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Studies of the Economic Impact of NAFTA

**Council of Economic Advisers
Executive Office of the President**

October 20, 1993

Summary

The NAFTA may be the most thoroughly studied trade agreement in history. A review of the major studies of NAFTA's economic impact indicate a broad consensus on key points in the NAFTA debate: (1) All three NAFTA countries gain from the agreement. (2) In the U.S., labor will gain through increased employment, increased wages, or both. (3) Increased investment in Mexico will not be at the expense of investment in the U.S. The few studies reaching contrary conclusions have been strongly criticized by academic and other professional economists.

In his speech signing the side agreements to NAFTA, the President stated that nineteen out of twenty serious studies showed that NAFTA was good for the U.S. economy in general and labor in particular. A list of the major studies of the economic impact of NAFTA is attached. Of the twenty comprehensive studies listed, nineteen find that NAFTA is good for U.S. labor, leading to either increased employment, increased wages, or both.

Both past experience with trade liberalization and economic theory indicate that increased international trade benefits all participants. Given the lessons from history, it is hardly surprising that virtually all the studies that analyze the potential gains from trade liberalization find that NAFTA would benefit all three countries.

In a recent letter to the President, 286 academic economists, including thirteen Nobel prize winners, expressed their support for NAFTA, stating: "While we may not

agree on the precise employment impact of NAFTA, we do concur that the agreement will be a net positive for the United States, both in terms of employment creation and overall economic growth." The support for NAFTA among academic economists and serious researchers is simply overwhelming.

With the exception of a few studies, discussed below, the overwhelming conclusion from the large body of work assessing the economic effects of NAFTA is that NAFTA is good for all three countries.

All in all, an impressive array of academic, government, and business analyses of the economic impact of NAFTA have been done. NAFTA is probably the most thoroughly studied trade agreement in history. These studies have been extensively surveyed by impartial researchers at, for example, the International Trade Commission (ITC), the Congressional Budget Office (CBO), the General Accounting Office (GAO), and the Brookings Institution.

The ITC concludes: "Despite the different approaches taken in these studies, there is a surprising degree of unanimity in their results regarding the aggregate effects of a NAFTA. All three countries are expected to gain from a NAFTA. The greatest impact will on the Mexican economy, with less impact on the Canadian and U.S. economies."

The CBO report concludes: "A thorough review of the myriad changes brought about by NAFTA, and of their interactions, leads to the single resounding conclusion that the net effect on the U.S. economy would be positive and very small. . . . Contrary to some commonly expressed concerns, the reallocation of resources would not be massive. Americans should not fear that NAFTA would cause a wholesale relocation of U.S. manufacturing plants and jobs to Mexico to take advantage of the lower average wage."

The Brookings Institution survey concludes: "A consensus emerged . . . that the direct economic effects of NAFTA will be small for both Mexico and the United States. . . . [M]any of the changes in commercial relations that are often associated with NAFTA in public discussions have already occurred, and others will be spread over future years. . . . The general consensus of the studies . . . is that NAFTA will raise the average wage of U.S. workers and that the effect on low-wage workers will be negligible."

The GAO review concludes: "With the exception of a few U.S. policy analysis groups, the economic researchers in general agree that NAFTA would bring a small overall economic benefit to the U.S. and

Canadian economies, and a larger benefit to the Mexican economy."

The one comprehensive study that found negative results is a paper by the Economic Policy Institute (EPI), written by Jeff Faux and William Spriggs (item 17 on the attached list), which drew on a model developed by Raul Hinojosa and Robert McCleery. This study found that 550,000 jobs were "lost" due to NAFTA, a number which has been widely cited by EPI in various press releases. However, the number largely consists of jobs "lost" due to return migration of workers from the U.S. to Mexico. In the scenarios generating this result, growth in Mexico raises Mexican wages, yielding return migration and higher wages in the U.S. These are not jobs "lost" by American workers, but rather U.S. jobs foregone by Mexican workers for whom NAFTA will provide increased income at home.

Hinojosa and McCleery wrote a letter to Faux, the President of EPI, complaining about what they considered to be a gross misuse of their model. The ensuing debate is described in a recent article by Robert Wright in The New Republic (November 1, 1993, p. 42). Wright is very critical of the EPI work, using terms like "anti-NAFTA misinformation."

The studies listed under the heading "Studies with selective consideration of certain issues" are the ones often cited as indicating that NAFTA is bad for the U.S. There are two by the Economic Strategy Institute (ESI), whose President, Clyde Prestowitz, initially argued that NAFTA would be bad for the U.S. Since then, Prestowitz has changed his mind. In an article titled "Time for NAFTA" (Economic

Strategy Institute, News and Notes, Vol. 1, No. 4, summer/fall 1993), he concludes: "Even with its imperfections, NAFTA will leave America better off than before." He notes: "The barriers that are being removed are mostly on the Mexican side. Ironically their removal may actually reduce incentives for U.S. firms to move south."

Critics of NAFTA, including EPI, often cite a study by Edward Leamer, a Professor at UCLA, as indicating that NAFTA will lower wages for non-professional workers in the U.S. by up to \$1,000 a year. Those who have reviewed the Leamer paper note that it does not refer to NAFTA, but extrapolates from trends in the 1970s and 1980s. Robert Wright (The New Republic, Oct. 11, 1993, pp. 23-25) interviewed Leamer, who said that the use of his study by EPI was "extremely misleading." Leamer, in fact, supports NAFTA.

The study of NAFTA by Koechlin, Epstein, Bowles, and Larudee argues that NAFTA will lead to the loss of 290 to 490 thousand jobs in the U.S. The chain of argument in this article, however, is deeply flawed. They assume that: (1) NAFTA will generate increased foreign investment in Mexico; (2) much of this increased investment will come from the U.S.; and (3) increased U.S. investment in Mexico will reduce aggregate investment in the U.S., dollar for dollar, and lead to job losses as capital moves to Mexico. While the first two steps in this chain are reasonable, the final step is nonsense.

The Congressional Budget Office (CBO), in chapter 2 of their study of NAFTA (A Budgetary and Economic Analysis of the North American Free Trade

Agreement), examined the question of investment diversion carefully, using a multi-country macro model. In a section entitled "Increased Investment in Mexico Is Not At the Expense of Investment in the United States" they conclude (p.26):

"A popular view holds that individual plant migrations would combine in a 'great sucking sound' as large amounts of net investment and jobs flow out of the United States into Mexico. This view rests on a misconception. Particular events in which capital appears to move to Mexico would be offset by others in which new capital, some from outside North America, flows to new investment projects in the United States."

In a review of the Koechlin *et al.* model in a book edited by N. Lustig, B. Bosworth, and R.Z. Lawrence (North American Free Trade: Assessing the Impact), Hinojosa and Robinson (pp. 85-86) conclude:

"There is no theoretical or empirical reason to think that these investment changes will have any effect at all on aggregate investment [in the United States]. In fact, EC experience after Spanish and Irish accession suggests that NAFTA should increase direct foreign investment (DFI) into the United States."

NAFTA Impact Studies that Provide Results for the U.S. Economy

COMPREHENSIVE STUDIES

Macroeconomic Models

1. INFORUM-CIMAT (Clopper Almon, Univ of Maryland)
2. DRI/McGraw-Hill

Static Computable General Equilibrium (CGE) Models

3. Boyd, Krutilla, and McKinnery (Ohio Univ & Baylor)
4. U.S. International Trade Commission (USITC)--February 1991
5. U.S. International Trade Commission (USITC)--January 1993
6. KPMG Peat Marwick (Bachrach & Mizrahi)
7. Hinojosa and Robinson (UC Berkeley)
8. Robinson, Burfisher, Hinojosa, and Thierfelder (UC Berkeley, USDA, UCLA, US Naval Academy)
9. Burfisher, Robinson, and Thierfelder (USDA, UC Berkeley, US Naval Academy)
10. Hinojosa, Robinson, and Wolff (UCLA and UC Berkeley)
11. Trela and Whalley (Univ of Western Ontario)
12. Brown, Deardorff, and Stern (Univ of Mich)--June 1991
13. Brown, Deardorff, and Stern (Univ of Mich & Tufts)--Oct 1992
14. Roland-Holst, Reinert, and Shiells (Mills College & USITC)
15. Hunter, Markusen, and Rutherford (San Diego St, Colorado, Western Ontario)

Dynamic Computable General Equilibrium (CGE) Models

16. Hinojosa and McCleery (UCLA and East-West Center)
17. Economic Policy Institute (EPI)¹
18. McCleery (East-West Center)

Analogy to Other Liberalizations

19. Institute for International Economics--IIE (Hufbauer & Schott)--February 1992
20. Institute for International Economics--IIE (Hufbauer & Schott)--February 1993

STUDIES WITH SELECTIVE CONSIDERATION OF CERTAIN ISSUES

1. Economic Strategy Institute--ESI (Prestowitz *et al.*)(1991)
2. Economic Strategy Institute--ESI (Chimerine & Cohen)(1992)
3. Koechlin, Epstein, Bowles, and Larudee (Skidmore & Univ Mass)
4. Leamer (UCLA and NBER)
5. Choate (Ross Perot)

¹This is the only comprehensive study finding a net job loss from NAFTA.

NAFTA Impact Studies that Provide Results only for Mexico

1. Adams, Alanis, and del Rio (Univ of Pennsylvania)
2. Kehoe (Univ. of Minnesota)
3. Levy and van Wijnbergen (Boston Univ and World Bank)
4. Sobarzo (Colegio de Mexico)
5. Young and Romero (Univ. of Texas and Colegio de Mexico)

NAFTA Impact Studies that Provide Results Only for Canada

1. Cox and Harris (Univ of Waterloo and Simon Fraser Univ)

Reviews of NAFTA Impact Studies

1. Brookings Institution--Lustig, Bosworth, and Lawrence
2. Congressional Research Service (CRS)--Bolle
- 3/4. Congressional Budget Office (CBO)--Arnold and staff study
5. U.S. Department of Labor--Schoepfle & Perez-Lopez
6. U.S. General Accounting Office--staff study
7. U.S. International Trade Commission (USITC)--staff study

NAFTA IMPACT STUDIES

NAFTA Impact Studies that Provide Results for the U.S. Economy

COMPREHENSIVE STUDIES

Marcoeconometric Forecasting Models

1. INFORUM-CIMAT (Clopper Almon, University of Maryland)
Interindustry Economic Research Fund, Inc., "Industrial Effects of a Free Trade Agreement Between Mexico and the USA." Prepared under contract to the U.S. Department of Labor, Clopper Almon, University of Maryland, principal investigator, September 1990.
2. DRI/McGraw-Hill
DRI/McGraw-Hill, "The Impact of the North American Free Trade Agreement on U.S. Regional and Sectoral Labor Markets," Lexington, MA, August 1992, Appendix B in National Commission for Employment Policy, The Employment Effects of the North American Free Trade Agreement Recommendations and Background Studies, Special report No. 33 (Washington, DC: National Commission for Employment Policy, October 1992)

Static Computable General Equilibrium (CGE) Models

3. Boyd, Drutilla, and McKinnery (Ohio University and Baylor University)
Boyd, Roy G., Kerry Drutilla, and Joseph A. McKinney, "The Impact of Tariff Liberalization between the United States and Mexico: An Empirical Analysis," Applied Economics 25 (1993), 81-89.
4. U.S. International Trade Commission (USITC)--February 1991
U.S. International Trade Commission, The Likely Effects on the United States of a Free Trade Agreement with Mexico, USITC Publication 2353 (Washington, DC February 1991)
5. U.S. International Trade Commission (USITC)--January 1993
U.S. International Trade Commission, Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement, USITC Publication 2596 (Washington, DC, January 1993).
6. KPMG Peat Marwick (Bachrach and Mizrahi)
KPMG Peat Marwick, Policy Economics Group, "The Effects of a Free Trade Agreement between the United States and Mexico," prepared under contract to the U.S. Council of the Mexico-U.S. Business Committee (Washington, DC, May 1, 1991); see also, Bachrach, Carlos, and Loris Mizrahi, "The Economic Impact of a Free Trade Agreement Between the United States and Mexico: A CGE Analysis," Pp. 39-79 in U.S. International trade Commission, Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico, USITC Publication 2508 (Washington, DC: U.S. International Commission, May 1992).
7. Hinojosa and Robinson (University of California at Berkeley)
Hinojosa-Ojeda, Raul, and Sherman Robinson, "Alternative Scenarios of U.S.-Mexico Integration: A Computable General Equilibrium Approach." Working paper No. 609, Department of Agriculture and Resource Economics, University of California at Berkeley, April 1991.
8. Robinson, Burfisher, Hinojosa, and Thierfelder (Univ of Calif at Berkeley and U.S. Dept of Agriculture)
Robinson, Sherman, Mary E. Burfisher, Raul Hinojosa-Ojeda, and Karen E. Thierfelder, "Agricultural Policies and Migration in a U.S.-Mexico Free Trade Area: A Computable General Equilibrium Analysis."

Working paper No. 617, Department of Agricultural and Resource Economics, University of California at Berkeley, December 1991; also reprinted Pp. 457-507 in U.S. International Trade Commission, Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico, USITC Publication 2508 (Washington, DC: U.S. International Trade Commission, May 1992).

9. Burfisher, Robinson, and Thierfelder (US Dept. of Agric, UC Berkeley, US Naval Academy)
Burfisher, Mary, Sherman Robinson, and Karen Thierfelder, "Agricultural and Food Policies in a U.S.-Mexico Free Trade Area," The North American Journal of Economics and Finance 3:2 (Fall 1992), 117-139.
10. Hinojosa, Robinson, and Wolff (University of California at Los Angeles and UC Berkeley)
Hinojosa-Ojeda, Raul, Sherman Robinson, and Goetz Wolff, "The Impact of a North American Free Trade Agreement on California: A Summary of Key Research Findings." Working Paper No. 3, Lewis Center for Regional Policy Studies, Graduate School of Architecture and Urban Planning, University of California at Los Angeles, September 1992.
11. Trela and Whalley (University of Western Ontario)
Trela, Irene, and John Whalley, "Bilateral Trade Liberalization in Quota Restricted Items: U.S. and Mexico in Textiles and Steel," paper presented at a conference titled "North American Free Trade: Economic and Political Implications," Center for Strategic and International Studies, Washington, DC, June 1991; see also, Trela, Irene, and John Whalley, "Trade Liberalization in Quota Restricted Items: U.S. and Mexico in Textiles and Steel," World Economy 15:1 (January 1992), 45-63.
12. Brown, Deardorff, and Stern (University of Michigan and Tufts University)--June 1991
Brown, Drusilla K. Alan V. deardorff, and Robert M. Stern, "A North American Free Trade Agreement: Analytical Issues and a Computational assessment," Institute of Public Policy Studies, mimeo, University of Michigan, June 24, 1991; and revised version, October 18, 1991; subsequently published in World Economy 15:1 (January 1992), 11-29.
13. Brown, Deardorff, and Stern (University of Michigan and Tufts University)--October 1992
Stern, Robert M. Alan V. Deardorff and Drusilla K. Brown, "A U.S. Mexico-Canada Free Trade Agreement: Sectoral Employment Effects and Regional/Occupational Employment Realignment in the United States," University of Michigan, Institute of Public Policy Studies, September 2, 1992, Appendix A in National Commission for Employment Policy, October 1992).
14. Roland-Holst, Reinert, and Shiells (Mills College and USITC)
Roland-Holt, David, Kenneth A. Reinert, and Clinton R. Shiells, "North American Trade Liberalization and the Role of Nontariff Barriers." Pp.523-580 in U.S. International Trade Commission, Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico, USITC Publication 2508 (Washington, DC: U.S. International Trade Commission, May 1992)
15. Hunter, Markusen, and Rutherford (San Diego State, Colorado, and Western Ontario)
Hunter, Linda, James R. Markusen and Thomas F. Rutherford, "U.S.-Mexico Free Trade and the North American Auto Industry: Effects on the Spatial organization of Production of Finished Autos." Paper presented at a conference titled "North American Free Trade: Economic and Political Implications." Center for Strategic and International Studies, Washington, DC, June 1991; subsequently published in World Economy 15:1 (January 1992), 65-81; see also, Hunter, Linda, James R. Markusen, and Thomas F. Rutherford, "Trade Liberalization in a Multinational-Dominated Industry: A Theoretical and Applied General Equilibrium Analysis." Pp. 39-42 in Federal Reserve Bank of Dallas, North American Free Trade: Proceedings of a Conference (Dallas, TX, June 1991); revised december 1991, Pp. 187-223 in U.S.

International Trade Commission, Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico, USITC Publication 2508 (Washington, DC: U.S. International Trade Commission, May 1992).

Dynamic Computable General Equilibrium (CGE) Models

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Hinojosa-Ojeda, Raul, and Robert K. McCleery, "U.S.-Mexico interdependence, Social Pacts and Policy Alternatives: A computable General Equilibrium Approach." Working Paper No. 596, Department of Agricultural and Resource Economics, University of California at Berkeley, March 22, 1991; reprinted, Pp. 113-154 in J.A. Bustamante, C.W. Reynolds, and R.A. Hinojosa Ojeda (eds.), U.S.-Mexico Relations: Labor Market Interdependence (Stanford, CA: Stanford University Press, 1992)
17. EPI -- Economic Policy Institute (Faus and Spriggs)
Faus, Jeff, and William Spriggs, U.S. Jobs and the Mexico Trade Proposal, Briefing Paper (Washington, DC: Economic Policy Institute, May 1991); see also, Spriggs, William E. Economic Policy Institute, "Potential Effects of Direct Foreign Investment Shifts Due to the Proposed U.S.-Mexico Free Trade Agreement," testimony before the Subcommittee on Commerce, Consumer Protection and Competitiveness of the U.S. House of Representatives Committee on Energy and Commerce, May 15, 1991.
18. McCleery (East-West Center)
McCleery, Robert K., "An Intertemporal, Linked, Macroeconomic CGE Model of the United States and Mexico Focussing on Demographic Change and Factor Flows." Pp. 371-441 in U.S. International Trade Commission, Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico, USITC Publication 2508 (Washington, DC: U.S. International Trade Commission, May 1992).

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2. Economic Strategy Institute -- ESI -- 1992
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3. Koechlin, Epstein, Bowles, and Larudee (Skidmore and Univ of Mass at Amhers)
Koechlin, Timothy, Gerald Epstein, Samuel Bowles, and Mehrene Larudee, "Estimates of the Impact of the Free Trade Agreement on Direct U.S. Investment in Mexico." Summary of Testimony to the U.S. Trade Representative Public Hearings on NAFTA, Boston, MA, September 11, 1991; see also, Koechlin, Timothy, Mehrene Larudee, Samuel Bowles, and Gerald Epstein, "Effect of the North American Free Trade Agreement on Investment, Employment and Wages in Mexico and the U.S." Mimeo, Skidmore College and University of Massachusetts at Amherst, February 1992; Koechlin, Timothy, and Mahrene Larudee, "The High Cost of NAFTA," Challenge (September-October 1992), pp. 19-26.
4. Leamer (Univ Calif at Los Angeles and National Bureau of Economic Research)
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5. Choate
Choate, Pat, "Jobs at Risk: Vulnerable U.S. Industries and Jobs under NAFTA" (Washington, DC: The Manufacturing Policy Project, April 1993).

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3. Levy and van Wijnbergen (Boston Univ and World Bank)
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1. Cox and Harris (Univ of Waterloo and Simon Fraser Univ)
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NAFTA and Relative Wages in the U.S. and Mexico

**Office of the Assistant Secretary for Economic Policy, U.S. Treasury
Council of Economic Advisers, Executive Office of the President**

October 26, 1993

Summary

Critics of NAFTA claim that Mexican competition is not fair competition. They argue that Mexican wages are "artificially depressed" to "Third World levels." They point to the failure of manufacturing wages to rise as fast as manufacturing productivity, and call it evidence that Mexican competition is unfair.

But in the U.S. as well as in Mexico manufacturing wages have not kept pace with manufacturing productivity. As a rule, manufacturing wages rise not with manufacturing productivity but with economy-wide average productivity.

A full look at the evidence leads to the conclusion that Mexican real wages are at levels that are appropriate given the low productivity of Mexico's workers. Competition with Mexico will be fair competition. Moreover, NAFTA will lead to growth and increased wages in Mexico. Thus NAFTA will reduce the attractiveness of Mexico to industries seeking to locate production where labor is cheapest.

Mexican Wage Trends: The Issue

The North American Free Trade Agreement (NAFTA) binds the U.S. and Mexico to eliminate barriers to international trade. It allows American producers and goods free access to the rapidly-expanding Mexican market.

Some critics of NAFTA paint apocalyptic pictures of U.S. companies fleeing to Mexico in pursuit of low-cost Mexican labor. They rely implicitly on a false and naive model in which producers seek always to locate production where wages are the lowest.

That this implicit model is false is shown by the United States's \$7.5 billion surplus in manufacturing trade with Mexico in 1992. Producers of manufactured goods have preferred to locate in the United States rather than Mexico despite lower U.S. wages, and despite trade barriers against shipments from the United States to Mexico that are much higher than barriers to shipments from Mexico to the U.S.

Because Mexican workers have low productivity, Mexican wages cannot help but

being low—but Mexico's low wages are in general not a bargain for manufacturing employers.

Other critics recognize the falsity of the argument that in the absence of Mexico production in Mexico must be attractive to businesses because wages are low. They make a more sophisticated argument. The problem that they claim to see is not that Mexican wages are low, but that Mexican wages are kept *artificially* low by anti-labor government policies.

Such critics claim that a gap exists between Mexican wages and productivity as a result of authoritarian government action. If not for the oppressive hand of the Mexican government, Mexico's wages would be higher relative to U.S. levels.

For example, NAFTA critic Harley Shaiken writes that Mexico is characterized by "artificially depressed Third World wages." NAFTA critic Jeff Faux writes of "the government's policy of keeping wages depressed in order to attract foreign capital."

But the argument that Mexican competition is unfair because of the gap between Mexican and U.S. wage levels is based on a serious misreading of the evidence. In fact, Mexico's wage level is appropriate given its generally low level of productivity.

Moreover, NAFTA is likely to raise wages in Mexico relative to the United States. The Mexican economic reform and liberalization program—of which NAFTA is a

key part—has seen relative wages in Mexico rise since its beginning in 1987. NAFTA is likely to continue and accelerate these trends. Thus NAFTA will reduce the attractiveness of Mexico to industries that base location decisions on low labor costs alone.

Wage and Productivity Patterns

Are Mexican wages in fact being kept artificially low relative to U.S. levels? Some observers misread the evidence, and claim that a more rapid growth rate of manufacturing productivity than manufacturing wages is evidence that they are. But the argument that the gap between productivity and wage growth in manufacturing reflects successful anti-labor policies is a serious misinterpretation.

Over the long run, economists anticipate that the economy-wide average real wages will grow in line with overall economy-wide labor productivity. Competition from high-wage employers will induce low-wage employers to raise wages, and prevent the unbounded growth of wage differentials across industries.

But economists also anticipate that manufacturing productivity growth will outstrip economy-wide average productivity growth. This is the essence of the industrial revolution: the process of ongoing improvement in manufacturing productivity. Manufacturing wages rise at about the average rate of wage increase, and manufacturing productivity grows much faster than average

mfg wages 9 at overall wage

productivity—hence a widening lag between manufacturing productivity and manufacturing wages.

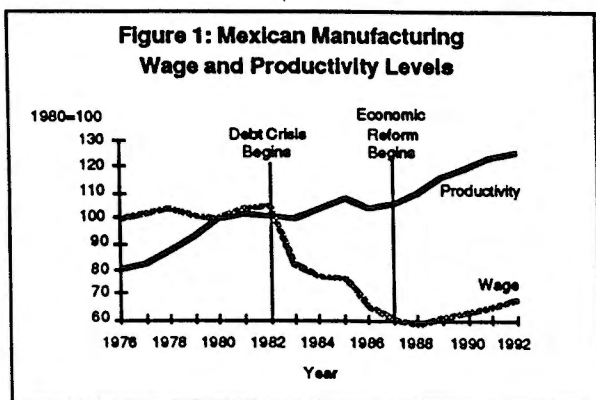
This pattern is equally true for nineteenth century Britain, twentieth century Mexico, and the twentieth century United States. The real wage in U.S. manufacturing has hardly grown at all since the 1970s. The reason? Economy-wide average productivity growth has been slow. But manufacturing productivity growth has increased by nearly forty percent. In the United States as well as in Mexico, there is a wide gap between manufacturing productivity growth and manufacturing wage growth

Wages dropped dramatically after 1982, but not as a result of government intervention. Wages dropped as a result of the debt crisis and the associated economic collapse that gripped Mexico in the early 1980s.

The debt crisis years from 1982 to 1987 saw Mexican productivity rise by little. However, productivity resumed its upward course after the beginning of Mexico's economic liberalization and reform program in 1987. And Mexican real wages as well began to rise, as trade liberalization and policy reform took hold.

The Role of the Debt Crisis

In the short run, external shocks and business cycles can lead to significant deviations of wage levels from their long-run trends. Figure 1 shows that manufacturing productivity in Mexican industry grew by twenty percent from the mid-1970s to 1982. Real manufacturing wages held steady over this period.



The Economic Solidarity Pact

Some critics of NAFTA have argued that the creation of the "Economic Solidarity Pact" in Mexico in 1987 is a principal mechanism by which the government has kept wages artificially depressed. In its conception and operation, the pact is similar to the "incomes policies" that were adopted in many European countries by Social Democratic governments in the 1970s. Labor movements agree to moderate wage inflation if firms commit to hold down price increases.

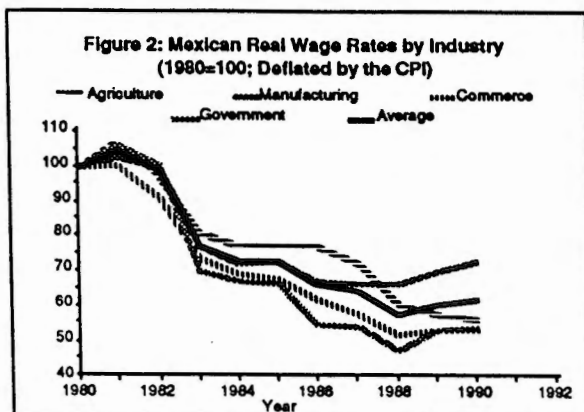
Such arrangements were looked on favorably by a wide spectrum of left and centrist economists in the 1970s. They promised to bring down inflation without causing recession and unemployment.

The pact appears to have succeeded in containing inflation and fostering recovery. As figure 1 showed, it has been accompanied by rising real wages: the period of falling real wages is the pre-pact period of the 1980s.

prevented Mexican manufacturing wages from rising.

Mexican Wages and Reform

Figure 2 shows relative wage levels in different sectors of the Mexican economy. It shows that wages in all Mexican industries move closely together: the levels of real manufacturing wages, and wages in other sectors, have in fact been determined as a result of economy-wide forces.



In fact, manufacturing wages declined less than other sectors during the debt crisis, and have recovered more rapidly since the initiation of economic reform. Manufacturing wages in Mexico have risen somewhat more than one would have anticipated in recent years, given the economic wide forces that have been at work.

That wages in manufacturing have advanced relative to other sectors in recent years suggests that the Mexican government is

not depressing manufacturing wages, in order to make Mexico a more attractive export platform.

In fact, the policies undertaken by the Salinas government have made Mexico much less attractive as a potential low-wage export platform. Figure 3 shows the average compensation of Mexican manufacturing workers, measured in dollars as a percentage of the average wage of manufacturing workers in the United States. This ratio is determined by U.S. wages in dollars, Mexican wages in pesos, and the dollar-peso exchange rate.



Figure 3 shows that the relative attractiveness, based on labor costs alone, to a business of locating its operations in Mexico reached its peak in the mid-1980s, as the peso reached its lowest value during the Third World debt crisis. With reform in 1987, real wages in pesos and the Mexican exchange rate both began to rise.

If NAFTA is successfully implemented and Mexican liberalization continues, we expect to see further increases in the level of

Mexican manufacturing wages relative to the United States. NAFTA will steadily reduce the attractiveness of Mexico to industries that base location decisions on basic labor costs alone.

Mexican Wage Levels Are Appropriate Given Low Mexican Productivity

The World Bank has calculated that in 1991 U.S. manufacturing compensation was 4.7 times higher than compensation in Mexico. But even with such a large gap, Mexican manufacturing wages were in a sense too high: the \$7.5 billion U.S. surplus in United States-Mexican trade that was seen in 1992 shows that consumers in the U.S. and Mexico found that U.S. manufactured goods provided better value for the money.

U.S. manufacturing productivity is higher than Mexican by approximately the difference in wage rates. On average, it takes almost five Mexican workers to produce as much as one U.S. worker. It is unit labor costs, not wages *per se*, that determine the profitability of hiring workers in the two countries—and the likely redistribution of manufacturing employment that will result from an opening up of trade.

We know that low wage levels in an economy do not by themselves make it advantageous for firms to produce in that economy: if they did, all the most profitable factories in the world would have relocated to Bangladesh decades ago.

Mexican wages are low for a reason—the average level of productivity in Mexico is low. And the average level of productivity in Mexico is low because it lacks the capital and its workers lack the skills to attain First World levels of average productivity. Only one-fifth of the Mexican population, for example, has finished high school.

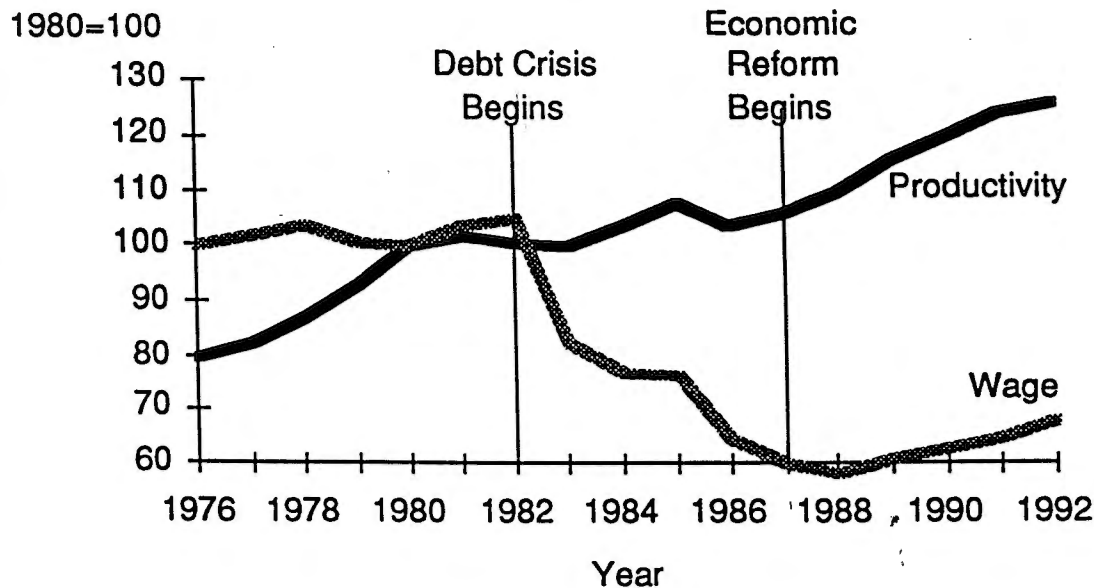
Thus a close look leads to the rejection of the claim, made by some critics of NAFTA, that the failure of manufacturing wages to rise as fast as manufacturing productivity is evidence that Mexican competition is not fair competition.

As a rule, manufacturing wages rise more slowly than manufacturing productivity, but alongside average productivity in the economy as a whole. In the United States as well as in Mexico, manufacturing wages fail to keep pace with manufacturing productivity.

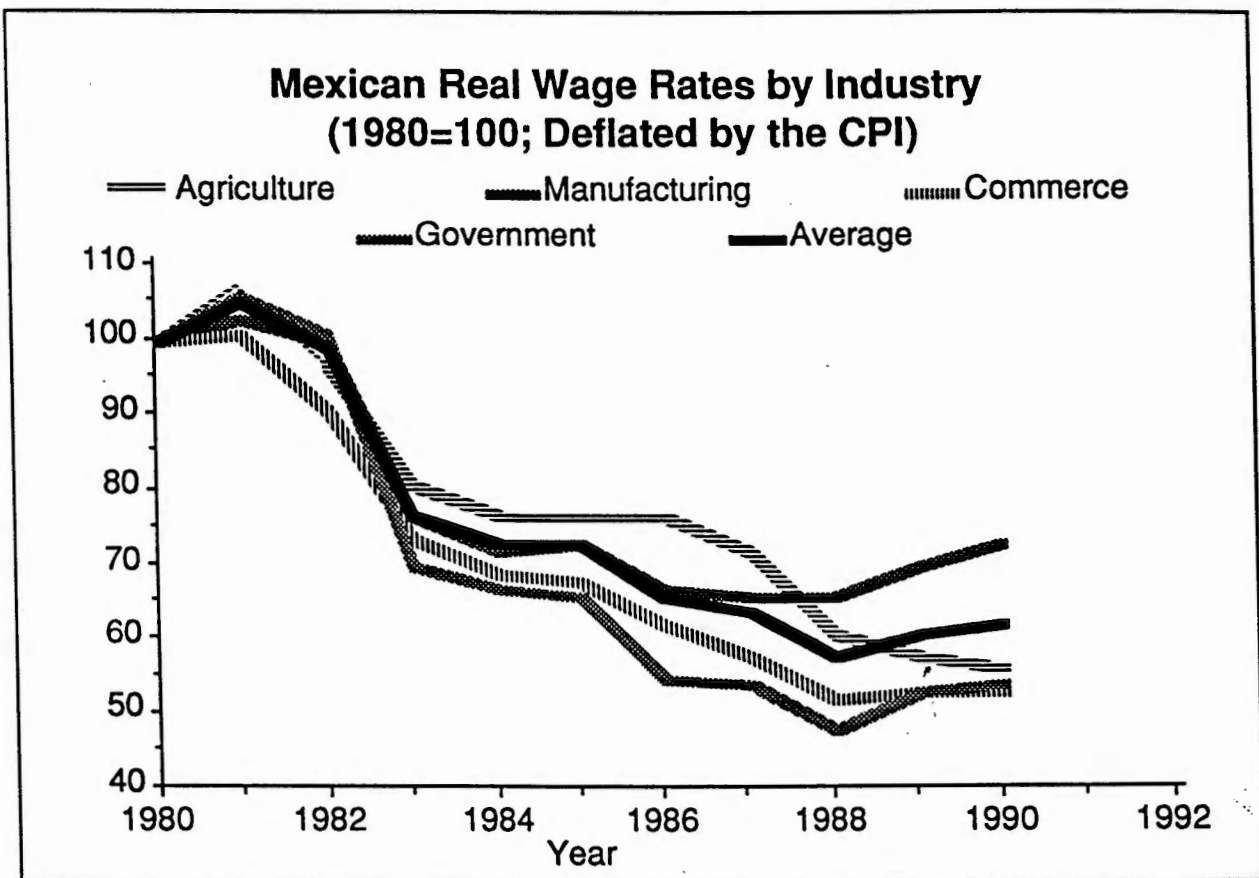
A careful look at the evidence leads to the conclusion that the low level of Mexican real wages relative to the United States is not the result of government policies that push Mexican wages to “artificially depressed Third World” levels. Mexican real wages are at levels that are appropriate for Mexico, given the country’s poverty and the low productivity of its workers.

As in other countries, Mexico’s real wages rise in line with increases in overall economy-wide productivity in times of economic advance, and fall in times of economic crisis.

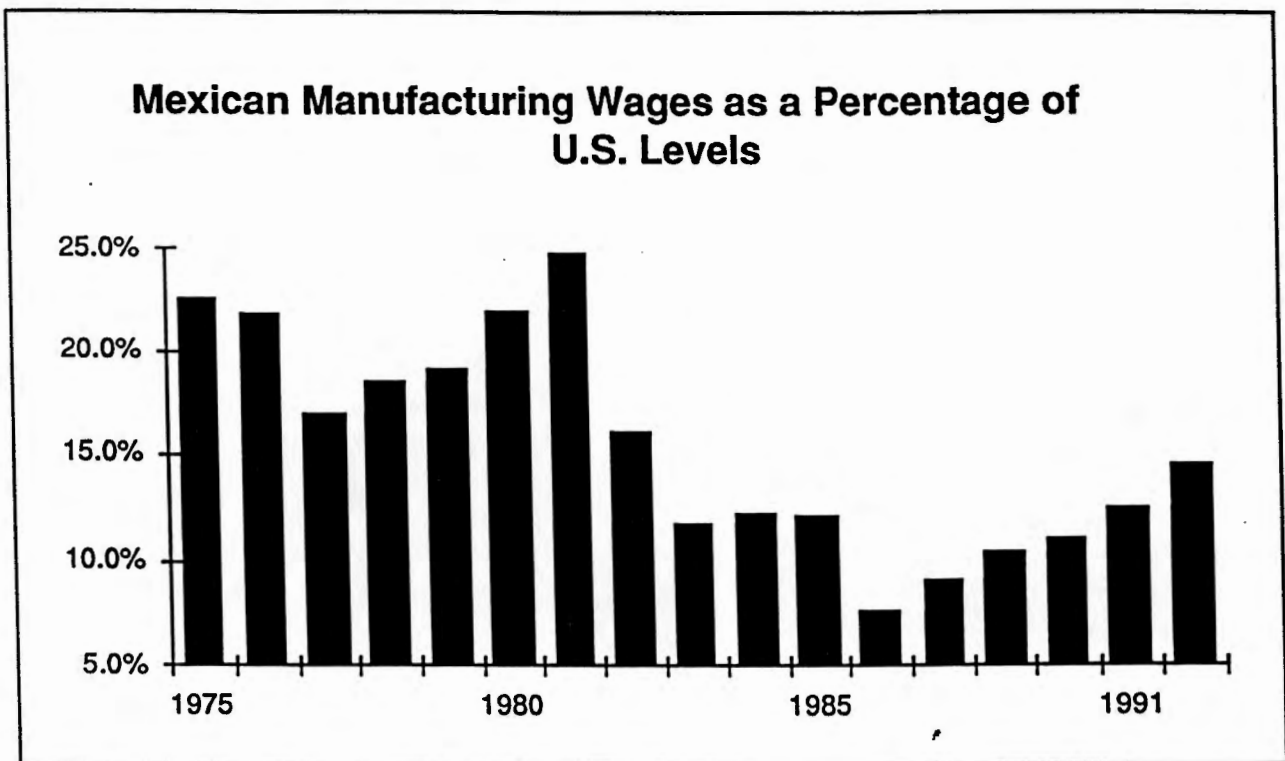
Mexican Manufacturing Wage and Productivity Levels



- Some critics of NAFTA argue that the creation of the “Economic Solidarity Pact” in 1987 is the principal mechanism by which the government keeps real wages artificially depressed.
- But when real wages fell in the 1980s, they fell before the 1987 creation of the Pact—they fell not because of the Solidarity Pact but because of the Third World debt crisis.
- Real wages in Mexico began to rise in 1987, when the economic reforms of which the Solidarity Pact was a component were introduced.
- Real wages in manufacturing have been rising since 1987: the pact has been successful in containing inflation, fostering economic recovery, and encouraging the growth of real wages.
- A continuation of the reform program—of which NAFTA is a key component—is the best method to keep Mexican real wages rising.



- Some critics claim that Mexican real wages in manufacturing have been artificially depressed by government policies attempting to make Mexico an attractive low-wage export platform.
- Declines in Mexican real wages in manufacturing in the 1980s were the result of economy-wide forces—the Third World debt crisis. Wages in all sectors of the economy follow roughly the same pattern.
- Wages in manufacturing fell by less in the mid-1980s and have risen by more in recent years than wages in the average Mexican industry. Manufacturing wages are forty percent higher relative to government-sector wages than they were in 1980.



- Relative to U.S. levels, Mexican real manufacturing wages fell very steeply in the mid-1980s as the Third World debt crisis crippled the Mexican economy.
- Mexican wages have been rising rapidly since 1987 as a proportion of the U.S. level. In 1987 President Salinas began his economic reforms—which caused real wages to rise in Mexico and which gave international investors more confidence in the Mexican economy, leading to an appreciation of the peso.
- A firm that bases its location decision on where wages are lowest would find Mexico less than half as attractive today as in 1986: Mexican wages are twice as large a proportion of U.S. wage levels now as they were then.
- A continuation of Mexican economic reform—of which NAFTA is a key component—is the best route to take to keep Mexican wages relative to U.S. levels on an upward trend, and to reduce Mexico's raw labor cost advantage vis-a-vis the United States.

U.S.- Mexican Manufacturing Trade: Overcoming Tariff Barriers and NAFTA

Economic and Statistics Administration and International Trade Administration, U.S.
Department of Commerce

October 26, 1993

Summary

The U.S. had a \$7.5 billion surplus in manufacturing trade with Mexico in 1992. This surplus was achieved in spite of Mexican tariffs which averaged 2.5 times as much as U.S. tariffs. Moreover, use of simple averages underestimates the size of Mexican barriers. Many important export industries have Mexican tariffs much more than 2.5 times U.S. tariffs.

↓ by 50

U.S.-Mexican Manufacturing Trade

The United States had a \$7.5 billion manufacturing trade surplus with Mexico in 1992.¹ The U.S. manufacturing surplus was \$1.9 billion greater than the United States' \$5.6 billion surplus on all products.

The more favorable manufacturing balance arises principally because each year the U.S. imports approximately \$4 billion worth of oil each year from Mexico, while it exports only about \$2 billion of primary products—principally grains—south to Mexico.

Therefore, when manufactured goods are considered in isolation the U.S. trade surplus

is even greater. Hundreds of thousands of manufacturing jobs in the United States are supported by exports to Mexico.

The Level of Mexican Tariffs

The \$7.5 billion annual surplus in manufactured goods trade that the U.S. obtained in 1992 has been achieved despite Mexican tariffs which on average are 2.5 times higher than U.S. tariffs (10 percent vs. 4 percent).

The table on the following page demonstrates that for some of the most important U.S. export sectors, the difference between U.S. and Mexican tariffs is even greater. NAFTA will level this tariff playing field, reducing both U.S. tariffs and the much

¹See Department of Commerce, International Trade Administration, *U.S. Foreign Trade Highlights, 1992*.

higher Mexican tariffs to zero.

The items listed in the table constitute about half of U.S. exports to Mexico (total merchandise exports in 1992 were \$40.6 billion). These exports were achieved despite high current Mexican tariffs.

U.S. and Mexican Relative Tariff Rates In Manufacturing²

<u>Category</u>	<u>U.S. Tariff</u>	<u>Mexican Tariff</u>	<u>Share of U.S. Exports to Mexico</u>
Electrical machinery ^a	2.3%	14.2% ^d	17.8%
Telecom. equip.	0.2%	13.9%	* ³
Transportation equipment	1.5%	13.9%	13.7%
Autos	2.5% ^b	20%	*
Diesel engines	0	10%	*
Spark ignition engines	0 ^c	13.8%	*
Chemicals	1.2%	7.1%	7.3%
Fabricated metals	0.4%	14.7%	4.7%
Iron and steel products ^a	2.0%	13.9%	n.a. ⁴
Scientific instruments	0.4%	12.5%	3.6%
Computer equipment		16%	2.4% ^e

a) Tariff rates based on a trade-weighted average.

b) Tariff rate of 25% for light trucks.

c) Tariff rate of 3.1% for engines over 1,000 cc.

d) Based on 1989 tariff rates.

e) Includes software exports.

²Note: U.S. and Mexican tariff classifications are not identical, so the Mexican categories are close approximations of the U.S. categories. Unless otherwise designated, tariff rates are based on arithmetic averages across subcategories.

³* denotes subset of a larger category.

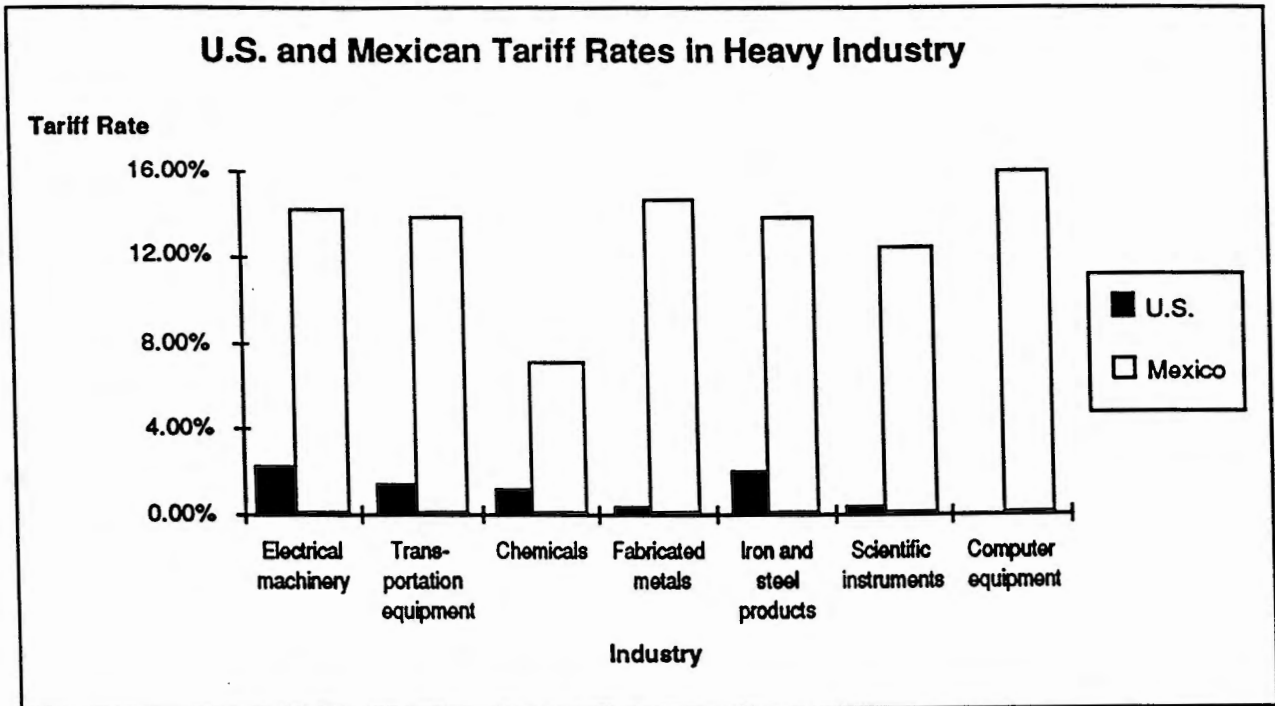
⁴Not available.

Clearly, U.S. exports in these areas—and many others—can be expected to increase as Mexico continues to grow and Mexican tariffs are cut, creating thousands of jobs in the U.S.

Non-Tariff Barriers

A level playing field on tariffs, however, is not the whole story. Mexico also has major non-tariff restrictions on imports that are not reflected in the table. These non-tariff barriers will be dismantled as part of NAFTA, as well.

The auto and auto parts industries are a good example. Vehicle manufacturers are required to export from Mexico \$2 worth of vehicles for every \$1 worth of imports. In addition, both vehicle and parts producers must comply with strict local content requirements. These provisions effectively require U.S. companies to manufacture in Mexico if they wish to sell in Mexico. All these impediments to U.S. exports will be phased down under NAFTA.



- At present, Mexican tariff rates exceed U.S. tariff rates by roughly 2.5-1 on average.
- The average, however, hides substantial variability. In the high-wage capital-intensive heavy manufacturing industries, Mexican tariffs are roughly ten times as high as U.S. tariffs. *10 X is as high*
- A simple comparison of tariff rates understates the magnitude of the difference in trade barriers: Mexico possesses stringent non-tariff restrictions on trade as well—which NAFTA will eliminate.
- For example, motor vehicle manufacturers are required to export from Mexico \$2 worth of vehicles for every \$1 worth of vehicles that they import. Both vehicle and parts producers must comply with strict local content requirements. There provisions effectively require U.S. companies to manufacture in Mexico if they wish to sell in Mexico, and to manufacture more in Mexico than they sell in Mexico.

NAFTA and the Employment of Union Workers

**Council of Economic Advisers, Executive Office of the President
Office of the Assistant Secretary for Economic Policy, U.S. Treasury**

October 28, 1993

Summary

The growth of exports to Mexico over the past six years has increased demand for U.S. union workers. 24.6% of the workers employed in the industries that export the most to Mexico are covered by union contracts. By contrast, 19.2% of workers in industries that face the most competition from Mexican imports are covered by union contracts. As a result, expanded trade with Mexico has increased, not decreased, the relative demand of U.S. firms for union vis-a-vis nonunion workers.

NAFTA and Union Workers

Some observers fear a North American Free Trade Agreement would diminish the standard of living of U.S. workers and the level of employment in the United States. Many U.S. labor unions have been particularly concerned.

Our analysis suggests that these fears are greatly overdrawn. Detailed analysis indicates that the net effect of NAFTA will be to increase, not decrease, opportunities for union employment in the United States.

NAFTA will expand U.S.-Mexico two-way trade. U.S.-Mexico two-way trade has already grown significantly over the past six years: U.S. exports to Mexico today are three times what they were in 1987. And those U.S. industries that export the most to Mexico today are among the most heavily unionized in the country.

Industries that Export to Mexico

The recent expansion of exports to Mexico has shifted the distribution of U.S.

production and increased the demand for workers in more heavily-unionized occupations. There is good reason to believe that a further expansion of U.S.-Mexico trade under NAFTA would further stimulate demand for union workers.

The table below reports the fifteen groups of commodities, measured at the level of their three-digit Standard Industrial Classification (SIC), that exported the most to Mexico. Table 1 also reports estimates of the proportion of workers producing these commodities who are covered by union contracts, derived from Current Population Survey (CPS) reports of workers by Census Industrial Classification (CIC) code.

Some CIC codes cover more than one SIC code. Electronic components and electrical machinery, for example, fall under the same CIC code and thus have the same estimated unionization level.

The average level of workers covered by union contracts in the fifteen industries that

produced the most exports to Mexico in 1992 was 24.6 percent. Since union contracts cover 21 percent of manufacturing workers today, and little more than 12 percent for private-sector workers as a whole, workers in industries that export the most to Mexico are significantly more likely to be union members than the average.

Unionization and Top U.S. Exports to Mexico, 1992

(Million Dollars)			
Product Group	SIC Code	Exports	Percent Union
Motor vehicles	371	\$4,129	51.4
Elect. components	367	\$2,116	15.8
Misc. manufactures	3XX	\$1,522	NA
Elect. machinery	369	\$1,339	15.8
Cash grains	011	\$1,300	7.9
Office machinery	357	\$1,053	7.6
Aircraft	372	\$959	37.4
Non-ferrous metals	335	\$931	27.1
Blast furnace pdts.	331	\$912	50.1
Misc. plastic pdts.	308	\$903	14.0
Measuring insts.	382	\$900	9.8
Cons. machinery	353	\$879	25.3
Refinery products	291	\$863	32.9
Plastics	282	\$830	13.3
Meat products	201	\$814	23.4
Indust. machinery	356	\$801	18.0

Average 24.6

NA—Not available.

Sources—Current Population Survey; Bureau of Economic Analysis.

Industries that Import from Mexico

Not only do workers in industries that export to Mexico have higher than average unionization rates, they also have higher unionization rates than workers in industries that compete with imports from Mexico. Table 2 reports unionization levels for the fifteen industries that imported the most from Mexico in 1992.

19.2 percent of workers employed in the fifteen industries that imported the most from Mexico in 1992 were covered by union contracts—a unionization rate of only three-quarters the rate for those industries that export the most to Mexico.

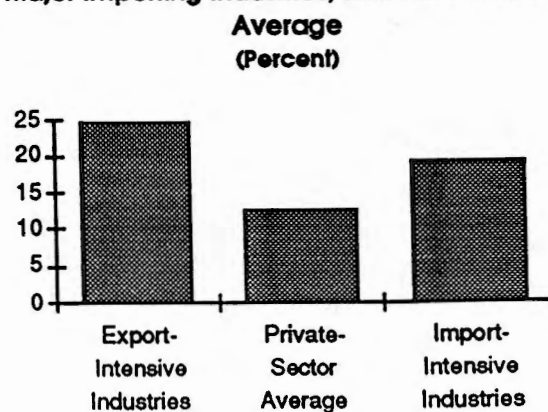
Unionization and Major Imports from Mexico, 1992

(Million Dollars)			
Product Group	SIC Code	Imports	Percent Union
Motor vehicles	371	\$5,487	51.4
Oil and gas	131	\$4,272	4.3
Elect. components	367	\$2,005	15.8
Elect. machinery	369	\$1,947	15.8
Radio & TV sets	365	\$1,755	15.3
Office machinery	357	\$1,053	7.6
U.S. goods (reimp.)	980	\$1,168	NA
Elect. lighting	364	\$895	15.8
Office machinery	357	\$813	7.6
Fabric. textiles	239	\$795	12.2
Furniture	259	\$742	22.9
Hshld appliances	363	\$725	33.3
Elec. ind. apparatus	362	\$664	15.8
Vegetables	016	\$639	3.1
Fruits	017	\$588	3.1
Fabricated metals	349	\$456	26.6
Non-ferrous metals	335	\$450	27.1
Average			19.2

NA—Not available.

Sources—Current Population Survey; Bureau of Economic Analysis.

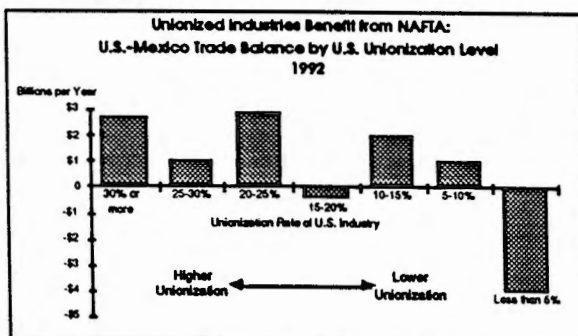
Unionization Rates: Major Exporting Industries, Major Importing Industries, and Private Sector



Conclusion—More Jobs for Unions

Expanded trade with Mexico as a result of NAFTA is likely to increase the demand for union workers. First, NAFTA is likely to increase the U.S. bilateral trade surplus vis-a-vis Mexico—increasing exports to Mexico more than imports from Mexico. Exporting industries are substantially unionized.

Second, NAFTA and the expansion in U.S.-Mexico trade that it engenders is likely to shift relative demand in the U.S. further toward products produced by industries that have relatively high unionization rates. The expansion of trade with Mexico over the past five years has boosted demand for products made by high-union industries. NAFTA is likely to continue this process, creating job opportunities in the U.S. in industries in which unions are relatively strong.



The magnitude of these factors can be gauged from the figure above, which presents the 1992 bilateral trade balance of the U.S. with Mexico by the proportion of workers covered by union contracts. The U.S. has substantial trade surpluses with Mexico in industries that employ substantial numbers of

union workers. There are only two categories in which the U.S. runs a trade deficit with Mexico: industries in which fewer than five percent of workers are covered by union contracts, and there is a small deficit in those industries with 15-20% of workers covered by union contracts.

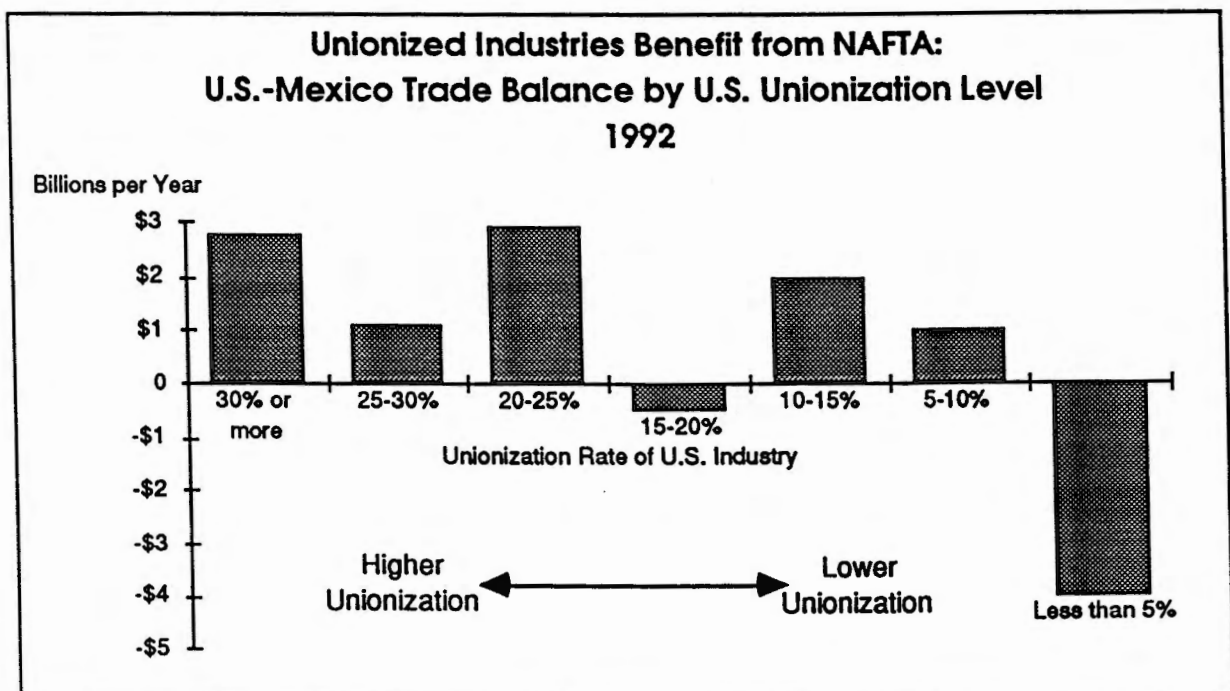
This analysis has used the distribution of trade with Mexico today to assess the likely consequences of further liberalization, through NAFTA, on the demand for union labor. There is one important factor, however, which leads this analysis to *understate* the benefits for union labor of NAFTA.

The distribution of trade with Mexico is now distorted by the legacy of Mexico's past protectionist policies. For example, industries—like motor vehicles and parts—that are relatively heavily unionized and are high on the import list rank as highly as they do only because of Mexico's current trade barriers: U.S. auto producers cannot export products to Mexico unless they import a larger quantity and value of products *from* Mexico. NAFTA is eliminating these Mexican non-tariff barriers—and removing Mexican tariffs on U.S. products that are on average more than twice U.S. tariffs on Mexican products.

Therefore as Mexico's tariff and non-tariff barriers come down the distribution of trade with Mexico will shift in a direction that will produce an even further increase in demand for those high-wage, high-skill, relatively heavily unionized industries in which Mexican demand for U.S. products is so strong.

UNION EMPLOYMENT AND NAFTA

- The U.S. runs a substantial surplus with Mexico in those industries that are heavily unionized. The fifteen industries that export the most to Mexico average 24.6% union—the private sector as a whole averages 12.7% union.
- The increase in trade with Mexico over the past six years has increased demand for U.S. workers in those occupations and industries with relatively high unionization levels.
- At present Mexican non-tariff barriers reduce U.S. exports to Mexico in high-wage high unionization industries like automobiles. NAFTA is removing these barriers. Under NAFTA Mexican demand for U.S. industrial products like motor vehicles, aircraft, electrical machinery, primary metals, construction machinery, and refinery products will increase even more.
- Thus NAFTA will increase U.S. firms' demand for workers in those occupations and industries that are heavily unionized.



Majority Leader Gephardt's Anti-NAFTA Speech: A Point-by-Point Rebuttal

U.S. Treasury, Office of the Assistant Secretary for Economic Policy
Council of Economic Advisers, Executive Office of the President

November 3, 1993

In his September 21 speech announcing his opposition to NAFTA, House Majority Leader Richard Gephardt invited further discussion: "Let the debate begin" were his closing words. In the speech he made four "factual statements" about U.S. Mexican trade and the provisions of the North American Free Trade Agreement, with its attached side agreements.

In spirit with the invitation to join debate extended by the Majority Leader, we dispute all four: we believe that they are all based on incomplete or inaccurate information.

(1) "During the upcoming debate, so-called 'facts' will be used by each side to sell their position. Let me take a minute or two to dispute two...points.... First, the proponents say the average Mexican buys \$450 of U.S. goods. This is simply false. The real number is closer to \$60."

Assessment: Not correct. The value of *per capita* exports to Mexico is more than \$450 a year. *Per capita* figures indicate the value of the Mexican market—the 82 million people in Mexico import \$40 billion a year of U.S. goods, a larger figure in proportion to their population than imports of U.S. goods by

much richer countries like Germany and Japan.

Why does it matter whether a Mexican consumer buys a U.S.-made washing machine or a Mexican electric utility buys a U.S.-made turbine to power its generators so the washing machine can run? In either case the Mexicans make productive use of the American goods. And in either case Mexican demand keeps U.S. industries operating closer to full capacity.

The \$495 *per capita* of U.S. exports to Mexico in 1992 were made up of the following products:

- \$168 of machinery
- \$64 of transport equipment
- \$39 of chemicals
- \$35 of primary metals
- \$34 of agricultural products
- \$28 of intermediate goods
- \$23 in "other goods"
- \$22 of non-ag. primary products
- \$22 of miscellaneous manufactures
- \$15 of fuels
- \$15 of precision instruments
- \$10 of apparel and accessories
- \$8 of furniture and fixtures
- \$4 of photographic equipment
- \$2 of fats and oils
- \$2 of prefab construction materials

(2) "*\$21 billion that are claimed as exports are really products we ship to maquiladoras and export plants for inclusion in products sent right back to us.*"

Assessment: Not correct. U.S. exports to maquiladoras and export plants are certainly not half of U.S. exports to Mexico, which amounted to \$40.6 billion in 1992. Exports to maquiladoras comprised 22% of U.S. exports to Mexico in 1992, compared to 32% in 1987. 83% of the growth in U.S. exports to Mexico in the last five years was for Mexican consumption—not for reexport.

Even if U.S. exports to maquiladoras are not counted, Mexico buys \$353 per capita from the U.S. The average European country buys only \$297 per capita. Mexico is an excellent customer with a strong preference for U.S. goods. It is clearly in our interest to expand trade with Mexico.

(3) "*[Proponents say] 700,000 jobs are created by the exports we ship to Mexico. Again the proponents are wrong....The real number of U.S. jobs related to U.S. exports is closer to 330,000 at most... because "360,000 of these [700,000] jobs...produce parts...shipped from U.S. factories to Mexico, assembled into finished products, and then immediately shipped back..."*"

Assessment: Not correct. First, Gephardt grossly overestimates the share of U.S. exports to Mexico that are components for final assembly, as pointed out above.

Second, Gephardt appears to believe that

jobs producing components for final assembly elsewhere are somehow not "real." But would the U.S. be better off if Mexican *maquiladoras* assembled German components into finished products that they then shipped to the United States? Would U.S. employment be unaffected if labor-intensive final assembly for the U.S. market took place in Malaysia, using components manufactured in Japan?

Gephardt's rhetoric implies that it is better to see both high-value component manufacture and low-value assembly processes move to the other side of the Pacific Ocean, rather than to do the high-value component manufacture in the U.S., where the labor force is skilled, and the low-value assembly in Mexico. But this is the wrong choice. Jobs producing high-value components in the U.S. for Mexican assembly are as "real" as any other jobs—and are at risk if Mexico returns to relative autarchy.

A somewhat more subtle—but equally incorrect—argument is that sales of U.S. machinery to Mexico are not "real" exports because they will be used to produce products that will then be sold to the U.S. In fact, Mexico spends relatively less on U.S. capital goods than do our other trading partners: capital goods account for 40 percent of U.S. exports in total, and only 33 percent of U.S. exports to Mexico. *good word*

A look at the capital goods which the U.S. actually exports to Mexico suggests that a large share of Mexican purchases of U.S. machinery and equipment are to serve Mexican needs. For example, Mexico in 1992 bought:

- \$1.6 billion of telecommunications equipment.
- \$750 million of measuring, testing, and

controlling equipment.

- \$500 million of electrical generating equipment.
- \$400 million of hospital, medical, and scientific equipment.

(4) *"Since 1980, real hourly compensation has fallen by 32% in Mexico, while manufacturing productivity has increased by more than 30%. Economists tell us that wages should roughly track productivity increases. Yet Mexican workers are producing more and getting less."*

Assessment: Not the full picture. The period covers the start of the debt crisis. Mexican real wages collapsed after 1982 as the Mexican economy was hit by the international debt crisis—a disaster for Mexico.



As the debt crisis eased and Mexico implemented its reform program, Mexican wages have grown rapidly as has productivity.

There is every reason to think that Mexican real wages will continue to rise in the future as overall productivity rises.

- Measured in dollars of constant purchasing power, Mexican real manufacturing wages collapsed between 1980 and 1987 as the debt crisis made its effects felt.
- Since 1987, Mexican manufacturing wages measured in constant dollars have been rising—standing in 1992 fully 130 percent above their 1987 levels.
- The rise in the dollar value of Mexican real wages in the past five years—in large part because of the program of liberalization of which NAFTA is a key component—has made it considerably less attractive to move operations to Mexico to take advantage of low-wage labor.
- The beginning of the rise in real wages in 1987 is the date at which the Salinas administration began its incomes policy—not consistent with Gephardt's claim that the administration's policy is "a conscious decision...to keep wages artificially low to continue to attract investment."

LDT
ASB
JES
SR

**POTENTIAL COSTS OF THE NORTH AMERICAN
FREE TRADE AGREEMENT**

STAFF STUDY

**PREPARED BY THE STAFF OF THE
JOINT ECONOMIC COMMITTEE**

**DAVID R. OBEY
CHAIRMAN**



NOVEMBER 1993

TABLE OF CONTENTS

Page

Sections

Summary	1
Implementation Over the Next Five Years Could Cost 30 Percent More than Administration Estimates	1
Costs Over the Next Decade Could Reach \$20.1 Billion	2
The Total Costs of NAFTA	4
Estimated Tariff Revenue Losses	5
NAFTA-Related Job Dislocation and Program Costs	9
Environmental and Infrastructure Costs on the Border	11
References	14

Tables

1. Possible Costs Associated with NAFTA Over the Next Decade	2
2. Estimates of Ten-Year Costs for NAFTA-Dislocated Workers	9
3. Estimated Border Infrastructure Costs	12
4. Financing GAP for Border Infrastructure	12

Figures

1. Mexican Imports have Grown Faster than World Imports	6
2. Projected U.S. Imports from Mexico	7
3. Historical Growth Rate Means Higher Revenue Loss	8

POTENTIAL COSTS OF THE NORTH AMERICAN FREE TRADE AGREEMENT

SUMMARY

As the debate over on the North American Free Trade Agreement (NAFTA) intensifies prior to the upcoming Congressional vote on the agreement, there is much controversy over how much NAFTA might cost American taxpayers, and how to pay for those costs.

There are two aspects to the debate on NAFTA-related costs: direct implementation costs over five years, and longer-run costs over the next decade. Implementation costs involve the budget offsets that must be found for lost tariff revenue and other costs associated with the NAFTA implementing legislation. The Administration has estimated these direct costs at approximately \$2.7 billion over five years, largely for lost tariff revenues.

The second set of costs are the total NAFTA-related costs over the next decade. Although these costs are not dealt with directly in the implementing legislation, they should be considered when the NAFTA decision is made. These costs include further tariff losses, training and income support for worker dislocation, and environmental and infrastructure costs.

This report presents the results of a Joint Economic Committee (JEC) staff review of both sets of costs. The review finds that direct implementation costs over the next five years may be \$868 million more than the Administration estimates. And total NAFTA-related costs that might have to be paid from the federal budget in three areas—lost tariff revenues, programs for dislocated workers, and environmental and infrastructure costs on the U.S. border—could require the Federal Government to come up with \$20.1 billion over the next decade.

Implementation Over the Next Five Years Could Cost 30 Percent More Than Administration Estimates

There are two reasons that the five-year implementation costs could be higher than the Administration estimates: an additional loss of tariff revenues of up to \$700 million and a lack of resources for all of the proposed U.S. contributions to the new North American Development Bank (NADBank).

Tariff losses are estimated by the Administration at approximately \$2.5 billion over four years. But the basis for this calculation may understate potential lost revenues, by understating the current trend in Mexican imports to the U.S.

The \$2.5 billion figure is consistent with about a 7 percent growth rate in Mexican imports; as tariffs fall, the revenues from those imports would be lost. But the actual growth in nonoil imports from Mexico is much higher, and the growth over the next five years could easily be 14 percent.¹ If this historical trend in Mexican imports continues over the next five years, then lost tariff revenues could reach \$3.2 billion, 30 percent higher than current estimates.

Another implementation cost is the proposed NADBank, which would cost the U.S. \$224 million in direct contributions over the next five years. But the United States is currently \$819 million in arrears to international financial institutions, making it difficult to see where the new funds will come from. The implementing legislation does allow for the first year's contribution of \$56 million, but the subsequent three years are not funded,

¹ This is the recent historical trend, without NAFTA.

meaning that \$168 million for the NADBank is not paid for in the Administration's proposal.

Finally, the approximately \$140 million, around \$28 million annually, allocated for dislocated workers seems extremely low. But this underestimate is not included in the five-year calculations, because the additional costs of the dislocation programs were not required as part of the implementing legislation. A full critique and alternative cost projections are presented below, in the discussion of potential ten-year costs, but it should be noted that the Bush Administration was calling for \$335 million annually for NAFTA-related dislocations, twelve times what the current implementation proposal calls for.²

Costs Over The Next Decade Could Reach \$20.1 Billion

Beyond these problems with the five-year implementation costs, the potential unmet costs related to NAFTA in three areas—lost tariff revenues, and new spending needed to pay for worker dislocation and environmental and infrastructure costs could reach \$20.1 billion in the next decade.

The JEC estimates are summarized in Table 1—full details for each area of concern are provided in the body of the report.

TABLE 1. POSSIBLE COSTS ASSOCIATED WITH NAFTA OVER THE NEXT DECADE

	10 Years ^a
Lost tariff revenues	\$8.8 billion
Dislocated workers	\$3.9 billion
Environmental and infrastructure gap	<u>\$7.4 billion</u>
Total possible costs	\$20.1 billion

a. These are gross estimated potential federal budget costs over a ten-year period; they do not take into account any proposed revenue offsets.

There are three reasons that NAFTA costs could reach this higher level.

1. Tariff losses. The Congressional Budget Office (CBO) has estimated lost tariff revenue at \$2.5 billion over five years, as tariffs are phased out on Mexican products entering the U.S. But, as discussed above, CBO may have underestimated this figure, by underestimating the growth in Mexican imports to the U.S. If imports from Mexico continue to grow in line with recent trends, then more tariff revenues will be lost. This loss could amount to \$8.8 billion over the next decade.³

2. Dislocated workers. The Administration has proposed a "bridge" program for workers who lose their jobs due to NAFTA, budgeted at a projected total cost of approximately \$140 million, or \$28 million annually. This would provide services to only 5,175 workers displaced by NAFTA annually, or about 51,750 over ten years.

The program would be phased out if and when a new, future "comprehensive" program is implemented.⁴ As noted above, this annual figure is far less than the Bush

² *Report of the Administration on the NAFTA and Actions Taken in Fulfillment of the May 1, 1991 Commitments*, September 18, 1992.

³ Total tariff losses would rise in the second five years, as the cumulative effect of phasing out tariffs takes hold and the U.S. and Mexican economies grow.

⁴ Of course, new revenues will still have to be found to pay for additional NAFTA dislocations that would be covered by this program.

Administration's proposal to reserve \$335 million annually for NAFTA-related dislocations, twelve times the Administration's annual proposed budget.⁵

The JEC staff estimates that costs for an adequate program for NAFTA dislocations over the next decade could reach \$3.9 billion. Three factors could drive up the costs of NAFTA dislocations to this level—greater job losses, higher *per capita* program costs, and providing funds to serve a higher percentage of dislocated workers.⁶

- *Total job losses:* The Administration is using a conservative figure to estimate possible job losses from NAFTA. A recent JEC staff review found that as many as 500,000 workers could lose their jobs due to NAFTA over the next decade. If more dislocated workers need services than the Administration is predicting, it will increase the costs significantly.⁷
- *Costs for each worker.* The Administration is using a modest *per capita* figure in estimating costs of dislocation. They estimate an average federal cost of \$7,260 per participant for the "bridge" program, covering both training and income support. But earlier Department of Labor estimates for training and income support in the future "comprehensive" program are higher. Using those figures, an adequate full-year program could cost \$12,940 per worker.
- *Serving a higher percentage of dislocated workers.* The implementation plan's figures suggest that a relatively low percentage of eligible workers will actually get training and income support—around 26 percent of direct NAFTA dislocations.⁸ But the average percentage of participants getting training in the current Trade Adjustment Assistance (TAA) program, on which the bridge program is modeled, is around 60 percent. Using that percentage will increase total costs. In addition, current proposals do not provide adequate funds for workers who lose their jobs due to indirect NAFTA impacts on the surrounding community and local economy.

3. Environmental and Infrastructure Costs. The Administration has estimated that approximately \$8 billion over the next decade will be needed for specific environmental costs on the U.S.-Mexico border. The JEC staff has estimated that the direct environmental and highway costs could easily reach \$11.3 billion, and that there is a potential \$7.4 billion "financing gap" in meeting these costs over the next decade.⁹

This gap results from several factors.

- *Costs of Environmental Cleanup and Regulation.* The Administration figures do not account for the necessary cleanup of existing toxic and solid waste hazards, or for the future costs of environmental regulation. These costs could add an additional \$800 million over ten years.
- *Costs of New Highways.* New highway construction and border crossing improvements will be needed to handle increased traffic for goods and people. These costs could easily reach \$2.5 billion over ten years in the U.S.

⁵ See footnote 2.

⁶ These are only direct program costs for NAFTA-dislocated workers. They do not include any compensation for the downward wage pressure that NAFTA may cause for employed workers, which could be over one percent of full-time manufacturing compensation.

⁷ Joint Economic Committee staff report, "Potential Economic Impacts of NAFTA: An Assessment of the Debate," October 1993.

⁸ Experience in some states, and the Administration's own earlier assumptions about the "bridge" program, suggest that an even higher rate could be used—around 90 percent.

⁹ In some estimates, these financing gaps will be covered by an unspecified mix of private, state, and local spending. But if these sources are not forthcoming, then the federal budget may have to bear these costs, or the problems will not be resolved.

- *Financing Gaps.* The Administration hopes to have \$2 billion available in financing from the NADBank, leveraged by a \$224 million contribution from the United States. The Administration's plan does provide NADBank financing for the first year, but not for subsequent years. As noted earlier, the U.S. is \$819 million in arrears to international financial institutions. If the full NADBank contributions are not provided, then the projected \$2 billion in leveraged capital will fall short by \$1.5 billion, adding to the financing gap. Even if the Administration persuades Congress to support the new bank, it will be hard to get further funds in later years, especially when the United States is behind in its obligations to existing international financial institutions.

The Total Costs of NAFTA

Although the debate over the costs of NAFTA has concentrated on an implementation cost of around \$2.7 billion over five years, those five-year costs could be close to \$900 million higher than projected. And the total costs that could fall on the federal budget over the next decade could reach \$20.1 billion. These higher potential costs come mainly from higher estimated tariff losses, allowing for more comprehensive services to a higher number of dislocated workers, and a financing gap for environmental and infrastructure needs.

The estimates provided here are only for direct possible revenue losses or expenditures by the federal government. They do not include the total possible economic costs of NAFTA, especially the ripple effects on communities and workers indirectly affected by NAFTA job losses, or the potential wage and income losses due to increased downward pressure on U.S. wages, both of which are plausible outcomes from NAFTA. Adding estimates for these factors would add substantially to the total potential costs of NAFTA.¹⁰

Economists often defend free trade by saying that there are more winners than losers, and that some of the gains that might be won under free trade should go to helping the losers. But under current proposals, it does not appear that enough resources are being set aside to make up for lost tariff revenue, much less to adequately help the losers from NAFTA or correct the problems that it might cause. A failure to provide these resources breaks the implicit political bargain that underpins free trade—some percentage of the projected gains will be used to help the losers and address problems created by the agreement.

The remainder of this report provides detailed descriptions of the JEC staff calculations for tariff revenues, dislocated workers, and environmental and infrastructure needs.

¹⁰ See the recent JEC staff report, "Potential Economic Impacts of NAFTA: An Assessment of the Debate", October 1993.

ESTIMATED TARIFF REVENUE LOSSES

Enactment of NAFTA will result in a loss of revenues to the U.S. Treasury because of the lower tariff rates on Mexican imports to the United States. CBO has estimated the net loss of revenue due to NAFTA at \$2.5 billion for the 1994-98 period,¹¹ but JEC staff calculations show that the expected revenue losses could reach \$3.2 billion, or \$700 million higher over five years.

Further, JEC staff calculations find that tariff losses could accelerate in later years, leading to as much as \$8.8 billion in lost tariff revenues over the next decade. The lower estimates of tariff losses understate the problem by understating the current likely trend in Mexican imports to the United States. Extrapolation from the actual trend produces the higher estimated tariff losses.

The Budget Act sets several important scorekeeping rules that come into play in estimating tariff losses from NAFTA. First, the estimate must take into account any changes in law already scheduled for the next five years, regardless of NAFTA, to establish a baseline.¹²

Second, according to the budget scorekeeping rules, early each year CBO must make projections for the next five fiscal years on several key measures of the overall condition of the U.S. economy. In making cost estimates for proposed legislation for the rest of that year, CBO takes its projections of GDP growth, unemployment, inflation and interest rates as fixed and not alterable by any subsequent proposed legislation. The scorekeeping rules do not require, however, that CBO ignore clear historical trends in microeconomic data that directly apply to the legislation under consideration.¹³

Despite the requirement of fixed macroeconomic assumptions, the microeconomic assumptions of the baseline revenue estimate—what would happen under current law—are important. The larger the amount of goods and services assumed to be imported from Mexico under current law and tariff structure, the larger the resulting loss of revenues as the effective tariff rate on these imports is cut under NAFTA.¹⁴

¹¹ Congressional Budget Office, "CBO Estimates of Changes in Revenue and Direct Spending Associated with NAFTA, 1994-1998," November 4, 1993.

¹² Roughly one-sixth of imports from Mexico now enter duty free under the Generalized System of Preferences (GSP) program designed to assist developing countries such as Mexico. Since the GSP program is authorized only through the end of calendar 1994, an estimate of revenue losses under NAFTA must consider the potential additional baseline revenue that would come to the United States following an expiration of GSP.

¹³ For example, in projecting GDP, CBO needs to consider the prospects for total imports, but not necessarily imports from specific countries. When it becomes necessary to focus on Mexico, the trend for Mexico need not match the total so long as the relationship is plausible. Indeed, it would be reasonable to assume that U.S. imports from Mexico might be raised by NAFTA, but it also would then be necessary to take account of the possibility that imports from other countries might be lower. These assumptions could still comply with the budget scorekeeping rule that the budget estimate for the legislation be consistent with the original GDP forecast—and that it not assume a net change in production or employment in the U.S. economy even though gross changes in imports or employment would be likely to occur.

¹⁴ Of course, in the transition period when tariffs are falling but are above zero, the amount of customs duties collected is affected by offsetting factors: a decline in the tariff rate, but an increase in the volume of goods on which some tariff is paid. In principle, the duties collected could be unchanged or even rise. Note, however, that NAFTA is estimated to eliminate tariffs on 60 percent of dutiable goods in 1994 and on another 9 percent by 1998, with the tariff reductions accounting by then for about 85 percent of the value of tariffs under current law. Given the already low level as well as the steep decline in tariff rates, the possibility of substantial offsets to loss of customs duties resulting from an increase in the volume of imports is unlikely. First, the adjustment would have to be implausibly large and rapid. Estimates of the effect of NAFTA on trade are quite uncertain and responses large enough to have a noticeable effect on tariff revenues, at very low tariff rates, are dubious. Second, this offset would occur only if the increased imports of goods still subject to some (though a declining) amount of tariff were substitutes for domestically produced goods. Of course, some such substitution is likely. However, it is also likely that some increased imports from Mexico will be substitutes for imports from other countries that face higher U.S. tariffs. Increased imports from this source would actually result in a greater loss of customs duties than if the volume of imports were unchanged.

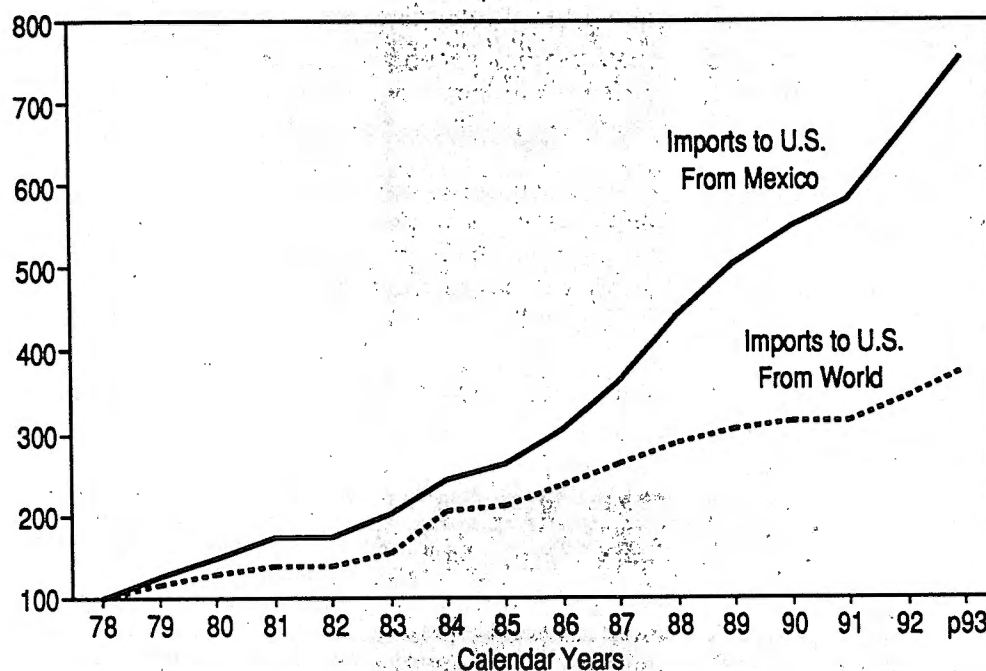
Taking the revenue losses as projected by CBO, one can impute the growth rate that CBO anticipated for imports from Mexico in the absence of NAFTA. They appear to have used a growth rate of about 7 percent. This rate is within a consensus range for U.S. imports from the world over the next five years, assuming CBO's baseline GDP forecast.

An assumption that U.S. imports from Mexico would grow at the same rate as imports from the world would be appropriate if past experience showed that they were growing at roughly the same rate. However, that is not the case. For the last fifteen years, U.S. imports from Mexico have grown much faster than imports from the world at large.

As Figure 1 shows, in the period from 1978 to date, U.S. nonoil imports from Mexico have dramatically outstripped imports from the world.¹⁵ Although the growth rate of imports from Mexico varied from year to year, the increase exceeded total import growth from the entire world in 14 of the last 15 years.

FIGURE 1

Mexican Imports Have Grown Faster Than World Imports Index, 1978=100



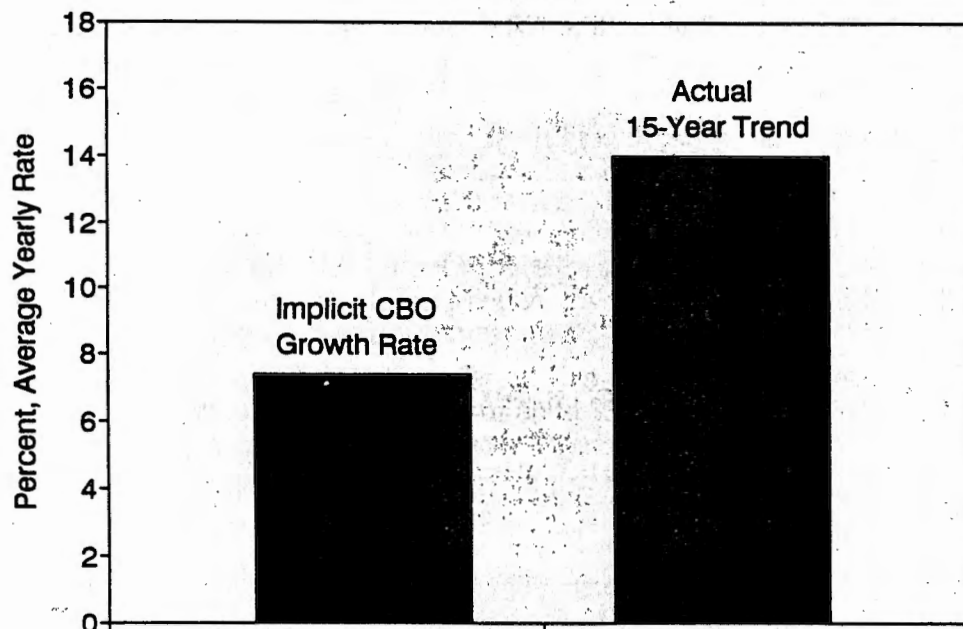
Source: Census Bureau data on merchandise trade (customs valuation).

To assume that imports from Mexico will grow only at the rate of all imports, as CBO seems to do, ignores this historical evidence and results in a lower estimate of lost tariff revenues. As Figure 2 shows, using the actual historical growth rate for Mexican imports to the United States gives a much higher estimate—almost double the impact of using the total world growth rate.

¹⁵ Source data for these calculations are the merchandise trade statistics from the Bureau of the Census, Foreign Trade Division. Because of accounting changes, data prior to 1978 are not directly comparable.

FIGURE 2

Projected U.S. Imports From Mexico 1992-1998



Source: JEC calculations; non-oil imports.

Total imports from Mexico would reach \$70 billion by fiscal 1998 if they continue to increase at their 15-year trend rate, but only \$51 billion if, as assumed by CBO, they slow down to roughly half that pace.

To understand the significance of the import growth rate on the revenue estimate, it is useful to consider FY1998. CBO has reported that NAFTA will reduce duties on imports from Mexico by about 85 percent by 1998.¹⁶ Thus, NAFTA will lower the effective tariff rate on 1998 imports from Mexico by 1.8 percentage points.¹⁷ Taking that difference in tariff rate times the almost \$20 billion difference in CBO and JEC staff projections of 1998 dutiable non-oil imports from Mexico gives \$350 million difference between projections of customs duty loss for that year alone.¹⁸

Using the same type of calculations for all five years of the budget projection period implies a total revenue loss from NAFTA of up to \$3.2 billion—\$700 million greater than the CBO estimate of \$2.5 billion, as shown in Figure 3.

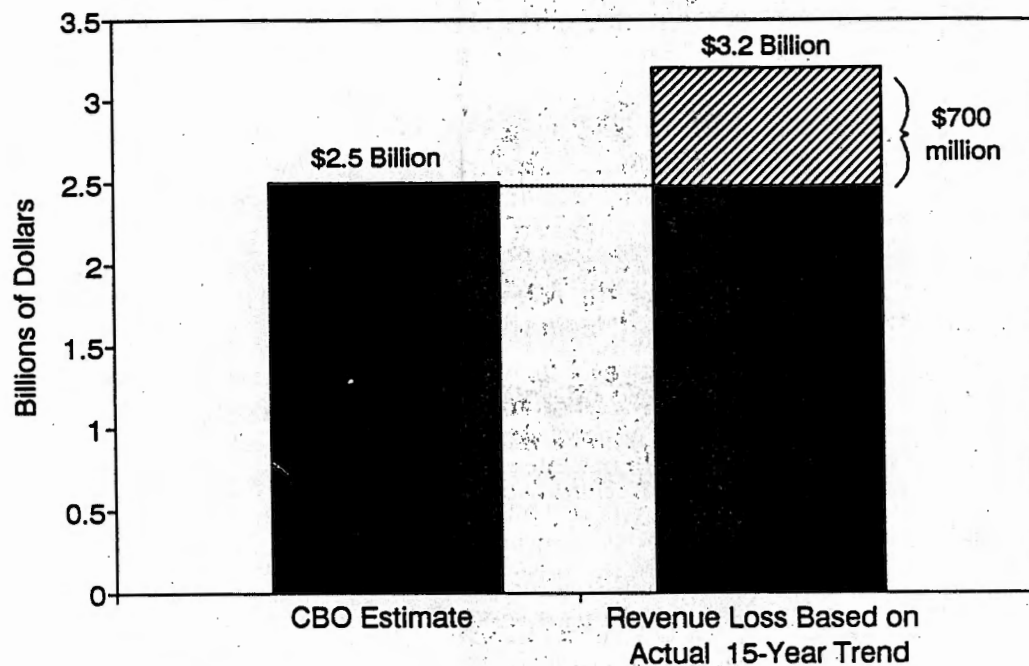
¹⁶ Congressional Budget Office, *A Budgetary and Economic Analysis of the North American Free Trade Agreement* (July 1993), p. 9.

¹⁷ The estimated effective tariff rate in FY93 is about 2.1 percent, calculated from estimated customs duties collected on imports from Mexico divided by estimated customs valuation of imports, adjusted for GSP goods.

¹⁸ The effect on total revenues is only about three-quarters of that amount, about \$260 million, because some of the revenues are regained in higher taxes from other sources. Thus, instead of the \$672 million in tariff revenue losses estimated by CBO for FY1998 based on a slow non-NAFTA growth rate, there could be losses of up to \$930 million, with a projection of imports from Mexico at the fifteen year trend rate.

FIGURE 3

Historical Growth Rate Means Higher Revenue Loss Fiscal Years 1994-98



Source: JEC calculations.

Extending the revenue loss for a 10-year period requires allowing for further growth in the annual loss from its amount in the fifth year, as the U.S. and Mexican economies grow, and allowing for the remaining phaseout of tariffs. By this estimate, the 10-year loss of tariff revenues to the United States plausibly could be as much as \$8.8 billion.¹⁹

¹⁹ No comparison is provided with CBO for the 10-year figure, as CBO does not provide such estimates.

NAFTA-RELATED JOB DISLOCATION AND PROGRAM COSTS

The Administration estimates that its "bridge" program for workers displaced during the first five years of NAFTA would cost about \$140 million. This may underestimate the potential extent of displacement and the potential costs of programs aiding displaced workers. There are three factors that could increase spending: the numbers of workers displaced due to NAFTA; the length and cost of appropriate training; and the length and cost of income support.

1. Participants. The Administration estimate of workers displaced by NAFTA is taken from the CBO estimate of 200,000 displaced workers over ten years. However, this estimate is well below other plausible estimates cited in the JEC's recent study of NAFTA models, which concluded that 500,000 workers displaced due to NAFTA is "a realistic possibility."

As Table 2 shows, CBO reduces that pool from 200,000 to a projected 51,750 who will actually get training and income support. This is only 5,200 workers per year, or 26 percent of all workers who CBO estimates will be displaced due to NAFTA. Under these assumptions, 3 out of 4 NAFTA-displaced workers would not be covered.

TABLE 2. ESTIMATES OF TEN-YEAR COSTS FOR NAFTA-DISLOCATED WORKERS

	Estimate	
	Based on CBO	By JEC
1. NAFTA-Related Dislocations	200,000	500,000
2. Total Receiving Services ^a	51,570	300,000
3. Annual Average Cost per Participant: Total	\$7,263 ^b	\$12,940
a. Training	\$1,579	\$ 5,200 ^c
b. Income support	\$5,684	\$ 7,740 ^d
4. Total Ten-Year Cost (line 2 x line 3)	\$375 (million)	\$3.9 (billion)

a. CBO assumes 50 percent of those displaced will be eligible for existing TAA. Of that 50 percent, 45 percent actually receive services; some will get income support and training, others will get only a shorter period of income support. Of the remaining 50 percent ineligible for existing TAA, CBO estimates that less than 7 percent will get services under the new provision relating to plant relocations to Canada or Mexico. JEC assumes that 60 percent of those dislocated will get full training and income support, which approximates the current experience under TAA, as cited by CBO.

b. Average of two groups, those receiving both training and income support, and those receiving only a shorter period of income support.

c. JEC assumes 52 weeks of training, based on the DOL draft "comprehensive program."

d. At current average level of \$180 weekly average unemployment benefits, JEC assumes a federal share of income support of 43 weeks, with the balance paid by the regular state unemployment insurance program.

But around 60 percent of current TAA participants are in training. JEC uses this 60 percent figure to calculate possible numbers of program participants. Assuming a 60 percent enrollment rate for 500,000 dislocated workers, yields 300,000 trainees over ten years.

2. Length of training. The Administration "bridge" proposal calls for 39 weeks of training at a cost of \$4000 for those actually getting training. But present Administration plans for the "comprehensive workforce investment strategy" to go into effect in mid-1995 anticipate an average length of training of 52 weeks. This corresponds closely to the median length of training in the current TAA program, which is 50 weeks. If this

quality and quantity of training were to be used for the initial cohort of displaced workers under the bridge program, training costs per participant cost would be about \$5,200.

3. Length of federal income support. The Administration bridge proposal assumes that around 30 of the 39 weeks spent in training would be covered under the bridge program financing. The first nine weeks would be supported by regular State UI, due to the requirement that workers enroll by the 16th week of their unemployment spell. If training is increased to 52 weeks, as outlined for the comprehensive program, then income support would be needed for 43 weeks, with a resulting increase in federal expenditures.

4. Potential costs for dislocated workers. As Table 2 shows, a higher total spending figure for NAFTA-dislocated workers than projected by the Administration results from considering these three factors: higher numbers and serving a greater percentage of dislocated workers, higher *per capita* program costs in training based on the Administration's own draft "comprehensive" program, and a higher amount of income support in order to allow for the full training period of 52 weeks.

Table 2 shows the range of possible costs. The weekly costs for training are taken from the Administration's figures, and applied to the 52 week training period anticipated for the new comprehensive program for all dislocated workers. If the program has to train 300,000 NAFTA-displaced workers over ten years, it could require total spending of \$3.9 billion.

ENVIRONMENTAL AND INFRASTRUCTURE COSTS ON THE BORDER

1. Environmental Costs. The Treasury Department (Shafer, 1993) estimates that \$8 billion is needed over 10 years for water supply, wastewater treatment, and municipal solid waste infrastructure on both sides of the border.²⁰ This is somewhat of a midpoint in estimates; other sources estimate between \$6.5 billion and \$14 billion over ten years.²¹ It includes capital and operation and maintenance (O&M) costs necessary to control new flows of pollution.

However, it excludes cleanup costs due to wastes that have been improperly disposed of in the past. Cleanup costs in the border region, particularly on the Mexican side, are likely to be substantial due to inadequate pollution control over the last decade (AMA, 1990, Sanchez, 1990, GAO, 1991a, 1992). The Sierra Club (1993) has estimated the cleanup cost of municipal solid waste in the border region to be \$114 million,²² and the cost of hazardous waste cleanup to be \$417 million,²³ giving the total estimated cleanup costs shown in Table 3 of \$0.53 billion.²⁴

The \$8 billion figure does not include additional public sector costs for environmental regulation (monitoring, permitting, inspections, enforcement activities). The state of Texas has estimated these costs on its side of the border over the next 10 years. These costs include regulation for water supply, wastewater, solid waste, air quality, and hazardous waste.²⁵ Applying this estimate of regulatory costs to the U.S. population on the Texas border yields a per capita regulatory cost, which is then multiplied by the total border population for a regulatory cost of \$219 million for the United States.²⁶ Another regulatory cost, the U.S. share of expenses for the Border Environment Cooperation Commission, estimated at \$50 million over 10 years (Shafer, 1993), raises the total U.S. regulatory costs to \$269 million.

As Table 3 shows, a conservative estimate of total 10-year environmental costs for the border region is \$8.8 billion.²⁶

²⁰ It is often said that these costs are not directly attributable to NAFTA. However, they are a direct result of increased U.S.-Mexico trade and investment integration in the 1980s without concurrent increases in public infrastructure and environmental regulation.

²¹ The U.S. Section of the US-Mexico Business Council (1993) and the Sierra Club (1993). The Council report estimates the capital costs of watersupply, wastewater, municipal solid waste, and hazardous waste infrastructure to be \$6.5 billion over 10 years. The Sierra Club (1993) estimates that \$14.0 billion is needed for watersupply, wastewater, municipal solid waste, hazardous waste, air quality, habitat conservation, and environmental management over 10 years.

²² The Sierra Club (1993, p. 18) assumes that 20 percent of the municipal solid waste dumped informally in the last 10 years is recoverable and poses a threat to human health. The collection and disposal costs are \$48 million. The Sierra Club assumes that 50 percent of municipal solid waste put in open air dumps is a threat to human health. The costs of removal and sanitary landfill is estimated to be \$66 million. The total cost of cleanup of informal dumps and open air dumps is \$114 million.

²³ The Sierra Club estimates the hazardous waste generation in the Mexican border region based on maquiladora exports to the US. An estimate of waste dumped illegally in 1991 is derived by using a state of Texas estimate of annual hazardous waste generation by maquiladoras of 40,000 tons less the 2,600 tons returned to the US. To determine hazardous waste dumped illegally since 1970, a constant ratio of maquiladora exports to hazardous waste dumping is assumed. This yields 200,832 tons of hazardous waste. Assuming that 1 ton of hazardous waste contaminates 16 tons of soil and that the cleanup cost of contaminated soil is \$130 ton yields the total cost estimate.

²⁴ These costs exclude any cleanup costs of groundwater contamination and of sediments in surface waters. Since it is extremely likely that such contamination is present in the border region (Perry and others, 1990, National Toxic Campaign Fund, 1991), this estimate of cleanup costs is conservative.

²⁵ These costs are from the Spring 1993 draft of the Texas report, and only the Executive Summary of the Summer 1993 report is available. However, the Texas estimates of all environmental infrastructure costs are very close in the two reports.

²⁶ The U.S. regulatory cost estimated by the state of Texas is \$59.349 million, and the U.S. population on the Texas border is 1,550,250 persons (EPA 1992, p. II-7). This yields a per capita cost for the U.S. of \$38.28. This per capita estimate, multiplied by the total U.S. border population of 5,722,694 persons, yields the total regulatory cost.

²⁶ Some environmental costs are not included in the JEC estimate. For example, the estimated costs do not include

TABLE 3. ESTIMATED BORDER INFRASTRUCTURE COSTS (in billions of U.S. Dollars
10 years)

	Total Cost
Control of pollution flows:	8.0
Water supply	
Wastewater	
Municipal Solid Waste	
Cleanup of existing pollution:	0.53
Solid Waste	
Hazardous Waste	
U.S. Environmental Regulation ^a	0.27
Total Environmental Cost	8.8
U.S. Highways	2.5
Total Environmental and Highway Cost	11.3

Source: GAO (1991b), Shafer (1993), Texas (1993b), Sierra Club (1993), JEC calculations.

a. Includes new regulatory costs and U.S. expenses for Border Environmental Cooperation Commission.

2. Highway Costs. Highways are another type of border infrastructure that is directly related to increased trade and investment between Mexico and the United States. The vast majority of the value of U.S.-Mexico trade is transported via highways (Texas, 1993b), and the state of Texas estimates that \$2.0 billion is needed over the next 10 years for existing and projected highway costs on the U.S. side of its border only. According to a GAO (1991) survey, the costs of accommodating current traffic levels and a doubling of border traffic in New Mexico, Arizona, and California would be \$500 million; adding this to the Texas figure gives the total highway cost estimate of \$2.5 billion shown in Table 3.

3. Estimate of Financing Gap. The total cost of \$11.3 billion is shown in the first row of Table 4. According to the Treasury Department (Shafer, 1993), the U.S. and Mexican Governments have committed to \$1.4 billion in grants for the border region (\$700 million from each country). Mexico is also expected to receive \$2 billion in new funding from the World Bank and the Inter-American Development Bank (IDB).

TABLE 4. FINANCING GAP FOR BORDER INFRASTRUCTURE (in billions of U.S. Dollars
over 10 years)

1. Total Cost	11.3
2. Available Financing	3.9 to 5.4
3. Financing Gap	5.9 to 7.4

Source: Shafer (1993), JEC calculations.

In addition, the proposed North American Development Bank (NADBank) is expected to provide \$2 billion in financing.²⁷ This will require a total of \$450 million in paid-in capital (\$225 million from each country).

the capital costs of air pollution control infrastructure and new construction of hazardous waste disposal facilities because they are paid for by the private sector. However, the internalization of these costs depends on effective public sector regulation.

²⁷ Up to 10 percent of NADBANK capital is for community adjustment and investment outside the border region.

But the source of the U.S. funding for capitalization of NADBank is highly uncertain, given that the U.S. is currently \$819 million in arrears on commitments to international financial institutions. The Administration's proposal does allow for the first year's contribution to NADBank of \$56 million, which is expected to leverage \$500 million. But no financing is provided in the outyears.

If the Administration's financing assumption is accepted, and revenues to start NADBank are found in the outyears, then the maximum available financing is \$5.4 billion (U.S. and Mexican government grants plus World Bank/IDB plus NADBank), as shown in the second row of Table 4. If NADBank is not funded beyond the first year, then only 25 percent of the additional \$2 billion—\$500 million—will be leveraged, leaving a \$1.5 billion gap. The available financing will then only be \$3.9 billion.

It may be difficult to find additional funds at a time when total discretionary spending may have to be cut substantially just to meet the budget caps already enacted. In addition, the United States is already behind on existing commitments to other international financial institutions.

The third row of Table 4 shows the financing gap for border infrastructure, a \$5.9 billion gap if total NADBank financing is available and a \$7.4 billion gap if further NADBank financing is unavailable. This gap would have to be met by a combination of private, Mexican, state and local, or U.S. federal funding.

It is likely that much, if not all, of this gap could have to come from the federal government. Little private financing may be available, because much of the activity to be financed will not generate revenues that would provide adequate returns to private investors. The Mexican government may not have additional funds, and economically disadvantaged U.S. communities like those on the border have had difficulty in the past in being able to afford loans for infrastructure such as state revolving loan funds.²⁸

²⁸ Copeland, Claudia, 1993. *Clean Water Act Reauthorization*, Congressional Research Service Issue Brief 93013, p. 3.

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Congress of the United States
Joint Economic Committee

Room SD-G01 Dirksen, Washington, D.C. 20510
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David R. Obey, Wisconsin, *Chairman*

103rd Congress

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Joint Economic Committee Study Warns of \$20 Billion "NAFTA Deficit"

New Analysis Finds that Long-Term Budget Costs of Free Trade
Agreement Will Likely be Much Greater than Predicted

WASHINGTON, D.C. -- Congressman Dave Obey (D-WI), Chairman of the Joint Economic Committee, released a new JEC staff study today that calculates the potential budget costs of the North American Free Trade Agreement (NAFTA). The study finds that the total amount of NAFTA-related costs that would have to be paid from the federal budget over the next decade could reach as high as \$20.1 billion. Additionally, the direct costs of implementing NAFTA over the next five years could be 30 percent higher than the current estimates being used by the Administration.

The new JEC study examines two separate considerations of future NAFTA-related costs. The first is a calculation of the budget offsets that must be found in order to replace lost tariff revenues and other costs connected directly to the NAFTA implementing legislation. The second is a prediction of the total NAFTA-related costs over the next decade -- including expenses that are not directly part of the implementing legislation such as further tariff losses, training and income support for dislocated workers, and environmental and infrastructure costs.

Five-Year Cost Differences

The Clinton Administration has estimated that the direct NAFTA implementation costs will be approximately \$2.7 billion over a period of five years. But the JEC study finds that this figure is based on low tariff loss estimates and does not include the budget shortfall for the proposed U.S. contribution to the new North American Development Bank (NADBank). The Administration figure understates potential lost tariff revenues by as much as \$700 million because it is not based on historical growth rates of Mexican imports to the U.S. The proposed NADBank would require U.S. contributions of \$224 million over the next five years, but the current implementing legislation only includes \$56 million of this total. Because the U.S. is already \$819 million in arrears to international financial institutions, and that figure has more than doubled over the past fiscal year, it is difficult to see how this gap can be closed.

By combining the additional lost tariff revenues and the potential deficits in NADBank contributions, the JEC study finds that the total five-year costs connected directly to the NAFTA implementing legislation will be approximately 30 percent higher than the Administration estimate.

The JEC study also argues that the Administration allocation of \$138 million, (28 million annually) for dislocated worker programs is extremely low, but this underestimate is not included in the JEC five-year calculations, because the additional costs of worker dislocation programs were not immediately required as part of the implementing

[more]

legislation. By contrast, the Bush Administration originally proposed \$335 million a year for NAFTA-related dislocated worker programs, more than twelve times what is now being suggested.

Ten-Year Cost Estimates

The ten-year cost estimates of the JEC study are based on three significant factors -- further lost tariff revenues, additional dislocated worker program costs, and NAFTA related environmental and infrastructure expenses:

TOTAL BUDGET COSTS OF NAFTA OVER THE NEXT DECADE

Lost Tariff Revenues	\$8.8 billion
Dislocated Worker Assistance	\$3.9 billion
<u>Environmental and Infrastructure Gap</u>	<u>\$7.4 billion</u>

TOTAL COSTS OVER TEN YEARS: \$20.1 billion

The \$8.8 billion tariff loss estimate from the JEC study is based on the rate of growth of Mexican imports over the past fifteen years projected over the next decade. Three factors drive the cost for an adequate dislocated worker program to \$3.9 billion -- the probability of greater job losses than expected, higher *per capita* program costs, and the cost of providing assistance to a higher percentage of affected workers than under current programs. The \$7.4 billion in environmental and infrastructure costs represents a "financing gap" between available grants and loan funds and the likely costs for pollution control, border cleanup, and new roads and border crossings.

The JEC study cost predictions are conservative -- estimates are made only for direct possible revenue losses or expenditures by the federal government. The total social and economic costs of NAFTA could be even higher if other factors are considered, especially the ripple effects on workers and communities indirectly affected by NAFTA and the potential downward pressure on U.S. wages.

"My purpose in releasing this analysis is not to persuade anyone on how they should vote on NAFTA. My purpose is to make sure that members of Congress have a full understanding of what we will have to pay out of the federal treasury should NAFTA be passed," Obey remarked. "No one should vote for NAFTA unless they are prepared to cough up the money necessary to make all the promises a reality," he added.

"Many economists who have endorsed NAFTA have done so with the expectation that Congress will take sufficient action to mitigate the short and long term impact of the agreement, but it's my judgement that many of the same members of Congress who will vote for NAFTA on the 17th are simply not prepared to vote to appropriate the funds that are necessary to meet NAFTA's true costs," Obey said.

NAFTA and the Employment of Union Workers in Manufacturing

Council of Economic Advisers, Executive Office of the President
Office of the Assistant Secretary for Economic Policy, U.S. Treasury

November 8, 1993

Summary

The growth of manufacturing net exports to Mexico over the past eight years has been heavily concentrated in unionized industries. As U.S. net exports in unionized manufacturing sectors have grown, increased trade with Mexico has increased the demand for and expanded the employment opportunities of union workers. There is every reason to believe that passage of NAFTA would continue the expansion of the U.S. manufacturing trade surplus with Mexico, and would further increase the demand for U.S. unionized workers.

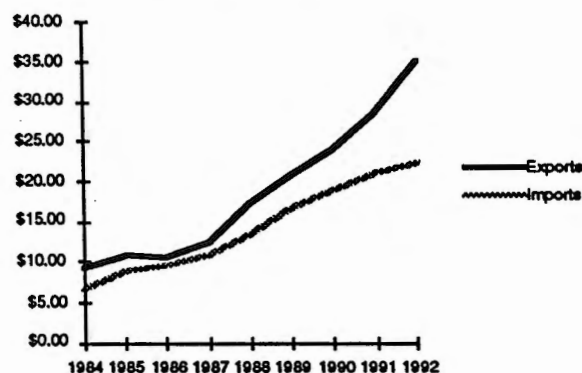
NAFTA and Union Workers

Many critics, including some connected with unions, have argued that NAFTA would reduce employment and wages in the U.S., especially among union members. Our experience in the last five years has shown just the opposite: that more open trade with Mexico has created more union jobs. The products in which Mexican demand for U.S. goods is most intense—and in which Mexico is least competitive—are precisely those high-wage capital-intensive heavy manufacturing industries which are heavily unionized.

The figure below shows the growth of manufacturing trade with Mexico—and the expansion of U.S. net exports in manufacturing—since the mid-1980s. In the mid-1980s Mexico began an historic reform of its economy. The government implemented a major macroeconomic stabilization program, reduced import barriers, and privatized a number of state sectors. The economic

reforms which Mexico began, and which are still underway, have been compared by some analysts to the reforms undertaken in Hungary after the collapse of the iron curtain.

Manufacturing Exports and Imports to Mexico (Billions)



The surplus in U.S. manufacturing trade with Mexico has grown rapidly since the beginning of Mexican reform in 1986. In 1992, U.S. manufacturing exports to Mexico reached \$35.3 billion, while manufacturing imports from Mexico amounted to \$22.4

billion.

In 1986 high-unionization manufacturing industries—those with unionization rates of 20 percent or more—exported \$4.9 billion worth of products to Mexico. Moderate-unionization manufacturing—with unionization rates of between 10 and 20 percent—exported \$4.6 billion worth of products to Mexico. Low-unionization industries—with unionization rates under 10 percent—exported \$1.1 billion worth of products to Mexico.

Between 1986 and 1992, the exports of high-unionization industries grew by \$13.8 billion, while the exports of moderate-unionization manufacturing industries grew by only \$9.2 billion and the imports of low-unionization manufactures grew by only \$1.7 billion. Expanding exports provided a significant boost to demand for products made by unionized workers.

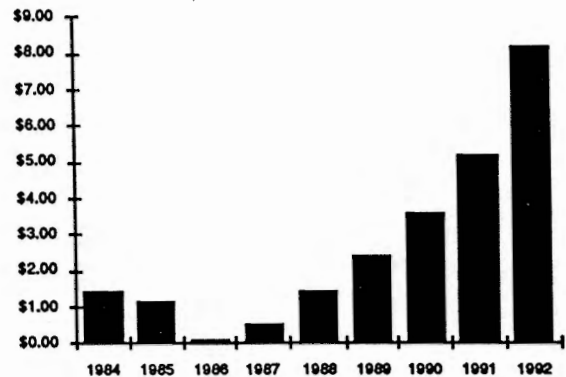
Expanding exports in high-unionization industries were not offset by imports in other high unionization categories. Net exports in the high unionization category grew from less than one hundred million dollars in 1986 to more than \$8.2 billion in 1992.

The figures below show the growth of net exports in these categories of manufacturing industry—high, moderate, low unionization—since the mid-1980s. The pattern is clear: the boom in manufacturing net exports has been a boom in sectors with more union workers.

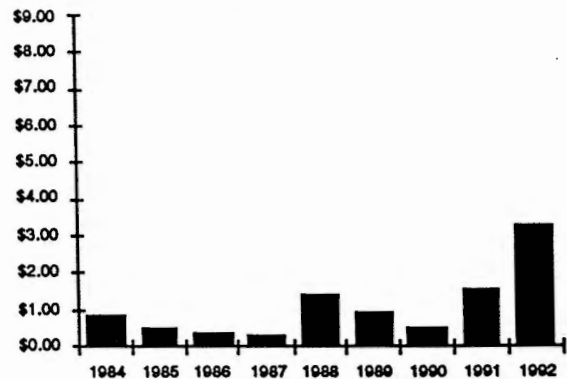
NAFTA is likely to further boost U.S. manufacturing trade, and net exports in high-union industries, with Mexico. Under NAFTA Mexico will remove substantial remaining tariffs to imports of U.S. manufactured goods,

especially consumer goods. The U.S., by contrast, has few barriers to manufactured imports from Mexico.

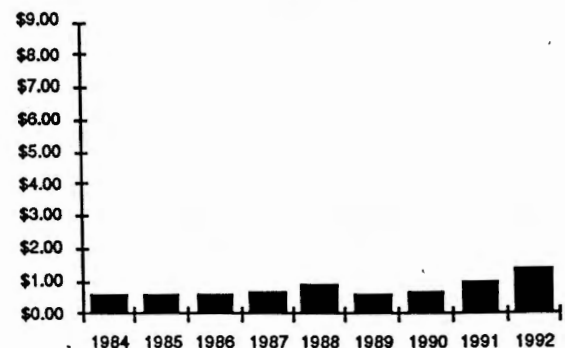
**U.S. Net Manufacturing Exports to Mexico:
High-Unionization Industries (Billions)**



U.S. Net Manufacturing Exports to Mexico: Middle-Unionization Industries (Billions)



U.S. Net Manufacturing Exports to Mexico: Low-Unionization Industries (Billions)



EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20500

November 2, 1993

**Staff Study by the Joint Economic Committee:
"Potential Economic Impacts of NAFTA: An Assessment of the Debate"**

The Joint Economic Committee (JEC) recently released a staff study which surveys some of the studies of the potential economic impacts of NAFTA. The JEC study maintains that these studies are of limited use in determining whether NAFTA should be approved because of the simplifying assumptions they make in modeling the way the economies in North America operate. The JEC study argues that many of these assumptions are unrealistic and bias many studies toward finding that NAFTA is good for the U.S., Canada, and Mexico. Finally, the JEC study argues that there are credible studies, making different assumptions, which find that NAFTA is potentially bad for the U.S.

Our evaluation of the available research and independent surveys by others indicate that the JEC study does not make its case. The very few studies finding that NAFTA is potentially bad for the U.S. are seriously flawed and are not credible compared to the many studies finding that NAFTA is good for all three countries.

All economic models rest on simplifying assumptions, and the models that have been used by numerous researchers to predict the effects of NAFTA on the U.S. economy are no exception. Several different models have been developed to explore the empirical importance of the many changes by which NAFTA will affect the three economies in North America. What is exceptional is that the overwhelming majority of studies, using a variety of different modelling techniques and different assumptions about the economic forces at work, conclude that NAFTA will benefit all three countries. For the U.S., these studies indicate that NAFTA will benefit labor, leading to either increased employment, increased wages, or both. While the JEC attempts to argue that the assumptions underlying the few negative studies are more realistic or valid, this argument has not been found persuasive by any of the independent reviewers of the economic work on NAFTA.

There have been a number of reviews of the economic studies of NAFTA by impartial researchers at institutions such as the Congressional Budget Office, the General Accounting Office, the International Trade Commission, and the Brookings Institution. These reviews have critically examined the various studies, evaluating the validity of their methodologies and underlying assumptions. The reviews are unanimous in their conclusion: NAFTA will benefit all three countries. In a recent letter to the President, 286 academic economists, including 13 Nobel prize winners, representing different theoretical and political traditions, make the same point. Although they disagree on many things, most academic economists agree that NAFTA will create jobs and encourage economic growth in the United States.

Selection of Studies to Survey

There have been a number of surveys of economic studies of NAFTA in the past year. Some have been encyclopedic, but most have been selective, analyzing examples of different types of models. The JEC survey considers a sample of sixteen studies which "provide estimates of aggregate impacts on the U.S. economy." In its survey, the JEC focuses on a single scenario considered by each study: "In general, the scenario with the largest US impacts, whether positive or negative, is chosen."

The JEC report compares its selection of studies with that of a brief survey recently done by the Office of the Special Counselor to the President on NAFTA. The Counselor's survey provides a complete bibliography of NAFTA studies available at the beginning of September 1993. The bibliography classifies studies in various categories: it includes twenty "comprehensive" studies, eleven studies with a variety of focuses, and seven reviews of the empirical literature on the effects of NAFTA. The bibliography also includes closely related papers by the authors of the listed studies.

With the exception of a very recent study by James Stanford, which was not available when the Counselor's bibliography was compiled, all of the studies surveyed by the JEC are included in the Counselor's bibliography. There is an overlap of twelve studies between the JEC's list of sixteen "aggregate" studies and the Counselor's list of twenty "comprehensive" studies. The JEC chose examples of studies of certain types, while the Counselor's list was more inclusive. For example, the JEC excluded multiple papers by the same authors, arguing that these represent "double counting." In fact, there are significant differences in structure and policy focus between the models used in many of the studies excluded from the JEC list and those included.

Assumptions, Models, and Policy Analysis

The JEC review considers the role of models in policy analysis, stating:

"All economic models are in fact scenarios that must exclude consideration of some questions and simplify others. . . . Because all results from economic models rest in large part on these assumptions, the credibility of the assumptions must be a central consideration when evaluating the results from the models. When these assumptions are not credible, the conclusions should not be a major factor in deciding public policy."

The review goes on to list six issues that are the focus of the debate over NAFTA: (1) investment, particularly diversion of investment from the U.S. to Mexico; (2) trade, both structure and volume; (3) immigration; (4) net job changes in the U.S.; (5) gross job losses in the U.S.; and (6) wages in the U.S.

After briefly discussing the key provisions of NAFTA, the report provides a critical analysis of how the sixteen studies address the six issues, focusing on the role of different assumptions in determining the model results. The report then goes on to discuss the model results, indicating the role of various assumptions in generating the empirical results.

The JEC survey raises a number of valid questions that policymakers should keep in mind when evaluating the different studies. However, the JEC's focus on a single scenario from each model is misleading in that it misses the richness of the analysis in many of the studies.

Although the studies from policy think tanks tend to focus on a narrow range of assumptions and causal links that support their particular viewpoint, all the academic studies surveyed were done by researchers who are well aware of the strengths and limitations of the methodologies they used. All of the researchers discussed the sensitivity of their results to variations in assumptions and considered a variety of scenarios under a variety of assumptions.

Computable General Equilibrium Models

For example, consider the academic studies using computable general equilibrium (CGE) models. CGE models are used in nine of the sixteen studies reviewed by the JEC and sixteen of the twenty comprehensive studies reviewed by the Counselor's office. In all these studies, the models are used as simulation laboratories providing policymakers with the ability to do controlled experiments that permit detailed analysis of the mechanisms by which policy changes affect the various economies. In many cases, researchers made strong assumptions in some scenarios in order to do controlled experiments that isolated the empirical size of various links. The single experiment for each study reported in the JEC survey gives little indication of the usefulness of the models in sorting out the empirical importance of the links between policy changes and economic results, and in evaluating the robustness of those empirical results.

In 1992, the ITC did a meticulous survey of all the CGE models used to study NAFTA and concluded: "Despite the different approaches taken in these studies, there is a surprising degree of unanimity in their results regarding the aggregate effects of a NAFTA. All three countries are expected to gain from a NAFTA. The greatest impact will be on the Mexican economy, with less impact on the Canadian and U.S. economies." While the JEC argues that the results from all the surveyed CGE models depend on their underlying assumptions, which is really a tautology, it was a surprise to the ITC and to the researchers involved to find such agreement across such a wide variety of modelling approaches and behavioral assumptions. Surveys by the Congressional Budget Office and the Brookings Institution considered a wider range of studies and reached similar conclusions —NAFTA is good for all three countries, especially Mexico.

Since the ITC survey, there have been a number of studies using CGE models that support NAFTA and two that find negative impacts. The two negative studies are on the JEC list: (1) the Economic Policy Institute (EPI) study which used a dynamic CGE model developed

by Hinojosa and McCleery, and (2) the recent CGE model of the U.S., Canada, and Mexico by James Stanford.

As noted in Table 2 of the JEC review, the EPI model generates a loss of 550,000 jobs in the U.S., a figure which EPI has used often and which appears in various ads. However, the number largely consists of jobs "lost" due to return migration of workers from the U.S. to Mexico. In the scenarios generating this result, growth in Mexico raises Mexican wages, yielding return migration and higher wages in the U.S. These are not jobs "lost" by American workers, but rather U.S. jobs foregone by Mexican workers for whom NAFTA will provide increased income at home. Hinojosa and McCleery wrote a letter to Jeff Faux, the President of EPI, complaining about what they considered to be a gross misuse of their model.

The JEC study presents a new CGE model developed by James Stanford as an improvement over existing CGE models. Stanford, a Ph.D. student at the New School for Social Research, strongly criticizes earlier CGE models of NAFTA for embodying neoclassical economic assumptions of the sort that underlie the theory of comparative advantage. He argues that these assumptions are unrealistic, and goes on to develop a "structuralist" or "institutional" CGE model that incorporates "real world" assumptions about how firms behave, how labor markets operate, and how savings and investment are determined.

In his "institutional" model, wages do not vary with the supply and demand for labor, firms do not seek to maximize profits, unemployment persists indefinitely, and changes in GDP in the long run are largely determined by changes in aggregate demand rather than by changes in the supply side. In this environment, changes in investment flows are very important because they have a strong impact on aggregate employment through the operation of the Keynesian multiplier. Indeed, the impact of changes in investment flows dominate all other effects arising from trade liberalization, such as efficiency gains arising from changes in the structure of trade and production.

Stanford goes on to say (p. 8): "The 'institutional' model of North American trade and investment flows thus incorporates a very different set of assumptions from the neoclassical approach which is reflected in the majority of NAFTA simulation models. Not surprisingly, therefore, the model's results suggest a very different outcome is likely from the NAFTA than has been suggested by many other economists." He later warns the reader: "It must be stressed that this 'institutional' analysis is quite preliminary, in that the behavioural relationships built into the model are novel and hence relatively untested."

Stanford's institutional model is an extreme example of a "structuralist" Keynesian macro model. The assumptions that some markets essentially never clear, that firms do not maximize profits, that wages are set by institutional forces in the long run, and that Keynesian multipliers operate in the long run are certainly controversial, and are not viewed as reasonable by many economists. They also seem out of place in an analysis of the efficiency gains from changes in the structure of trade and production arising from changes in protection, which is, after all, a major focus of NAFTA and of the models seeking to analyze the impact of NAFTA.

To his credit, and as befits a Ph.D. thesis, Stanford also reports runs of his model in "neoclassical" mode. He reports (p. 31) that "[t]he effects of the NAFTA, according to this neoclassical simulation, . . . are quite startling. Just as predicted by other NAFTA models, the agreement has very small positive effects on the U.S. and Canadian economies, including small gains in GDP, wages, consumption, and foreign trade. . . . The effects of the NAFTA on the Mexican economy are more positive (with GDP growing by 2.8 percent), but there are no 'losers' as a result of the NAFTA." Startling? No, but certainly reassuring.

The JEC survey cites Stanford's model approvingly, stating that "Stanford models virtually the full range of issues that concern most people in the NAFTA debate." While an overwhelming majority of economists would disagree strongly with his assumptions, his model specification, and the applicability of that specification to issues of trade liberalization, all would agree with the JEC assessment that "Stanford's work is the clearest illustration of the critical importance of assumptions in affecting empirical results from these models." (p. 34)

Macroeconomic Models of NAFTA

The JEC study criticizes a number of the NAFTA models because they do not adequately consider macroeconomic linkages through which trade might affect: (1) aggregate employment, (2) foreign direct investment in Mexico and diversion of investment to Mexico from the U.S., and (3) the balance of trade between Mexico and the U.S. Many of the NAFTA models, particularly the CGE models, focus on efficiency gains from changes in protection, prices, trade, resource allocation, and production as a result of NAFTA. Given their focus, these models tend to assume that macroeconomic variables are set exogenously, and hence are not directly affected by NAFTA. Most of these models, however, do explore the sensitivity of their results to changes in these variables. In effect, researchers have imposed different macro scenarios on their CGE models to examine the sensitivity of their results to changes in the scenarios.

All of the NAFTA models which find potentially negative impacts of NAFTA on the U.S. economy focus either on changes in the U.S.-Mexican balance of trade (balance-of-trade multiplier models) or on investment diversion from the U.S. to Mexico (investment-employment models).

(1) Macro balance-of-trade multiplier models. According to the CBO report, reviewing balance-of-trade multiplier models (p. 84): "Implementing NAFTA would probably expand total employment in the United States in the short run, as increased exports to Mexico raised the demand for labor. Net gains ranging from 35,000 jobs to 170,000 jobs have been forecast."

The 170,000 figure is from Hufbauer and Schott. They project increased export jobs of 316,000, minus job loss from increased imports of 145,000, yielding 171,000 net (which CBO evidently rounded to 170,000). They present their estimate of job gains as a result of NAFTA,

due to the change in the trade balance with Mexico, with the U.S. maintaining a trade surplus with Mexico for an extended period.

The only negative study in this category is a study by Clyde Prestowitz and others of the Economic Strategy Institute, which assumes that the U.S.-Mexico balance of trade moves into deficit. They then apply a balance-of-trade employment multiplier (using a different magnitude than Hufbauer-Schott), and project a loss of more than 900,000 U.S. jobs. Prestowitz, after initially arguing that NAFTA would be bad for the U.S., has since changed his mind and now argues that NAFTA will be good for the U.S.

In this type of model, the result depends critically on the projection of the U.S.-Mexican trade balance. The JEC study argues that the Mexican's will be unable to maintain a current account deficit with the U.S. for very long. The Congressional Budget Office (CBO), in chapter 2 of their report ("The Macroeconomics of NAFTA"), analyze this issue by using a dynamic, multi-country, macro model adapted from a model originally developed by Warwick McKibbin and Jeffrey Sachs. This study, which is not included in the JEC survey, is the only one that uses a formal model designed to evaluate questions of changes in the balance of trade between Mexico and the U.S. The model also incorporates international investment flows, and so can also be used to evaluate questions of investment diversion (discussed below).

The CBO researchers run a variety of macro simulations, and conclude that (p. 20) "Mexico's current-account deficit will continue for a substantial period of time," around twenty years or more. This result, which is consistent with the historical experience of other semi-industrial countries, supports the Hufbauer-Schott results, since their net employment gains are based on the assumption that Mexico will continue to run trade deficits with the U.S.

(2) Macro Investment-Employment Models. This type of analysis is used by the Economic Policy Institute (in various papers) and underlies the analysis of Pat Choate, Ross Perot, and Harley Shaiken. It is the "sucking sound" argument.

The argument is that increased investment in Mexico will largely come from the U.S., that this increased investment flow will cause a decline in investment in the U.S., and that therefore employment in the U.S. will fall. It is the mechanism at work in the Stanford and McCleery CGE models, as well as various macro models.

For example, one EPI study (Koechlin *et al.*) makes an extreme assumption that additional U.S. investment flows to Mexico reduce investment in the U.S. dollar-for-dollar. Starting from this premise, the study generates estimates of industrial job losses for the U.S. ranging from 290,000 to 490,000. This approach has been heavily criticized for its faulty methodology and unrealistic assumptions. The CBO did not even bother to review this work.

As noted in the JEC review, this type of analysis depends crucially on the assumption that increased investment in Mexico leads to decreased investment in the U.S. The JEC report

argues that such investment diversion is significant, and will lead to reduced investment in the U.S.

The CBO addresses the issue of investment diversion using their multi-country macro model. Their macro simulations indicate that increased investment in Mexico will not be at the expense of investment in the United States. In a section entitled "Increased Investment in Mexico Is Not At the Expense of Investment in the United States," the CBO argues that investment diversion represents a very small share of U.S. aggregate investment, and can be made up by tiny changes in either domestic savings or capital inflows into the U.S. from the rest of the world.

The CBO conclusion is also consistent with the experience of the EC. When Spain, Portugal, and Ireland joined, the argument was made that these countries would drain investment from the rest of the EC. In fact, aggregate investment in the EC rose after the market expanded.

Labor Displacement

The JEC report surveys work on possible gross job dislocation in the U.S. due to NAFTA. They dismiss as wildly unrealistic the claims of Pat Choate that 5.9 million U.S. jobs are "at risk" under NAFTA. The JEC argues that estimates of gross dislocations of 300,000 to 600,000 are plausible.

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The CBO report has a chapter on "Workers Displaced by NAFTA" (Chapter 5). They conclude that (pp. 86-87): "The basis for forecasting the number of job losses associated with NAFTA is quite weak. . . . Perhaps 100,000 to 200,000 jobs would be a reasonable range, but considerable skepticism is warranted. . . . Even if the number of workers displaced because of NAFTA were twice the high end of the range of job losses given above, that would still be less than 400,000 losses in an economy of nearly 120 million jobs."

The CBO goes on to report that annual job losses in the U.S. economy in the 1980s ranged from 1.5 million to 2.7 million. The maximum of 400,000 gross job losses due to NAFTA is spread over fifteen years. They conclude (p. xv): "Viewed as part of a larger, dynamic labor market in which nearly 20 million workers were displaced during the 1980s, the effects of NAFTA appear relatively small."

Migration Issues

The issue of migration has become part of the NAFTA debate, and is discussed in the JEC study. The JEC survey notes that only three of the sixteen studies it includes consider migration issues, and they yield a wide variety of results. The JEC cites a recent study by Martin (1993), who reviews economic and demographic studies of Mexican-U.S. migration.

Following Martin, the JEC concludes (p. 25) that, as a result of NAFTA, "... greater imports of farm products into Mexico would displace labor from Mexico's rural areas more rapidly, which would stimulate migration to urban in Mexico and the U.S."

As Martin notes, Mexican-U.S. migration is affected by "pull" factors on the U.S. side and "push" factors on the Mexican side. From the "push" side, immigration is sensitive to conditions in the Mexican labor market, including both wages and employment growth, and to changes in the exchange rate. All studies agree that NAFTA will, from the start, increase industrial employment in Mexico. The potential problem that has attracted a great deal of attention is what will happen in the Mexican countryside.

When NAFTA was first proposed, a number of researchers worried about the impact on the rural economy of rapid liberalization of Mexican restrictions on agricultural trade. At that time (1991), Mexican agricultural policy involved heavy subsidies to corn and beans, grown largely on communally owned land known as "ejidos." These subsidies raised domestic prices above world levels, and were supported by a system of strict import quotas. Researchers argued that too-rapid removal of those quotas would have undermined the whole agricultural support system, leading to disruption of rural labor markets, increased rural-urban migration within Mexico, and increased migration to the U.S. in the short run.

This scenario is the major argument underlying what Martin (p. 137) calls the "conventional wisdom" that "NAFTA can be expected to increase Mexico-to-US migration, but only temporarily and only marginally compared with the current flow. . . . [A]fter [the year] 2000, the more rapid economic growth and job creation due to NAFTA should reduce the 'normal' Mexican influx."

In the last year and a half, two developments have changed the Mexican policy environment dramatically:

First, the negotiation of NAFTA has been completed, and the agreement explicitly acknowledges the sensitivity of Mexican agriculture. Under NAFTA, Mexico is allowed fifteen years in which to adjust its trade policies in important agricultural sectors; a period long enough to give them flexibility in changing their agricultural support policies.

Second, Mexico has unilaterally undertaken to reform its domestic agricultural policies, regardless of whether NAFTA is implemented. At the end of 1991, the Mexican Constitution was amended to allow private ownership of communal "ejido" lands—a major break with history. In addition, this fall, the Mexican government announced a comprehensive reform of its agricultural subsidy system. They plan to move to a "non-distorting" system of income support for farmers, with quite high support levels that taper off over fifteen years. This new system will employ policy instruments that are consistent with the allowable "green box" agricultural policies currently under discussion in the Uruguay round of GATT negotiations.

In response to the anticipated changes in the rural economy, the Mexican government is also considering a number of additional policy initiatives, including a rural investment program to increase employment opportunities in rural areas. In the long run, the major mechanisms for absorbing this surplus labor will be expansion of the industrial sector and changes in the structure of agriculture, with increases in productivity and shifts toward high-value, labor-intensive crops such as fruits and vegetables. NAFTA will play an important role in supporting these changes.

In the short run, however, migration will be determined largely by how well the Mexican government manages the agricultural reforms that are currently underway. NAFTA, with its provision of a long transition period for agriculture, provides the Mexicans with maneuvering room to manage these changes and is probably no longer an important factor, by itself, in the short run.

By contrast, studies indicate that if NAFTA fails, the Mexican growth rate over the next decade will be 1-2 percent lower than it would be if NAFTA were implemented, and there would also be a depreciation of the Mexican exchange rate. The lower growth rate would certainly exacerbate employment problems in Mexico, and lead to a "push" toward higher migration to the U.S. in the short run. In addition, a depreciated Mexican peso will make U.S. wages look better, increasing the "pull" for potential migrants.

Two years ago, the question was whether too-rapid trade liberalization would disrupt Mexican rural labor markets and exacerbate the migration problem. Now, with negotiations completed and recent changes in Mexican policy, we can see that, as far as migration is concerned, NAFTA is an important part of the solution, not the problem.

References

A complete list of NAFTA studies is given in: Council of Economic Advisers, Executive Office of the President, "Studies of the Economic Impact of NAFTA," October 20, 1993. The studies quoted in this report are listed below.

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EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20500

November 2, 1993

MACROECONOMICS OF NAFTA

In a recent article (Business Week, November 8, 1993), Aaron Bernstein argues incorrectly: (1) "that investment lost under NAFTA could outweigh potential gains from increased trade" and (2) that this issue has not been analyzed in the NAFTA debate. In fact, he presents a rehash of views that were first presented during the fast track debate, have been discussed thoroughly, and were rejected as incorrect by almost all researchers.

All agree that NAFTA should lead to increased investment in Mexico, some of which will be funded by foreign borrowing, much of which, in turn, will come from the U.S. Bernstein argues that this increased U.S. investment in Mexico will cause a corresponding decline in investment in the U.S. and that, as a result, employment in the U.S. will fall. This argument has been used by the Economic Policy Institute (EPI) in various papers, including one that draws on the McCleery model cited by Bernstein, and also implicitly underlies the "sucking sound" argument by Pat Choate and Ross Perot.¹ It rests on two fundamental fallacies: (1) that increased investment in Mexico must somehow lead to a decrease in investment in the U.S., and (2) that a job gained in Mexico must somehow lead to a job lost in the U.S., so that increased investment and growth in Mexico, regardless of source, will be bad for the U.S.

Investment diversion fallacy. In their recent major report on NAFTA (A Budgetary and Economic Analysis of the North American Free Trade Agreement), the Congressional Budget Office (CBO) addresses the issue of investment diversion using both historical analysis and a multi-country macroeconomic model.¹ In a section entitled "Increased Investment in Mexico Is Not At the Expense of Investment in the United States," the CBO argues: (1) that new foreign investment in Mexico represents a very small share of U.S. aggregate investment and, in any case, (2) that any diversion can be made up by tiny changes in either domestic savings or capital inflows into the U.S. from the rest of the world. The CBO model results also support their arguments. The arguments presented by the CBO have been well understood for some time, which explains why, as Bernstein notes, many modelers have simply assumed that investment diversion is insignificant —hardly a "bizarre" assumption, given the facts.

¹Note that this CBO report is not the one cited by Bernstein. Bernstein cites a background paper by Bruce Arnold of the CBO which surveyed NAFTA models. Bernstein quotes Arnold as saying, regarding the investment diversion argument, that "no one has looked at it much." Arnold is probably misquoted, since he must be aware of the CBO modelling work and macroeconomic analysis presented in the full report.

The CBO conclusion is also consistent with the experience of the EC. When Spain, Portugal, and Ireland joined, the argument was made that these countries would drain investment from the rest of the EC. In fact, aggregate investment in the EC rose after the market expanded. Similarly, NAFTA will make North America more productive and hence more attractive to both foreign and domestic investors.

Second fallacy: Investment in Mexico is bad for the U.S. Experience in many countries, including Mexico, indicates that increased direct foreign investment leads to increased demand for exports of capital goods from the investing country. Increased U.S. investment in Mexico translates into increased U.S. exports to Mexico. After Mexico unilaterally lowered protection in the mid-1980s and attracted increased foreign investment, U.S. exports to Mexico shot up, supporting a lot of U.S. jobs.

Bernstein adds the argument that increased investment and exports of capital goods to Mexico will be used to expand Mexican exports to the U.S., leading Mexico to run a balance-of-trade surplus with the U.S., with negative effects on U.S. industry and employment. The argument is fallacious on two counts.

First, Mexico is currently running a current account deficit with the U.S., and should continue to do so for an extended period. The CBO study indicates that Mexico may well run a deficit with the U.S. for twenty years or more, which is consistent with the past experience of a number of other successful semi-industrial countries.

Second, most investment in Mexico is to expand capacity to supply the domestic market in Mexico, leading to increased aggregate growth. All studies agree that a prosperous Mexico is good for the U.S., providing an expanded market and increased trade.

As Bernstein notes, most studies of NAFTA have focused on efficiency gains arising from trade liberalization. All such studies find that NAFTA is good for all three countries. On the other hand, all of the NAFTA models which find potentially negative impacts of NAFTA on the U.S. economy focus on macroeconomic mechanisms involving either investment diversion or changes in the balance of trade. Careful analysis indicates that investment diversion has a negligible effect on aggregate investment in the U.S., that Mexico is capable of running trade deficits with the U.S. for an extended period, and that increased growth in Mexico is good for the U.S.

AN ANTI-NAFTA ARGUMENT YOU HAVEN'T HEARD



For months, a media juggernaut has rolled over anyone who challenged the North American Free Trade Agreement (NAFTA).

That's because economists have won the day by repeating their graduate school lessons like a mantra: History shows that free trade is good, so NAFTA will benefit the U.S. economy. Those who say otherwise are dismissed as ignorant or irresponsible.

But the argument overlooks the treaty's biggest impact, which won't be on trade but on investment, mainly by U.S. companies in Mexico. Most studies rely on the 19th century theory of free trade, which assumes capital doesn't cross borders. Result: The studies miss the drain of U.S. investment dollars—which began several years ago in anticipation of the pact's becoming law.

Some quick arithmetic suggests that investment lost under NAFTA could outweigh potential gains from increased trade. "Most economic models of NAFTA don't look at capital movements," says Edward E. Leamer, a trade economist at the University of California at Los Angeles. "And it might give a different answer as to whether NAFTA is good or bad for the U.S. work force if they did."

"NO ONE HAS LOOKED." Indeed, of 19 NAFTA forecasts reviewed by the Congressional Budget Office (CBO), just five looked at the issue. Four of these assumed—bizarrely—that any investment surge in Mexico would come from somewhere other than the U.S. The only study delving into the issue, by Robert K. McCleery, an American economist at Kobe University in Japan,

predicted that NAFTA would displace about \$2.5 billion of investment from the U.S. to Mexico annually.

What does that mean for U.S. jobs? McCleery doesn't ask, because he assumes the U.S. economy will fill in lost jobs with new ones. But Georgia State University economist Donald Ratajczak figures that \$1 billion of U.S. investment generates about 30,000 jobs. As-



suming a \$2.5 billion annual capital outflow, that would mean 375,000 potential new jobs lost over five years—more than wiping out the 170,000 gain that Gary Clyde Hufbauer and Jeffrey J. Schott of the Institute for International Economics in Washington predict will occur in five years if NAFTA passes. Bruce G. Arnold, the economist who wrote the CBO paper, acknowledges that investment outflows could wipe out potential job gains from NAFTA, but he admits that "no one has looked at it much."

The pro-NAFTA argument rests on

some shaky assumptions about exports, too. Hufbauer and Schott, like most others, assume that higher exports are a net increase for the U.S. economy. But the recent export surge to Mexico wasn't fueled by Mexicans on a spending spree. Some 37% of it went to *maquiladoras*, which ship most of their output right back to the U.S., according to a recent General Accounting Office study. That's not a net boost to U.S. gross domestic product—it's production lost to another country.

Moreover, the CBO found that a further third of U.S. exports to Mexico consisted of capital goods. If much of this money comes from U.S. companies closing plants at home and setting up new ones in Mexico, these exports aren't a net gain for the U.S. either.

Lets take an example: Say General Motors Corp. shuts an Ohio plant that had cost \$1 billion to build and that employs 30,000 people. Then, it builds a factory in Mexico, buying \$1 billion of equipment from U.S. makers. Hufbauer and Schott figure the economy will be swelled by \$1 billion in new exports—enough, they estimate, to create 19,600

new jobs for American workers. But the investment and 30,000 jobs lost in Ohio are left out of the equation.

Trade theory is convincing—about the benefits of increased trade. But it doesn't address what's happening between the U.S. and Mexico, which are merging their economies. If the effects of integration overwhelm the trade gains, the U.S. could be the loser. And economists simply don't pay enough attention to that possibility.

Trade theory is convincing—about the benefits of increased trade. But it doesn't address what's happening between the U.S. and Mexico, which are merging their economies. If the effects of integration overwhelm the trade gains, the U.S. could be the loser. And economists simply don't pay enough attention to that possibility.

Bernstein writes about labor issues for BUSINESS WEEK.

NAFTA and African-American Employment Opportunities: An Assessment

U.S. Treasury, Office of the Assistant Secretary for Economic Policy

November 3, 1993

Summary

9.3 percent of employees in the average industry exporting to Mexico are African American. By contrast, only 7.4 percent of employees in the average industry ~~competing with imports from Mexico~~ are African American. And 13.4 percent of workers in transportation services—which would receive a large boost from increased trade with Mexico—are African American. The further expansion of trade with Mexico that is anticipated to follow the implementation of the NAFTA will in all probability enhance the employment opportunities of African Americans.

*Industries that
export to Mexico
has more
AA's than
industries that
import from Mexico.*

NAFTA will expand exports to Mexico. Exports to Mexico have tripled over the past five years, since President Salinas took office and began his policy of liberalizing and reforming Mexican trade. Exports will continue to rise if the NAFTA is implemented—boosting employment in the U.S. and giving more American workers better employment opportunities, for export-sector jobs are high wage jobs.

How will this expansion in trade with Mexico to follow from the NAFTA affect the economic well-being of African-Americans? The Administration believes that the NAFTA will benefit African-Americans, who are well-positioned to benefit from the boost to economic activity following implementation of NAFTA. African-Americans will receive a substantial share of the increase in employment opportunities created by expanded trade.

Industries that Export to Mexico

9.3 percent of the workers in the average industry that exports to Mexico are African Americans. Table 1 examines the fifteen industries¹ that export the most to Mexico—from motor vehicles and parts with more than \$4 billion of 1992 exports, to meat products with \$800 million of 1992 exports—and shows that these industries' employment of African Americans averages 9.2 percent.

The industries that export the most to Mexico today are those that have expanded exports to Mexico most in the past five years, since Mexico began the program of economic reform that has led them to seek NAFTA.

¹Measured at the level of a three-digit Standard Industrial Classification [SIC] code.

Industries that export to Mexico today will see demand for their products rise as Mexico grows, and as U.S.-Mexico trade links tighten. American businesses will hire more workers, including African-Americans, and they will raise the wages of those currently employed.

Table 1: African Americans Are Heavily Employed In Industries that Export to Mexico

Industry	Exports* (1992)	African-American Percentage
Motor vehicles and parts	\$4,129	11.5%
Electronic components	\$2,116	8.3
Unidentified manufactures	\$1,522	10.3
Electrical machinery, nspl	\$1,339	8.3
Cash grains	\$1,300	5.7
Office machinery, nspl	\$1,053	5.9
Aircraft and parts	\$959	11.5
Rolled non-ferrous metals	\$931	9.5
Blast furnace products	\$912	9.5
Miscellaneous plastics	\$903	10.3
Measuring instruments	\$900	7.2
Construction machinery	\$879	5.9
Refinery products	\$863	10.2
Plastics	\$830	10.1
Meat products	\$814	14.2

*In millions of dollars.

African American workers are well represented in these exporting industries today, and are thus likely to benefit from their expansion of economic activity.

It is not unreasonable to estimate that African Americans presently hold approximately 67,000 of the 700,000 jobs supported by exports to Mexico, or that African-American employment will rise by 19,000 over the next three years as exports to Mexico expand as NAFTA is implemented.

Industries that Import from Mexico

African-Americans will not suffer a

disproportionate share of job dislocations from any expansions of Mexican imports that follow from NAFTA. African-American workers are not concentrated in industries that compete with imports from Mexico.

Only 7.4 percent of employees in the average *importing* industry are African-American—significantly less than the 9.3 percent of workers in exporting industries who are African Americans, or the 10.1 percent of all employed in the United States who are African-Americans.

In addition, note that African-American employment is somewhat concentrated in transportation services. 13.4 percent of workers in transportation services are African-American. Expanded trade with Mexico will expand the demand for transportation services within the United States, as the flow of goods to and from the border increases. African-Americans may well benefit more than proportionately from expanded opportunities in the transportation sector.

Other Assessments

One additional assessment of the impact of NAFTA on employment in California has estimated that over the next five years expanded opportunities as a result of NAFTA will provide net new jobs for 52,000 additional people in California—of whom an estimated 3,000 will be African-Americans. African-Americans receive more than a proportionate share of job gains, and suffer slightly less than a proportionate share of job displacement.

Migration

There remains one additional important consideration. According to many estimates NAFTA will reduce Mexican migration to the U.S. This will reduce the number of people competing for relatively low-wage American jobs, and force employers to offer higher wages for low-income Americans.

The Wharton forecasting group, WEFA, has provided the most recent migration forecast. They predict that NAFTA will

reduce illegal immigration from Mexico by 600,000 per year, relative to what immigration would have been.

The major benefit of NAFTA for Mexico is faster growth and expanded employment opportunities for Mexico at home. To the extent that this improvement in opportunities leads fewer Mexicans to migrate illegally, it will put upward pressure on the wages of low-income Americans.

NAFTA

August 6, 1993

**MEMORANDUM FOR CHRISTINE VARNEY
SECRETARY TO THE CABINET**

**FROM: LAURA D. TYSON
CHAIR, COUNCIL OF ECONOMIC ADVISERS**

**SUBJECT: Congressional Response to My Telephone
Call on the President's Economic Plan**

**Below are my notes from a phone call with a Member of Congress
concerning the President's economic plan.**

Member's Name: Congresswoman Carolyn Maloney (D-N.Y.)

Date of Call: Thursday, August 5, 1993

Member's Positive Comments on the President's Plan:

Member's Negative Comments on the President's Plan:

Follow-Up Action Required and By Whom:

August 6, 1993

**MEMORANDUM FOR CHRISTINE VARNEY
SECRETARY TO THE CABINET**

**FROM: LAURA D. TYSON
CHAIR, COUNCIL OF ECONOMIC ADVISERS**

**SUBJECT: Congressional Response to My Telephone
Call on the President's Economic Plan**

**Below are my notes from a phone call with a Member of Congress
concerning the President's economic plan.**

Member's Name: Congressman Marcy Kaptur (D-Ohio)

Date of Call: Thursday, August 5, 1993

Member's Positive Comments on the President's Plan:

Member's Negative Comments on the President's Plan:

Follow-Up Action Required and By Whom:

August 6, 1993

**MEMORANDUM FOR CHRISTINE VARNEY
SECRETARY TO THE CABINET**

**FROM: LAURA D. TYSON
CHAIR, COUNCIL OF ECONOMIC ADVISERS**

**SUBJECT: Congressional Response to My Telephone
Call on the President's Economic Plan**

**Below are my notes from a phone call with a Member of Congress
concerning the President's economic plan.**

Member's Name: Congressman Eric Fingerhut (D-Ohio)

Date of Call: Thursday, August 6, 1993 (Left two messages for return
calls to no avail.)

Member's Positive Comments on the President's Plan:

Member's Negative Comments on the President's Plan:

Follow-Up Action Required and By Whom:

August 6, 1993

**MEMORANDUM FOR CHRISTINE VARNEY
SECRETARY TO THE CABINET**

**FROM: LAURA D. TYSON
CHAIR, COUNCIL OF ECONOMIC ADVISERS**

**SUBJECT: Congressional Response to My Telephone
Call on the President's Economic Plan**

**Below are my notes from a phone call with a Member of Congress
concerning the President's economic plan.**

Member's Name: Congresswoman Lynn Schenk

Date of Call: Thursday, August 6, 1993 (Left a message for a return
call, but did not receive
one.)

Member's Positive Comments on the President's Plan:

Member's Negative Comments on the President's Plan:

Follow-Up Action Required and By Whom:

THE WHITE HOUSE
WASHINGTON

August 4, 1993

MEMORANDUM FOR CABINET CHIEFS OF STAFFS

FROM: STEVE SILVERMAN *SS*

SUBJECT: Targeted Members Phone Calls

Attached you will find a current list of Members that are "Undecided" on whether or not to vote for the President's budget. The Cabinet is encouraged to telephone Members that they have a particularly close relationship with to discuss their position.

In addition, some of the Members of the Cabinet have been asked in an August 4, 1993, memorandum from Mack McLarty to telephone targeted Members. These calls should be made by 11 a.m. Thursday and the results should be discussed with me so that I can report back to Mack. I can be reached at 456-7111 or through White House SIGNAL - 757-5000.

MEMBERS VOTING NAY ON RECONCILIATION 8/4/93

MEMBER VOTING
NAY (38)MEMBER
1992 %1992 %
BC/GB/RP

YES

Clement (TN)	72	53/37/10
Holden (PA)	52	36/41/23
Johnson (SD)	71	37/41/22
Maloney (NY)	51	69/23/07
McHale (PA)	53	41/37/21
Wilson (TX)	56	43/35/22

UNDECIDED

Chapman (TX)	100	39/38/23
Edwards (TX)	67	36/41/23

LEAN NO

Condit (CA)	84	41/37/22
Deal (GA)	59	35/49/16
Hutto (FL)		
Klein (NJ)	49	45/42/12
Minge (MN)	50	37/35/28
Pickett (VA)	56	35/48/17
Skelton (MO)	70	37/38/25

OTHER TARGET MEMBERS

LEAN YES

Applegate

Brewster

Collins (MI)

Fields

Ford (TN)

Glickman

Hilliard

Hughes

✓ Jacobs -- DO NOT CALL

Kaptur

McCurdy

Mineta

Penny

✓ Sangmeister

Schenk

Sisisky

Slattery

Toricelli

UNDECIDED

Barca

Barcia

Johnson (GA)

Lancaster

Menendez

Peterson (MN)

Ortiz

Sangmeister

Valentine

Williams

LEAN NO

✓ Abercrombie

Dooley

Fingerhut -- OH

Hutto

Inslee

Lloyd

Montgomery

Smith, Neal (IA)

Tanner

MEMBERS VOTING NAY ON RECONCILIATION

ABSOLUTE NO'S

Andrews (NJ)	70	48/32/20
Baesler (KY)	61	41/42/16
Browder (AL)	62	41/47/11
Coppersmith (AZ)	54	33/40/26
Danner (MO)	55	40/32/27
English (OK)	68	34/43/23
Geren (TX)	63	38/35/28
Hall (TX)	60	28/41/30
Hayes (LA)	100	46/38/14
Laughlin (TX)	72	37/41/22
Lehman (CA)	47	38/43/18
Lipinski (IL)	63	41/39/20
Long (IN)	62	31/46/22
Mann (OH)	51	43/43/14
Margolies-Mezvinsky (PA)	50	44/39/16
Orton (UT)	62	22/46/25
Pallone (NJ)	54	44/39/17
Parker (MS)	72	41/50/08
Roemer (IN)	57	38/42/19
Rowland (GA)	56	41/44/15
Sarpalius (TX)	60	36/43/20
Swett (NH)	63	40/37/22
Taylor (MS)	63	32/54/14
Traficant (OH)	84	50/26/24

OTHER NO'S

Stenholm
Tauzin

TOTAL: 26

CC: LDT
TOD

THE WHITE HOUSE
WASHINGTON

December 6, 1993

MEMORANDUM TO THE MEMBERS OF CABINET
CHIEFS OF STAFF

FROM: STEPHEN B. SILVERMAN *SS*
SUBJECT: NAFTA SIGNING

As you know, the NAFTA will be signed on Wednesday, December 8, 1993. The event will take place at the Mellon Auditorium on 13th and Constitution Streets.

Please arrive at the back right (east) entrance at 9:15 AM and proceed to Conference Room B for the coffee reception. At 10:00 AM, White House staff will escort you from the reception to the auditorium for the signing.

At the conclusion of the signing, please depart promptly for the lunch reception at Blair House hosted by Secretary Bentsen and Ambassador Kantor which will begin at noon and end by 2:00 PM. Chief Executive Officers, Members of Congress, and other distinguished Americans will attend.

If you have any questions regarding any of these events, please do not hesitate to contact me.

Members of your staff who participated actively in NAFTA have been invited to the signing ceremony. Those staff members should arrive at the main entrance of the Mellon Auditorium at 9:30 AM.