NAFTA) in light of experiences of the European Union (EU).

The historical results of these two integration experiences represent perhaps the world's most extreme examples of regional economic convergence/divergence and related differences in approaches to regional policies and adjustment investments. Their lessons are central to today's polarized debate over globalization, which unfortunately is dominated by those who either defend or attack it blindly.

This author aims to re-focus discussion on the economic, political, and institutional dynamics needed to achieve what both sides in this debate claim is their goal: a pattern of global economic relations that produces higher living standards and reduces inequalities among and within world regions.

* The author wishes to thank Nicholas Navarro for his excellent research assistance.
Global Perspective on North American Integration

In a comparative context, NAFTA is not the best example of globalization. Indeed, the North American experience is inferior to recent global experiences in trade openness with persistent inequality and poverty and other major patterns of regional integration—most importantly that of the EU. The fundamental question is this: why has North American integration resulted in persistently stark income inequalities, while other patterns of regional integration have produced a rapid, upward convergence of income levels? Crucial to the U.S. policy debate are the factors that explain the current North American dynamics; whether NAFTA alone can fundamentally change these dynamics; and, if not, what other policy choices must be made to shift toward a pattern of integration. From a global perspective, what conditions are required for regional integration and globalization generally to generate integration with income convergence?

Accelerated North American integration is occurring within the context of a rapid rise in trade between developed and developing countries worldwide and specifically within major regions of the world economy: Europe, Asia, and the Americas. While integration is occurring rapidly in all regions, income gaps in North America remain wide compared to income convergence in both Europe and Asia. As global trade has grown, it has also become more concentrated in these major regions.

Despite similar trends toward concentrated intra-regional trade, rates of per-capita income growth between countries have differed within these major world regions; in NAFTA and the Western Hemisphere zone, regional income gaps have widened, while incomes in the EU and Asia have converged. Most interesting has been the relative position of Mexico and the U.S., compared to developing and developed countries in East Asia and Europe. Forty years ago, Mexico's per-capita GDP was similar to that of Spain and higher than that of South Korea; since then, both Spain and South Korea have progressed significantly relative to Mexico, particularly in comparison with U.S. income levels. Finally, while the relative income gaps in East Asia and Europe have converged toward increasingly higher income levels over the past 40 years, North American gaps have remained virtually the same (figures 3–1 and 3–2).
Another key global and regional trend is the relationship between trade openness and poverty reduction. Recent World Bank studies indicate that, in general, increased global trade has resulted in a reduction in absolute and relative poverty levels for the world overall. This relationship is particularly significant as an average result for so-called "globalizer" countries (Dollar and Collier 2001). On closer inspection, however, this statistical significance applies better to Asian and European globalizers than to Latin America and the Caribbean (LAC) (Garrett 2004). Mexico, in fact, stands out as a major exception, even among LAC experience with poverty increasing over the last 15 years (Székely 2001). Contrary to global average correlations, Mexico's recent experience with trade and capital openness has also been correlated with increasing income inequality (Behrman, Székely, and Birdsell 2001).

Trade expansion between rich and poor countries can be correlated with relatively different development experiences, a key issue typically ig-
Figure 3.2. Regional PPP Convergence Indices, 1975–2001*

* 1975 = 100 (base year), except for Eastern Europe, where 1992 = 100.
Note: NAFTA, EU, and Gang of Four (Hong Kong, Singapore, South Korea, and Taiwan) convergence indices are calculated in reference to leading economies (U.S., Germany, France average, and Japan).
Source: World Development Indicators, World Bank.

neglected in the U.S. debates on NAFTA and globalization. The main concern for North America and the U.S., which should have been the major focus of the NAFTA debate, is to explore the particular factors, parameters, and dynamics behind North America's persistent pattern of uneven development.

Parameters include relative factor endowments (labor and capital), goods and factor mobility (capital goods and labor), and relative regional inequalities of income and wealth. Also important is the role of investment in public goods, measured as government share of GDP and region/transnational transfers from international institutions, corporations, and individuals. What stands out, but were often ignored during the NAFTA debate, are: 1) absence of regional transnational macro-stabilization or de-
velopment funds; and 2) the role of migration and remittances flows, compared to trade and capital flows (both have the potential to play a critical role in the evolution of income gaps in low-wage labor markets on both sides of the border).

**Mexico and Spain: comparing integration strategies**

Comparing Spain's regional experience in the context of EU integration with Mexico's experience in the NAFTA region is particularly interesting, given the two countries' similar profiles only 40 years ago. At that time, Spain and Mexico had similar levels of per-capita income, high levels of out-migration, relatively closed economies, and politically authoritarian States with minimal levels of social expenditure. Both countries were large net exporters of workers to wealthier regional neighbors related to lower regional per-capita income (figures 3–3 and 3–4). However, the experiences of the two countries have differed in terms of per-capita income

**Figure 3.3. Spain: Comparing Long- and Short-term Emigration, 1962–1994**

![Diagram showing long-term and short-term emigration](image)

relative to their richer regional partners (figure 3–5). One major difference, as economic migration theories would predict, is that Spain's out-migration fell rapidly as income gaps in Europe narrowed, while migration from Mexico and the U.S. grew as their income gaps remained highly unequal.

Key differences in European and North American experiences include the relationship between trade/investment openness, macroeconomic stability, and public expenditures. Asia, the EU, and Spain moved toward greater trade openness years before NAFTA, the Western Hemisphere, and Mexico (figures 3–6 and 3–7). Although causality and its direction cannot be established from the graph,\(^1\) 1950–98 data for Spain show a general correspondence between trade openness and per-capita GDP growth. Generally, both have increased greatly, although faster at certain periods. Spain's peak period of trade openness (1981–86) coincides with its preparing to become a full member of the EU. In Mexico during the second half of the

---

\(^1\) One must also consider time lags and whether trade liberalization policies caused or resulted from economic changes.
Figure 3.5. Per-capita GDP for Selected Countries, 1950-1998*

* In 1990 US$.  
Source: World Development Indicators, World Bank.

Figure 3.6. Regional Trade Openness, as a Percent of GDP, 1960–2000

Source: World Development Indicators, World Bank.
20th century, trade openness played a far different role. While per-capita GDP grew at a slow and steady rate overall, trade openness was fairly high in 1950, declined from the late 1950s until the mid-1970s, and did not reach its 1950 level again until the late 1980s. This pendulum swing toward openness with NAFTA apparently does not correspond to any such movement in Mexican per-capita GDP, owing partly to Mexico’s ongoing macroeconomic instability.

Openness to foreign direct investment (FDI) has been important in all zones (figure 3–8), although the timing, relative dimensions, and effect differ in significant ways. Until the mid-1980s, Spain and Mexico had similar levels of total FDI, including similar shares of FDI to GDP, even though Spain has always had higher FDI per capita. With Spain’s entry into
the European Community (EC) in 1985, however, inflow of FDI exploded and peaked a few years later, only to be overtaken by an enormous outflow of FDI (much of it to Mexico and other LAC countries). Mexico experienced a similar inflow of FDI with the announcement of NAFTA negotiations only a few years after Spain joined the EC, although the effects on relative macroeconomic stability and regional income convergence have differed greatly.

In the 1950s, Mexico's growth rates were as stable as those of Spain, and their stability increased from the mid-1950s to the mid-1970s (figure 3–9). Since then, however, Mexican instability grew, clearly illustrating the macroeconomic difficulties of the early 1980s and peso-crisis effect of the mid- and late 1990s. By comparison, Spain in the early 1950s to mid-1960s was characterized by highly variable growth rates. By the 1970s, when Spain entered the European Monetary Union (EMU), and particularly during the 1990s with full EU membership, the country's growth rates stabilized, varying only slightly when averaged over five-year periods.
With regard to government expenditures as a percentage of GDP, Spain’s first period of rapid and sustained per-capita GDP growth in the early 1960s throughout the oil crises of the 1970s coincides with a decline in its government’s share of GDP. However, its second period of rapid per-capita GDP growth in the early 1980s through the early 1990s coincides strongly with an increased share of government taxation and expenditure in the national economy (particularly education and social welfare expenditures). This period coincides with the harmonization of Spanish fiscal policies with EU norms to qualify for single currency membership.

Mexico’s relatively lower, yet steady rise in government expenditures as a percentage of total GDP between 1950 and the mid-1980s coincides with its higher growth of per-capita GDP. Since this period, however, government expenditures as a share of GDP declined, while per-capita GDP growth stagnated. Although Mexico is the LAC region’s second largest economy, it currently has one of the region’s lowest tax collection rates, at about 10.5 percent of GDP (figure 3–10).
Comparative role of labor migration

A significant difference between the North American and European experiences is the role of migration, and increasingly, the role of remittances. As the New Economics of Labor Migration (NELM) has documented (Stark and Bloom [1985] and Taylor [1999]), the role of migration and remittances is critical to understanding the dynamics and potential options of positive or negative cumulative causation across linked low-wage sectors of the labor market, just as FDI movement is crucial to understanding the potential dynamics in industrial trade relations. European migration and remittance flows were complementary to North and South growth. Kindelberger (1967) pointed out how labor surplus in the South helped to
meet the North's labor market needs, providing remittances for investment in the South.

Critical differences between the Spanish and Mexican cases involve mobilization of private and public resources for development in immigrant sending areas. Spain's expansion of a well-developed financial sector for intermediation of remittances was critical in complementing availability of regional development funds. (It should be noted that most European development funds focus on immigrant sending regions and that migration declines precipitously as structural funds begin to flow—a concrete signal to support a change in potential migrants' expectations that remaining in a region has a future.) NELM suggests that migration is a function of relative wages, as well as a response to imperfect capital markets and reduced risk. The European example makes the case that addressing these issues can have a significant effect.

Like postwar Europe, North America exhibits key demographic and migration/remittances complementarities (Hinojosa-Ojeda et al. 2001; Fishlow, Robinson, and Hinojosa-Ojeda 1991). Labor market interdependence (LMI), via migration between the U.S. and Mexico, far outweighs the linkages between labor markets via trade and investment flows. Transnational migration stock now represents 20 percent of the Mexican and 10 percent of the U.S. labor markets. In contrast to Europe, where migration was an organized and orderly policy, North American migration has become embedded as an extralegal socioeconomic dynamic that benefits the more politically powerful interests on both sides of the border. Rather than maximizing the benefits of migration and remittances for both countries, the current LMI pattern reproduces the conditions of low pay/low productivity sectoral dynamics on both sides of the border.

On the U.S. demand side, undocumented status lowers relative real wage/human capital levels in low-wage labor markets, providing a subsidy to U.S. employers and thus increasing their demand for more undocumented labor. The high costs of remittance transfer, related to lack of an efficient financial sector between the U.S. and Mexico, makes it difficult to translate remittance funds to any activity other than dependency developing consumption in immigrant sending areas and the fi-
nancing of more out-migration. On the Mexican supply side, agricultural policies and an inefficient financial system have resulted in large-scale undercapitalization of the rural sector and extremely low levels of human capital investment, generating the persistence of poverty-exacerbated, high-population growth pressures, which outstrip employment-generating capacities.

Transatlantic counterfactual experiments

Much discussion has centered on the role of the EU Structural Funds in explaining the differences between European and North American experiences and Spain’s performance relative to that of Mexico. Over the 1989–99 decade, efforts through the EU Structural Funds and Cohesion Funds totaled about 6.5 percent of Union GNP (Mairate and Hall 2001). By contrast, under the Marshall Plan (1948–51), the United States granted 1 percent of GNP each year (representing some 2 percent of the recipient countries’ annual GNP) or 4 percent over the period (De Long and Eichengreen 1992). Since joining the EU, these funds are estimated to have contributed 2 percent to Spain’s annual GDP growth, providing a basis for stable macroeconomic performance and investment funds for trade adjustment and new activities in lagging regions.

Counterfactual exercises have estimated the effects of similar structural funds for NAFTA, Central America Free Trade Agreement (CAFTA), and Free Trade Area of the Americas (FTAA). Such experiments have been used to propose more modest versions of this policy approach in the case of NAFTA (Fishlow, Robinson, and Hinojosa-Ojeda 1991). Table 3–1 presents the results using a formula derived for expenditures of EU Structural Funds, EU Enlargement Funds, and EU-Maghreb. These formulas are then applied to NAFTA, CAFTA, and FTAA. In the case of NAFTA, it is estimated that, if Mexico were admitted to the EU under the same policy rules that applied to Spain, it would be entitled to nearly $100 billion per year in

These include the European Regional Development Funds, European Social Fund, European Investment Bank, and Cohesion Funds related to the move toward the single currency.
direct public investment transfers. Under these circumstances, it is estimated (using a dynamic computable general equilibrium [CGE] model) that the relative income gaps in North America would experience similar rates of intra-EU income convergence within a decade (Hinojosa-Ojeda and Robinson 1992; Hinojosa-Ojeda 2003).

The globalization debate can learn much from the opposing regional integration experiences of Europe and North America. Trade and capital liberalization between rich and poor countries in itself can be correlated with relatively different development experiences.

**NAFTA Debates and Effects**

The conceptual and policy challenges of North American integration require an analytical framework that simultaneously analyzes trade, foreign investment, migration, and remittances. This framework must also account for two vital dynamics that are only now beginning to be understood theoretically and empirically: 1) dynamics that produce accelerated productiv-

---

3 Unlike the North American Development Bank, EU Structural Funds are not loans but direct transnational fiscal transfers.
ity growth (e.g., through economies of scale, innovation, or agglomeration); and 2) political and institutional dynamics across borders that engender complementary strategies by social actors (e.g., through improved international conditions for long-term capital investment, distribution of gains to workers, and a new vision for the State's international role in providing social investment, appropriate safety nets, and enhanced investment in innovation and lagging regions).

NAFTA appears to have only slightly accelerated both the positive and negative dynamics of cumulative causation. This author argues that the critical issues for U.S. policymakers should have been—and continue to be—factors and policies that can transform the pattern of North American integration toward greater growth, development, and income convergence on both sides of the border. The ongoing fundamental issue involves factors driving alternative paths of cumulative evolution in 1) investment-production-trade dynamics; and 2) employment-wages-migration-remittance dynamics. Together, these are the major drivers of regional income convergence and divergence.

While patterns of positive cumulative causation are clearly evident in sectors throughout North America, these dynamics are not necessarily sustainable (in terms of incentives for innovation and future productivity growth) or expanding rapidly enough to be a major source of employment absorption, particularly in Mexico. The dynamics of negative cumulative causation linked across national economies continue to drag on low-wage labor markets, reducing incentives for productivity-enhancing investments in low-wage sectors, as well as the entire regional economy. This author's analysis points to the need for major policy development efforts directed at both the investment-production-trade dynamics and employment-wages-migration-remittance dynamics.

**Review of NAID findings**

The author's review of the North American Integration and Development (NAID) Center's report on NAFTA's effects includes five major findings (Hinojosa-Ojeda et al. 2000).
1. The overall pattern of U.S.-Mexico trade and investment began to change radically nearly a decade before NAFTA, with Mexico's unilateral trade liberalization. This ushered in dramatic growth in the two-way trade of manufactured intermediate goods; this growth has continued and matured since NAFTA's implementation.

The most significant change in U.S.-Mexico trade relations over the past few decades has been an explosion of exports and imports since the late 1980s, driven almost entirely by an expansion of Mexican manufactured exports based on processing imported intermediate inputs. As a result, a large proportion of Mexican imports have become predominantly linked to the demand for Mexican exports rather than to fluctuations in Mexican domestic demand. This new import-export dynamic has grown even faster than the rapid expansion of Mexico's cross-border assembly plants (maquiladoras), as the export-manufacturing strategy is adopted by many other Mexican regions, sectors, and types of firms. The period following NAFTA implementation has witnessed a continuation, maturation, and even slight deceleration of this previously initiated shift.

2. Lowering of tariffs through NAFTA has not significantly affected growth of Mexican exports to the United States; in fact, exports to the U.S. have grown faster in those sectors not directly liberalized by NAFTA.

U.S. imports from Mexico grew an average of 6.3 percent annually in the three years before NAFTA and an average of 20 percent in the years following implementation. While the effect of NAFTA's tariff liberalization on the level of trade appears positive and statistically significant, such liberalization by itself can only statistically explain a small portion of these changes. A larger effect on trade levels and patterns should be attributed to the collapse and recovery of Mexican growth related to the peso crisis and the ongoing binational industrial integration.

In fact, analysis of the U.S.-Mexico trade pattern since NAFTA indicates that U.S. imports in commodities liberalized by NAFTA rose slower
than those commodities not affected by NAFTA liberalization. This finding corroborates the earlier findings of this author (Hinojosa-Ojeda et al. 1996). In addition, it is unlikely that NAFTA—or any other tariff liberalization—determined the evolving structure of trade significantly; rather, other causes were responsible.

3. Jobs put at risk annually from imports number about 37,000 because of Mexican imports and 57,000 owing to Canadian imports. (The NAID report derived these figures using a partial equilibrium method to estimate North American trade's direct and indirect effects on U.S. employment since NAFTA implementation.)

The NAID Center developed an alternative method for tracking the potential employment effects of trade, using partial-equilibrium, constant elasticity of substitution (CES) aggregation functions at a four-digit SIC sectoral level to estimate U.S. domestic demand for domestic production, given a particular import level. These production estimates are then translated into domestic labor requirements using direct and indirect input-output labor coefficients. Using the econometrically estimated Armington elasticities, these functions attempt to account for complementarity in production between the United States and a given country in a particular sector.

This model's usefulness lies in isolating the import's effect and showing that—even in the most exaggerated scenario with fixed demand and productivity—the potential effect on jobs is relatively small. Estimated totals across sectors are small. During 1990–97, Mexican and Canadian imports' total estimated effects on potential U.S. jobs were 299,000 and 458,000, respectively; that is, an average of 37,000 jobs per year resulting from Mexican trade and 57,000 per year stemming from Canadian trade. Considering that the U.S. economy creates more than 200,000 jobs monthly

---

4 These import commodities were liberalized before NAFTA, by other means, or are not yet liberalized.

5 Because these are partial equilibrium estimates, one has no theoretical basis on which to add them or interpret the magnitude of the sum. Certainly, however, the sum is an overestimate of the true general equilibrium effect.
and separates about 400,000 workers from their jobs per month, the relatively small share of potential job effects from this trade is apparent.

Applying more realistic productivity and demand changes experienced since NAFTA significantly reduces potential U.S. job effects caused by imports.

4. The NAFTA-Trade Adjustment Assistance (TAA) program is a relatively better indicator of estimating employment losses owing to plants moving to Mexico; however, it is less reliable as an indicator of employment losses resulting from import penetration.

Through early July 1999, the U.S. Department of Labor had certified 238,051 NAFTA-TAA workers, an average of 3,662 per month. Workers certified owing to trade effects were 46,826 (700 per month) for Mexico and 23,250 (350 per month) for Canada. Remaining certified workers were from unspecified causes or those not directly linked to Mexico or Canada.

The NAID-Armington estimate of potential trade effects is 75–90 percent higher than the NAFTA-TAA numbers. Even conceding a high estimate and the shifting of import results from certain certified plants back to the United States, it is likely that NAFTA-TAA is undercounting trade effects.

5. Estimates of trade-related employment effects have a limited but important role to play in the public discussion of trade.

In general, jobs gain/loss accounting methods should not be used to evaluate the relative benefits of trade. Changes in aggregate demand created by a changing trade balance or trade policy are likely to be counteracted by general macroeconomic policy; thus, trade policy changes are unlikely to affect overall employment significantly over the short term or at all over the longer term. A more significant measure of trade policy is the effect on economies of scale, technological change, new investments, productivity growth in liberalized sectors, and the economy's overall ability to reap benefits from these productivity increases.
However, the trade and employment-effect methods presented here should be central to an understanding of the adjustment costs of trade effects. Accurately identifying employment displacement risks is important in helping workers and communities to take adequate steps to prepare for a positive adjustment. Failure to identify and address adjustment risk inevitably generates exaggerated political opposition to trade liberalization (in certain cases, this opposition is based on ignorance and fear; while in others, it is a legitimate defense of uncompensated individual costs incurred on behalf of overall societal welfare).

**Empirical analyses of cumulative causation**

To consider the extent of cumulative causation—positive or negative—in the process of North American integration, this author used a specially constructed database that included: 1) macro data at the economy-wide level; 2) 11 subsectors (based on U.S. definitions of end-use categories); and 3) a detailed 39-subsector analysis (constructed at the most disaggregated level of concordance between published data in the three NAFTA countries).

Both before and after NAFTA, elements of an integration process with positive cumulative causation (PCC) and negative cumulative causation (NCC) had been operating across parts of the U.S., Canada, and Mexico. U.S.-Mexico economic integration exhibited a similar PCC dynamic, beginning with Mexico’s unilateral opening in the mid-1980s, while U.S.-Canada integration had begun a decade earlier. In all three countries, a common cluster of industrial subsectors is undergoing a rapid process of transnational industrial restructuring; as a result, all three countries are experiencing higher trade growth, employment, and productivity and wages in sectors linked across borders. The dynamics are led by high FDI growth, associated with expanded trade of intermediate goods to facilitate the transnational coproduction of final goods exported throughout North America and the world.

In light of the exaggerated expectations that the NAFTA debate generated on both sides of the issue, an important finding from the ongoing
tracking of North American integration is the lack of a fundamental shift in pre- and post-NAFTA patterns of trade, investment, and production. North America had already begun a dramatic transformation in trade relations in the mid-1980s, about a decade before NAFTA became operational. Years before NAFTA was contemplated, Mexico had opened to international trade and investment, ushering in a period of rapid trade growth, large trade and current account deficits, and large capital inflows. Thus, the period surrounding NAFTA implementation has been characterized by rapid acceleration of previously initiated trends, their maturation, and more recent deceleration.

FDI began to grow at about the same time NAFTA negotiations started, and that growth accelerated post-NAFTA. Yet, this FDI level represented a declining share of both U.S. and Mexican GDP. Foreign investment, more broadly defined to include speculative portfolio investments and loans, contributed to the overheating of the stock market in 1993–94. Thus, while NAFTA may have created the unrealistic expectations that led to Mexico’s dramatic crash, it may also have contributed to the country’s ability to mount its most rapid macroeconomic recovery (via exports and FDI), indicating NAFTA’s significant “policy-fix” power.

In general, however, NAFTA did not significantly alter preexisting differences in the macroeconomic and sector performances of Mexico and the United States, either before or after NAFTA’s 1994 inception. For the Mexican economy, the pre- and post-NAFTA period was an export boom (growth of net imports and capital inflow), characterized by modest employment growth, relatively flat productivity growth, and declining real wages; the result was a net improvement in per-unit labor cost and Mexico’s relative global competitiveness position. The correlation between Mexican productivity and wage growth, though weaker than expected, is still greater than that of the U.S. Similarly, rapid technological progress tends even more strongly to lead to employment losses in Mexico. In contrast to the United States, however, one can observe a distinct negative relationship between wage and employment growth, implying that Mexico will have difficulty moving beyond its role as a low-wage complement to U.S. industry while employing its rapidly growing labor force.
The U.S. economy post-NAFTA outperformed Mexico and Canada in terms of output, real wages, and even employment and productivity. Meanwhile, sectors in which U.S. exports to Mexico and Canada grew had strong employment performance. In more than 66 percent of the sectors in which U.S. imports from Mexico grew, U.S. employment also increased. At the same time, the positive correlation between productivity and wage growth before and after NAFTA is weak. While the relationship between productivity and wages is more likely to hold over the long term, the positive relationship appears extremely weak even if one observes the entire 1988–2000 period. There is no observable correlation between wage and employment growth; rather, there is a moderate negative correlation between productivity and employment growth. That is, the strongest relationship between these three variables is that rapid technological progress in a sector tends to lead to reduced employment levels.

Patterns of positive cumulative causation

A 39-sector database (with 25 traded sectors) was analyzed for evidence of strong or moderate PCC. One should note that, if the five key variables—output, employment, productivity, wages, and trade—were unrelated, then statistically there should be only one or two instances in which all variables grew faster than average. Instead, four strong PCC sectors have most variables at or above the average annual growth rate.6 For a second group of sectors, growth of these variables was mostly positive, although not necessarily greater than average for the economy. This group of sectors exhibits moderate PCC. (While all three countries share many PCC dynamics, this chapter focuses on the import-export dynamics between Mexico and the U.S. since much of the U.S. NAFTA discussion concerns trade with Mexico.)

Table 3–2 shows clearly observable PCC in certain key sectors of the U.S. economy. However, additional elements beyond the above variables are particularly relevant to the NAFTA debate. It should be no sur-

---

6 The average growth rate of employment used is that of industrial employment. Over this period, the share of manufacturing employment continued to shrink relative to service sectors.
Table 3-2. Average Compound Growth (\%) of U.S. PCC Sectors, 1994–2000

<table>
<thead>
<tr>
<th>PCC sector</th>
<th>Output</th>
<th>Employment</th>
<th>Productivity</th>
<th>Wages</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Average*</td>
<td>5.0</td>
<td>0.5</td>
<td>4.5</td>
<td>1.4</td>
<td>14.9</td>
<td>20.2</td>
</tr>
<tr>
<td>Electronic &amp; other electric equipment</td>
<td>21.3</td>
<td>1.6</td>
<td>19.3</td>
<td>3.8</td>
<td>16.7</td>
<td>21.1</td>
</tr>
<tr>
<td>Industrial machinery and equipment</td>
<td>13.6</td>
<td>1.3</td>
<td>12.1</td>
<td>2.4</td>
<td>14.4</td>
<td>29.0</td>
</tr>
<tr>
<td>Nonmetallic minerals (except fuels)</td>
<td>7.0</td>
<td>1.3</td>
<td>5.6</td>
<td>0.8</td>
<td>11.2</td>
<td>13.2</td>
</tr>
<tr>
<td>Rubber and miscellaneous plastic products</td>
<td>5.5</td>
<td>1.6</td>
<td>3.9</td>
<td>0.6</td>
<td>20.1</td>
<td>21.8</td>
</tr>
<tr>
<td>Farms</td>
<td>5.0</td>
<td>0.5</td>
<td>4.4</td>
<td>2.1</td>
<td>11.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Chemicals and allied products</td>
<td>4.9</td>
<td>-0.5</td>
<td>5.4</td>
<td>2.9</td>
<td>15.2</td>
<td>7.7</td>
</tr>
<tr>
<td>Motor vehicles and equipment</td>
<td>4.6</td>
<td>2.8</td>
<td>1.7</td>
<td>-1.2</td>
<td>15.5</td>
<td>23.9</td>
</tr>
<tr>
<td>Stone, clay, and glass products</td>
<td>4.5</td>
<td>1.6</td>
<td>2.8</td>
<td>1.0</td>
<td>16.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td>4.0</td>
<td>2.0</td>
<td>1.9</td>
<td>0.1</td>
<td>15.0</td>
<td>23.5</td>
</tr>
<tr>
<td>Miscellaneous manufaturing industries</td>
<td>3.8</td>
<td>0.5</td>
<td>3.3</td>
<td>1.7</td>
<td>8.9</td>
<td>10.6</td>
</tr>
</tbody>
</table>

*Average of the 25 traded sectors.

Note: The formula used to calculate the average compound growth rate is \( \text{Growth} = \left( \frac{Y_{2000}}{Y_{1993}} \right) ^ {\left( \frac{1}{7} \right)} - 1 \), where \( Y_{2000} \) = the value for the year 2000 and \( Y_{1993} \) = the value for the year 1993.

Source: North American Integration and Development (NAID) Center database.

prise that all leading PCC sectors are in the fastest-growing quarter of the 39 U.S. sectors. However, NAFTA’s opponents may find it surprising that most of the above-listed sectors also experienced faster-than-average import growth from Mexico. Hence, one observes positive cross-border linkages in the PCC sectors contributing to industrial development on both sides of the border. Equally illustrative of the potential for positive cross-border linkages is that, since 1994, leading U.S. PCC sectors have been responsible for more than 25 percent of all U.S. FDI in Mexico.7

7 While beyond the scope of this chapter, a similar analysis for Mexico highlights electronics as the only sector that meets the strict requirements for strong PCC, while industrial machinery, rubber, and
To summarize the clear, but limited, pattern of PCC since NAFTA, the agreement has led to production-sharing relationships across the Mexican border. Parts and components are fabricated in Mexico, integrated with knowledge-intensive U.S. components into U.S. designs, and marketed around the world. Thus, one observes output, employment, productivity, and wage gains in the very sectors that attract U.S. investment in Mexico and exhibit an expansion in two-way trade. While these PCC sectors account for nearly 43 percent of U.S. exports to Mexico, they employ just 4 percent of the total U.S. labor force. When one further considers the moderate PCC sectors, only 7 percent of U.S. employment and 11 percent of total output are accounted for.

**Patterns of negative cumulative causation**

Eight U.S. sectors display the spirit, if not the letter, of NCC. These sectors exhibit below-average growth in output, employment, wages, and productivity, with an absolute decline in at least one variable. All qualify in every respect except that wage growth rates for five of the eight are higher than the national average. One hypothesis to explain this pattern is that seniority-based raises in union contracts left layoffs as the only way to adjust the labor market in these sectors when demand slumped or productivity declined. However, these sectors are not highly unionized overall. Hence, a more likely explanation may be that management has elected to trim production workers, while retaining white-collar jobs. This could explain the decline in employment, while average wages climbed and productivity stagnated. For example, apparel and leather, the two sectors with the largest percentage of employment declines since NAFTA's inception, experienced increases in relative wages above the national averages (Table 3–3).

motor vehicles display moderate PCC. Hence, these four sectors show the potential for binational PCC. No other sectors in Mexico show even moderate PCC. Thus, one can postulate that PCC can be developed in Mexico through a “pull” effect from PCC in the U.S., and perhaps only in conjunction with U.S. PCC. An important question is whether U.S. PCC, both strong and weak, can successfully exist without corresponding sectors in Mexico. A further research step concerns the economic dynamics of Canadian sectors that exhibit PCC in the U.S.
Table 3–3. Average Compound Growth (%) of U.S. NCC Sectors, 1994–2000

<table>
<thead>
<tr>
<th>NCC sector</th>
<th>Output</th>
<th>Employment</th>
<th>Productivity</th>
<th>Wages</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Average*</td>
<td>5.0</td>
<td>0.5</td>
<td>4.5</td>
<td>1.4</td>
<td>14.9</td>
<td>20.2</td>
</tr>
<tr>
<td>Food and food-related products</td>
<td>0.4</td>
<td>0.2</td>
<td>0.3</td>
<td>0.8</td>
<td>8.6</td>
<td>16.4</td>
</tr>
<tr>
<td>Printing and publishing</td>
<td>−0.6</td>
<td>0.3</td>
<td>−0.9</td>
<td>1.7</td>
<td>10.7</td>
<td>22.1</td>
</tr>
<tr>
<td>Textile mill products</td>
<td>−1.0</td>
<td>−3.4</td>
<td>2.5</td>
<td>1.1</td>
<td>26.8</td>
<td>34.1</td>
</tr>
<tr>
<td>Other transport and instruments</td>
<td>−1.5</td>
<td>−1.1</td>
<td>−0.5</td>
<td>1.6</td>
<td>8.5</td>
<td>22.4</td>
</tr>
<tr>
<td>Paper and allied products</td>
<td>−2.7</td>
<td>−0.8</td>
<td>−2.0</td>
<td>0.7</td>
<td>12.4</td>
<td>22.8</td>
</tr>
<tr>
<td>Apparel and other textile products</td>
<td>−2.9</td>
<td>−6.1</td>
<td>3.4</td>
<td>2.1</td>
<td>13.5</td>
<td>22.6</td>
</tr>
<tr>
<td>Leather and leather products</td>
<td>−3.2</td>
<td>−7.1</td>
<td>4.2</td>
<td>2.8</td>
<td>24.8</td>
<td>23.2</td>
</tr>
<tr>
<td>Tobacco products</td>
<td>−5.6</td>
<td>−3.5</td>
<td>−2.2</td>
<td>3.0</td>
<td>−14.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*Average of the 25 traded sectors.
Source: North American Integration and Development (NAID) Center database.

In these NCC sectors, GDP and employment have experienced moderate to strong declines, in contrast to U.S. average growth rates of 5.0 and 0.5 percent, respectively. In a few sectors, imports from Mexico may have been a factor (Hinojosa-Ojeda et al., 2001); however, import growth across all NCC sectors was close to the economic average of 20.2 percent. In the food and tobacco sectors, imports grew slower than average; they grew fastest in the textiles sector, even though this sector did not experience the highest job loss. Also suggesting a lack of correspondence between imports and economic performance is that both the NCC and PCC sectors exhibited similar import growth. At the same time, export growth was not much below average, with the exception of textile mill and leather products. Furthermore, these NCC sectors contributed 22 percent of U.S. FDI in Mexico, less than the share drawn by the sectors showing PCC characteristics, despite representing a larger share of U.S. output and employment. Hence, the negative U.S. dynamic cannot be attributed to either a large surge in imports or an outflow of investment.
The dynamic becomes even more interesting if one considers such non-traded sectors as construction. Boosted by increasing demand in the U.S. economy and a ready supply of low-wage immigrant labor, the construction sector expanded 4.5 percent per year—slightly exceeding the average growth rate of the U.S. economy, despite falling productivity. The boom in employment (5.4 percent annual growth) may have been caused by a crowding-in of immigrant labor, as blue-collar manufacturing jobs contracted in the above eight sectors (excluding food).

This observation regarding the construction industry raises a serious issue. Construction is a cyclically sensitive sector subject to economic slowdowns during recession, significantly affecting low-skill and immigrant workers in the United States. A recent study by the Pew Hispanic Center, which confirms this expectation, cites unemployment levels that are higher than national levels for operators, manufacturers, and laborers (8.7 percent compared to 5.4 percent for the nation in October 2001), and a higher rate for Latinos (7.9 percent compared to the 5.8 percent national rate in December 2001). At least a portion of this greater vulnerability to recession can be attributed to NCC, enhanced by NAFTA.

**Observations on North American cumulative causality**

Contrary to the pro-NAFTA perception, many current PCC patterns are not necessarily sustainable in terms of expanding technological innovation and productivity growth throughout North American economies. Nor are PCC sectors expanding fast enough to become a major employment creator for low-wage U.S. and Mexican labor markets. Meanwhile, low-wage manufacturing cannot provide a sustainable basis for growth, given increasing global competition (from which NAFTA has temporarily exempted Mexico and parts of the United States). Mexico must soon address the challenge of finding a comparative advantage position based on innovation and productivity growth (product and process innovation), given its present

---

assembly role in the industrial integration process. This transition is complicated by the fact that export growth has not been extended to small and medium enterprises (SMEs), often key sources of innovation. Exports remain dominated by large firms dependent on external financing.

Mexico’s lack of productivity and income growth and its skewed regional concentration can also be a drag on U.S. productivity and income growth. If China and Southeast Asia exhibit stronger productivity and income growth, Northeast Asian producers will benefit in terms of global competitiveness. Similarly, if countries of Southern, Central, and Eastern Europe enhance their role as complementary producers and trade partners with the EU core, overall European productivity and competitiveness will be enhanced. The United States has gained much from the integration of a select group of PCC sectors across North American economies; however, it must also recognize that its long-term interests are tied to expanding PCC dynamics on a broader basis throughout North America.

The United States must also acknowledge that the current pattern of North American integration clearly exhibits NCC dynamics, although not based on the simplistic race-to-the-bottom, anti-NAFTA metaphor. As in the PCC case, there is evidence of a common cluster of sectors on both sides of the border that share similar characteristics and linked dynamics. These sectors exhibit slower growth in trade, employment, productivity, and wages. They also share immigrant labor markets, linking migrant sending regions in Mexico with immigrant receiving and Latino regions in the United States.

This low-wage, binational labor market also comprises the bulk of NAFTA’s employment-displacing effects, including trade realignment and plant relocation. For example, these sectors include Mexican corn production and U.S. garment production. Not only are negative employment effects highest in these sectors; these low-wage, binational labor markets also exhibit the lowest spending levels on education and training. Finding employment to sustain similar low-wage levels after layoffs is difficult, let alone transitioning to higher-skilled export jobs. Negative pressures on these migration-linked labor markets are compounded by a lack of productivity-enhancing capital outlays, exacerbated by low levels of human and social capital investment.
Demographic growth is also highest in low-skilled rural and urban sectors with low social investments on both sides of the border. Adding to negative causality is that this binational labor market has limited access to labor, migration, and political rights, thereby compounding the inability to demand higher wages and increased social investments for cross-border communities.

Mexico has substantial remittances transfers (nearly matching FDI); currently, however, their role is to maintain basic consumption levels among large segments of the poorest communities and perpetuate external dependence on family networks in the poorest U.S. communities. Low-wage migration is thus functionally maintained and reproduced, yielding U.S. consumers of low-wage goods and services a shortsighted subsidy. Over the long run, this approach keeps cross-border communities in poverty and maintains high levels of inequality in both countries. The United States must recognize its long-term stake in leveraging the migration-remittance dynamic toward increased financing of productive savings and investments in immigrant sending and receiving regions.

Political Economy of North American Adjustment Mechanisms

A U.S. economic slowdown would reveal the weakness in the integration pattern that NAFTA enhanced but did not initiate. The U.S. services sector (primarily construction, personal services, and wholesale and retail trade) might not expand rapidly enough to absorb labor from contracting manufacturing subsectors on both sides of the border, along with offering options to Mexican corn farmers. With this safety value threatened, the unsustainability of the current integration and growth pattern may be painfully revealed.

Whether proposed integration is regional or global, the United States faces the same fundamental questions: what integration scenario is in the best interest of U.S. output and income growth? Can the existing pattern of regional integration be improved to maximize positive and minimize negative cross-border externalities?
This analysis points to the need for a policy framework that could promote positive dynamics. Such a framework would harness the potential productivity and income benefits of integration, while addressing the adjustment costs of increased integration.

Destler (1995) views NAFTA side agreements as a dual failure by a “less protected Congress facing unprecedented trade-political pressures generated mainly by unprecedented trade deficits” and an Executive under Clinton, who, according to Destler, “ceded the field to the NAFTA critics.” Destler shows, however, that traditional congressional control over the trade agenda in the House Ways and Means Committee began to erode in the mid-1980s, even before the FTA with Canada and the GATT round were launched. Yet, many analysts have pointed out that it was only with NAFTA, especially the side agreements, that “the relationship between trade liberalization and consumer and environmental protection became visible for the first time in the United States” (Vogel 1998). This liberal formulation is thus insufficient to explain why it took the U.S.-Mexico context and NAFTA to produce a large-scale emergence of new issues and actors, despite the relatively smaller effect on the U.S. economy, compared to Canada and GATT.

The new reality of antitrade politics is more complex, especially with respect to Latino and environmental organizations, whose negotiating role cannot be labeled as protectionism, as in the traditional liberal formulation. They did not oppose trade in specific sectors or even trade generally; rather, they sought to adapt the trade regime to more general and collective concerns of an appropriate adjustment process, enforcement of labor rights, and sustainable development.

Understanding the Clinton administration’s role in NAFTA side agreements requires moving beyond traditional liberal formulations of State-society interactions in the making of trade policy and an apparently two-level game formulation of interstate negotiations with national domestic actors. Rather than an analysis of Clinton “ceding the field to the critics,” the administration’s actions must be viewed in the context of more complex bargaining with international and global players and domestic constituencies developing transnational linkages and alliances with their
own alternative transnational policy agendas. Finally, experience of the Clinton administration and NAFTA side agreements must include the collateral emergence of transnational societal networks and organizations, as well as transnational multistate institutions, which open up arenas for transnational political contestation and new types of transnational strategic actors.

In the 1990s, the politics of international economic policy formation in the United States, the world’s largest trader and investor, became increasingly divisive. Throughout the decade, U.S.-Mexico economic relations became the focal point for discussing global costs and benefits of trade and investment growth, along with the increasingly pivotal role of three related issues not traditionally a part of trade policy debates: 1) environmental sustainability; 2) labor rights and standards; and 3) community economic adjustment and development. When Mexico’s top government officials came to Washington in January 1990 for a hastily arranged meeting announcing to the Bush administration that Mexico would take the U.S. up on its often rhetorical offer to negotiate the NAFTA, the prospect that these three issues were important was completely absent (Hinojosa-Ojeda 1991). By the time the final vote on NAFTA was taken by the U.S. House of Representatives in November 1993, an unusually effective strategic coalition of Latino and environmental groups had succeeded in forcing the establishment of a new set of transnational institutions as a part of the “NAFTA Plus” legislative package, which became the determining factor in attaining the slim congressional majority needed to pass the agreement (Destler 1995; Audley 1997; Grayson 1995).

To address the issues of environment, labor rights and standards, and community adjustment and development, this author argues four basic points:

1. The NAFTA and side agreements experience are a significant milestone in the emergence of societal actors into the traditionally closed arena of international economic policymaking, long dominated by a limited set of state agencies and economic interests, with potentially important global implications.
Ironically, successful development of an alternative grassroots approach in the North American context was caused by the highly uneven pattern of development and rapid integration led primarily by societal actors (multinational capital and immigrant labor), combined with substantially uneven access of political rights by poorer communities in the United States, Mexico, and Canada and limited avenues of political redress concerning the unequal consequences of the historical pattern of transnational integration. While the effect of North American integration is highly asymmetrical (it is much less significant for the United States than for Mexico or Canada), various U.S. societal actors took advantage of negotiating a free trade agreement initiated by governing states primarily for geopolitical purposes, highlighting the long-neglected consequences of global integration and uneven development.

2. Within this new context, the Latino community played a unique role in providing a transnational perspective and North American vision that recognized the inevitability and potential benefits of integration, while focusing attention on its costs, which lower-wage Mexicans on both sides of the border had experienced long before NAFTA became a hot political issue. This transnational Latino perspective and emerging identity as a political actor were rooted in a long and harsh experience with the process of economic integration, particularly during the postwar era, when most U.S. groups were uninterested in Mexico. This alternative perspective was adopted in light of and despite evidence that NAFTA would disproportionately affect the Latino community more than any other U.S. constituency (Hinojosa 1992, 1997).

The emerging difference and complementarity of strategies among various Latino, environmental, and other activist groups forced national states to reopen the NAFTA agenda and eventually enter into globally unprecedented agreements, which created unprecedented, publicly oriented transnational institutions for addressing labor, environmental, and community development issues. Other, more staunchly anti-NAFTA environmental and labor groups effectively
used NAFTA as a way to discuss globalization's negative effects. While falling short of developing concrete, popularly based legislative proposals, they were critical in establishing a strategic counterweight, which allowed the NAFTA-Plus coalition to provide a politically credible alternative (Audley 1997).

3. Uneven construction and performance of NAFTA-related institutions can be traced back to differences in strategic interactions between societal actors and national states, particularly the underdeveloped capacity of groups to have already constituted a transnational network with well thought out and coordinated visions of the short- and medium-term steps necessary for North American strategic cooperation. It is argued that the fragile nature of the original coalition, which forced the new agenda items onto the states, led to the emboldening of conservative opponents of the NAFTA-Plus consensus and withdrawal of North American states' tentative support to aggressively follow through on consensus approaches and the institutions they represented. It was this failure of State actors to forcefully implement and expand side agreements that led Latino and environmental groups who supported the NAFTA-Plus consensus to withdraw crucial support, contributing to the current stalemate.

4. International economic policy formation is still a fluid political arena that is being reshaped by ongoing strategic interactions between national societal actors, governing states, international institutions, and transnational activist networks in ways that are setting new norms, principles, and terms of the coming debate on future trade agreements.

How the North American integration and development pattern—as well as the scope and efficacy of agreements and institutions—evolves depends on the evolution of transnational societal networking and coordinated action, including strategic choices that will influence the agenda of states and traditional economic actors.

Within this context, the key issue will be the capacity of groups to implement activities in at least four areas:
A broad popular vision of socially just and environmentally sustainable patterns of economic development, with ongoing integration through trade, investment, and migration.

A coordinated strategy to move governments and legislatures to build on and expand the elements of a NAFTA-Plus approach for the next round of fast-track authorization and future trade agreements.

Immediate campaigns to move NAFTA institutions to test their limits of activity through continuous exemplary uses and exhaustion of institutional potential to leverage ongoing labor, environmental, and community development organizing efforts.

Coordinated programs of transnational network capacity building among a wide range of groups with potentially complementary strategic objectives in North America, the Western Hemisphere, and other areas around the globe.

Concluding Remarks

For North America, the key issue is how to shift from the current pattern of unequal integration toward equitable integration. Fundamental for the U.S. is North America's future ability to expand patterns of high productivity and wage coproduction, while, at the same time, addressing regional dependence on low-wage labor migration, which accounts for cross-border patterns of inequality.

Clearly, the historical trajectory of NAFTA and FTAA differ from the EU's formation and enlargement. In the Western Hemisphere, the process is based more on societal institutional constructions, with lagging State-centered initiatives. In the resulting dynamic, states anticipate social movements and act in a new form of social spillover effect. Europe is already considering how to open State-centered processes directly to societal participation, not only through established state-to-state EU mechanisms. Such participation is crucial for adjustment investments and the integration process to succeed.

The major policy and political challenge is how to complement the productivity of trade integration with cross-border social investments. Short-term effects on jobs and bilateral trade balances are irrelevant to the coun-
tries involved. The key questions are how to enhance cross-border complementarities that can lead to mutual productivity growth, specialization, and trade, which, in turn, can lead to income growth and a better quality of life across rich and poor countries alike. Trade flows and their effects must be assessed as one dimension of a complex set of economic relationships, including investment and capital flows, labor flows, and social and institutional strengths and constraints.

Identifying sectors that exhibit PCC and NCC across countries is an important first step toward detailed sectoral studies that probe the socioeconomic and institutional causes of these dynamics. A next step is to design macroeconomic models that reflect these added dimensions of interdependence and can better anticipate the results of economic integration between countries at vastly varying levels of development. The final challenge will be to design economic and social policies that harness gains from economic integration, while providing safety nets and social infrastructure spending to boost wages and productivity levels in the region. Since an economic slowdown would threaten a substantial portion of the post-NAFTA period's income gains, particularly for the transnational migrant class, design and implementation of such policies should be a priority.

Finally, this effort requires broadening the participation of a wide range of economic actors into an emerging integrated economy. This process requires the support of SMEs, together with new private and public investment in low-wage labor markets and marginalized regions. In this way, integration can lead to expanded productivity, income, and consumption. Concerted institutional changes must be encouraged to support new accords on cross-border productivity, income distribution, and social investment. All are needed to sustain integration with both political and economic convergence.

---

6 These studies are being coordinated by UCLA’s North American Integration and Development (NAID) Center, with support from the Ford Foundation and MacArthur Foundation.
REFERENCES


