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Trade Liberalization: The North American Free Trade Agreement's Economic Impact on Michigan

> Paul Kengor, Ph. D. Michael LaFaive Grady Summers

Analysis of Five Years of Import and Export Data and the Effects of Lower Tariffs, Increased Trade, and Greater Competition





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140 West Main Street P.O. Box 568 Midland, Michigan 48640 (517) 631-0900 • Fax (517) 631-0964 www.mackinac.org • mcpp@mackinac.org

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Executive Summary

"This agreement will destroy the sugar-beet industry. It will destroy the flat glass industry. And of course, it will destroy the auto industry."

-U. S. Representative David E. Bonior, D-Mich., NAFTA briefing, Washington D. C., March 25, 1993.

The North American Free Trade Agreement (NAFTA) is now five years old. Has it benefited Michigan's economy? Or has it destroyed jobs and hampered Michigan's prosperity, as predicted by many who participated in the national debate that raged for two years prior to its ratification?

Finally, the verdict is in, and the available data clearly show that none of the dire predictions of NAFTA opponents have come true, and that free trade is proving to be a significant boon to Michigan's economy. This study analyzes five years of trade and export data and contains the following key findings:

- Michigan exports to Mexico and Canada have hit record levels under NAFTA. The U. S. Department of Commerce, which counts a company's home headquarters as the source of an export, shows a 40-percent increase in exports to Mexico since NAFTA took effect.
- The University of Massachusetts Institute for Social and Economic Research (MISER), which counts the point of manufacture as the source of an export, shows a 148-percent rise in Michigan's exports to Mexico under NAFTA. Michigan is Mexico's third-largest trading partner.
- The Commerce Department shows an impressive 72-percent gain in Michigan exports to Canada—Michigan's largest trading partner—since NAFTA took effect. The MISER data, due to the different way they are collected, register a much more modest 9-percent rise.
- In the five years prior to NAFTA, the MISER data show a 25-percent *drop* in Michigan's exports to Mexico—from \$1.7 billion in 1989 to \$1.3 billion in 1993. Exports not only increased under NAFTA, but the increases reversed a negative trend that might have continued were it not for NAFTA.

Michigan exports to Mexico and Canada have hit record levels under NAFTA. Lifting trade restrictions and lowering tariffs have been positive steps toward increasing the prosperity and standards of living for Michigan citizens—and citizens throughout America, Canada, and Mexico.

- In 1995, at the height of the Mexican recession, Michigan exports to Mexico increased by an incredible 104 percent over the previous year, according to MISER data. In 1997, Michigan exports to Mexico reached an all-time high of \$3.2 billion.
- Ford Motor Company products accounted for less than one percent of the Mexican auto market before NAFTA. In 1996, that figure climbed to 11 percent. General Motors' vehicle exports to Mexico were close to zero prior to NAFTA, but achieved a 1997 level of over 60,000 autos. DaimlerChrysler exports to Canada and Mexico increased from 49 percent of its total exports to 66 percent since NAFTA became law.
- Michigan-based Dow Chemical Company is saving \$25 million yearly from NAFTA tariff cuts on its products.

Overall, NAFTA has had a positive impact on Michigan's economy. The increase in Michigan exports to Mexico and Canada vindicates NAFTA supporters' predictions in championing free trade during the debate, especially in light of the fact that almost three-fourths (70 percent) of all Michigan exports are bought by Mexicans and Canadians.

Has every industry benefited from NAFTA? No; in fact, some companies have been harmed. However, the claims of injury by NAFTA on the part of companies are not always supported by evidence. This was found to be true even for some of those companies that were certified by the government as officially "injured" either by NAFTA or by foreign competition.

The NAFTA "winners" (people and companies benefiting from greater trade) in Michigan do, in fact, appear to be outweighing the NAFTA "losers" (people and businesses who have suffered as a result of greater trade). As demonstrated by the data, most Michigan industries have witnessed increases in their exports to Canada and Mexico since NAFTA was implemented. Some of these increases have been slight, while others have been dramatic.

Michigan's exports to Mexico and Canada have become much stronger since NAFTA was passed, and many Michigan businesses have grown due to the lower tariffs under NAFTA. At the very least, it is difficult to statistically argue that NAFTA has harmed Michigan's economy, its workers, or its consumers. On balance, lifting trade restrictions and lowering tariffs have been positive steps toward increasing the prosperity and standards of living for Michigan citizens—and citizens throughout America, Canada, and Mexico.

by Paul Kengor, Ph. D., Michael LaFaive, and Grady Summers

"If the agreement with Mexico receives congressional approval, Michigan's auto industry will eventually vanish."

-U. S. Representative David E. Bonior, D-Mich., *Detroit Free Press*, September 3, 1992.

"Contrary to fears expressed by NAFTA opponents, employment in the auto industry increased by 110,000 between 1993 and 1996...."

-G. Mustafa Mohatarem, chief economist for General Motors, testifying before the Committee on Ways & Means, U. S. House of Representatives, September 11, 1997.

Introduction

It has been nearly six years since the North American Free Trade Agreement (NAFTA) turned the entire continent of North America into a free-trade zone. Has the treaty benefited the economy of the state of Michigan? Or has it destroyed jobs and hampered Michigan's prosperity, as predicted by many who participated in the national debate that raged for two years prior to its ratification?

This study analyzes NAFTA's five-year economic impact on the state of Michigan to discover whether trade liberalization under NAFTA has helped or harmed Michigan economically. Because trade data are notoriously difficult to pin down, it is easy to find data that support various points of view or ignore one source in favor of another. Consequently, it should be understood up front that the two most widely accepted sources of information measuring exports—the U. S. Department of Commerce and the University of Massachusetts Institute for Social and Economic Research (MISER)—each count exports differently, yielding widely divergent results. The Commerce Department counts the location of the exporter (its home headquarters) as the source of the export, while MISER counts the origin of actual movement of each product—the point of the product's manufacturing—as the export source. This makes it more difficult to make the kinds of sweeping claims that have become typical on the subject of free trade in general and NAFTA in particular.

The first section of this report provides background on NAFTA, while the second and third sections provide a brief analysis of the five-year effect of NAFTA on the U. S. and Michigan economies. The fourth section provides a more in-depth examination of Michigan export data. It does this by employing two primary methods of measurement. First, it examines, statistically and anecdotally, NAFTA's positive and negative effects on companies This study analyzes NAFTA's five-year economic impact on the state of Michigan to discover whether trade liberalization under NAFTA has helped or harmed Michigan economically. and workers. Second, it uses export data showing which industries have experienced rises or falls in their exports to Canada and Mexico since NAFTA's implementation, as well as the overall export numbers for Michigan as a whole. This state-level export data is non-anecdotal and comprehensive.

I. NAFTA Is Signed into Law

On December 17, 1992, Canadian Prime Minister Brian Mulroney, Mexican President Carlos Salinas de Gortari, and U. S. President George Bush signed the North American Free Trade Agreement (NAFTA), marking the end of a process that began on February 5, 1991, when the three leaders announced they would negotiate the trade accord. Following approval by the legislatures in each of the three countries, NAFTA entered into force January 1, 1994. Its implementation created a free-trade area in North America that was the largest of its kind in the world, with a combined 1994 gross domestic product (GDP) of \$7.7 trillion and 368 million consumers. The objectives of the trade agreement, as detailed more specifically through its principles and rules, are to

- eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the territories of the three involved parties;
- promote conditions of fair competition in the free-trade area;
- increase substantially investment opportunities in the territories of the member parties;
- provide adequate and effective protection and enforcement of intellectual property rights in each party's territory;
- create effective procedures for the implementation and application of the agreement, for its joint administration and for the resolution of disputes; and
- establish a framework for further trilateral, regional, and multilateral cooperation to expand and enhance the benefits of the agreement.

NAFTA eliminates tariffs on most goods originating in Canada, Mexico, and the United States and destined for markets in those same countries. The schedule to eliminate tariffs previously established in the Canada-U. S. Free Trade Agreement of 1989 was continued as planned so that all Canada-United States trade is, as of today, duty-free. For most Mexico-United States and Canada-Mexico trade, the intent of NAFTA was to either eliminate existing customs duties immediately or phase them out in 5 to 10 years. By 1998, many duties had been zeroed out. On a few sensitive items, the agreement will phase out tariffs over 15 years. NAFTA-member countries may agree to a faster phase-out of tariffs on any goods at any time.

NAFTA eliminates tariffs on most goods originating in Canada, Mexico, and the United States and destined for markets in those same countries.

Table 1 – NAFTA Tariff Reduction Schedule for Heinz Co. Exports to Mexico												
Product	1988	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Ketchup	20%	20	16	12	8	4	0	0	0	0	0	0
57 Sauce	20	20	18	16	14	12	10	8	6	4	2	0
BBQ Sauce	20	20	13.5	12	10.5	9	7.5	6	4.5	3	1.5	0
Vinegar	20	20	16	12	8	4	0	0	0	0	0	0
Pickles	20	20	16	12	8	4	0	0	0	0	0	0
Tomato Sauce	20	20	13.5	12	10.5	9	7.5	6	4.5	3	1.5	0
Source: Heinz Co.												

Table 1, below, is a sample tariff-reduction schedule from an actual U. S. company.¹

This schedule, covering multiple products for a single U. S. company, is typical of the rate of tariff reduction experienced by thousands of companies throughout America.

Among NAFTA's many precedent-setting arrangements are the following:

- complete elimination of trade barriers for agricultural goods within 15 years;
- inclusion of the innovative dispute-settlement procedures incorporated in the Canada-U. S. Free Trade Agreement;
- liberalization of trade services, including financial services, within a framework of clear rules on intellectual property rights; and
- the removal of all tariffs and quotas on textiles and apparel in North America (although the impact is somewhat muted by tight guidelines regarding rules of origin).²

Many of these arrangements signify remarkable progress on issues that international negotiators were unable to resolve through the General Agreement on Tariffs and Trade (GATT) for generations, particularly in the areas of textiles and agriculture.

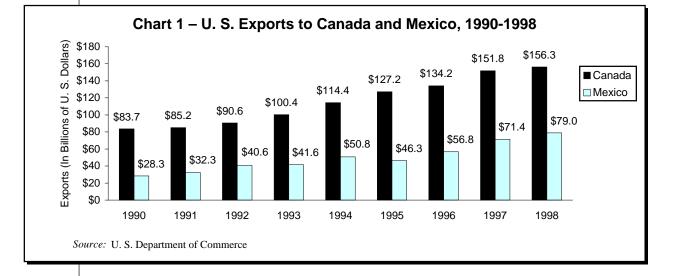
II. The Five-Year Impact of NAFTA on the United States Economy

Prior to NAFTA's actual implementation in 1994,³ the U. S. Federal Reserve Bank of Chicago estimated the agreement would produce "output gains" for all three nations, increasing U. S. gross domestic product (GDP) by 0.24 percent, Mexican GDP by 0.11 percent, and Canada's GDP by 3.26 percent.⁴

Actual results, however, have far exceeded that prediction. A 1997 study by the Heritage Foundation gave NAFTA an "A" and dubbed it a "remarkable success" in all areas of measurement, from job creation to increased exports to export-led economic growth. The study noted that U. S. exports to Mexico grew by 37 percent from 1993 to 1996, reaching a record \$57 billion.⁵

As President Clinton reported during his May 1997 trip to Mexico, by the end of 1997 the historically "Third-World" country would buy more American products than any country except Canada, surpassing even Japan, which has an economy 15 times larger than Canada. In fact, during NAFTA's first three years, 39 of the 50 states increased their exports to Mexico, with 44 seeing a rise from 1995 to 1996.⁶ Over the same period, U. S. exports to Canada rose by 33 percent.

Overall, since 1993, U. S. exports to Canada increased by over 50 percent and exports to Mexico nearly doubled.⁷ In total, those increases reflect an added \$93 billion in American exports (see Chart 1, below).⁸



A \$56 billion increase in U. S. exports, or more than 50 percent, to Canada, and a more than \$37 billion increase, or nearly double, to Mexico in just five years constitutes a significant jump in exports. In fact, this jump far exceeds most estimates NAFTA supporters used during debate over the agreement to bolster their contention that it would be a significant boon to U. S. trade. And it certainly belies the doomsday scenarios put forward by NAFTA's detractors. Such figures have led U. S. Trade Representative Charlene Barshefsky to insist, "There is no economic argument against NAFTA."

NAFTA's Effects on U.S. Job Creation

There is also the issue of jobs, about which estimates and studies vary widely. Shortly after NAFTA was signed, the office of the U. S. Trade Representative announced that NAFTA had created 122,000 U. S. jobs as a result of trade with Mexico, plus 189,000 due to Canada, totaling 311,000 jobs in all.¹⁰ On the other hand, a study by a coalition of labor union and environmental groups led by the Economic Policy Institute, contended that NAFTA had cost 420,000 American jobs.¹¹ By mid-1997, the U. S. Department of Labor certified 116,516 job losses.

Additionally, a well-publicized study of the job creation and loss issue conducted by UCLA's North American Integration and Development Center in 1997 found that the United

States had gained 11,000 jobs because of NAFTA, lost 38,000 jobs to Mexican and Canadian competition, and gained 49,000 jobs as a result of heightened U. S. exports to those nations.¹² The latter study led some analysts to conclude that when it comes to NAFTA's job impact, the trade agreement is somewhat of a "wash."¹³

Which figure is accurate? Job losses and gains are difficult or impossible to measure because of the vast number of jobs that change hands, become available, or disappear in as short a span of time as a single day. Because of this, it is easy to locate figures that bolster many conflicting conclusions. For example, the Office of the U. S. Trade Representative argues that U. S. exports to Mexico "support" 2.3 million American jobs. The *Dallas Morning News* cites figures that point to a gain of 688,000 new U. S. jobs five years after NAFTA. Some NAFTA supporters say the agreement has created as many as 12 million new U. S. jobs and credit NAFTA with a role in dropping the overall unemployment rate from 7.5 to 4.9 percent since 1994.¹⁴

Whether any of this is true or not is impossible to tell. Therefore, some skepticism regarding estimates of NAFTA-related job loss or creation is warranted. The authors avoid making estimates or devising their own formulas, instead citing only the *claims* made by others.

NAFTA's Effects on the State Level

Studies projecting NAFTA's state-level effects are scarce, which is not unusual for trade studies.¹⁵ One of the few conducted was done by the Pittsburgh-based Allegheny Institute for Public Policy. The study, which focused on NAFTA's three-year effect on Pennsylvania,¹⁶ found that the state's exports to Mexico and Canada reached record levels following the first full year of NAFTA's implementation, increasing by 31 percent and 11 percent, respectively.¹⁷ Of 30 Pennsylvania industries that do business with Mexico, 20 experienced export gains to Mexico in the first year of NAFTA, while 26 of 32 industries trading with Canada also saw increases. This led to an expansion of \$616 million in Pennsylvania exports just after the first year. Among the key beneficiaries were capital-goods industries and the environmental-technology sector. None of the leading sectors in the state experienced notable drops in exports to either nation.

Because of NAFTA, Pennsylvania-based companies like Heinz; Chester Environmental; Amp, Inc.; Mine Safety Appliances; and many more were able to expand their exports. For example, prior to NAFTA, Heinz had no sales in Mexico. By 1996, it had sold Mexico \$3 to \$5 million worth of U. S. products.

III. The Five-Year Impact of NAFTA on the Michigan Economy

Free trade creates both winners and losers in the battle for markets and economic advantage. Those who led the debate in favor of NAFTA were people who believe more winners are created by removing barriers to, and lifting restrictions on, the free exchange of goods. After five years, has NAFTA's trade liberalization created more economic winners

Prior to NAFTA, Heinz had no sales in Mexico. By 1996, it had sold Mexico \$3 to \$5 million worth of U.S. products. than losers in Michigan? In considering this question, this section incorporates anecdotal examples of companies claiming injury as well as those claiming benefits from NAFTA.

The economies of American states have become increasingly global, and many states now look to their export industries to help ease economic downturns.¹⁸ Perhaps no state's economy has been more closely tied to foreign markets than that of Michigan, which leads the nation in exports to Canada and is the third-largest state exporter to Mexico.

Foreign trade made up 15 percent of Michigan's gross state product in 1996. The importance of the NAFTA nations to Michigan is amplified even more by the fact that approximately 70 percent of the state's foreign trade is with Canada and Mexico. Michigan's reliance on the trade of NAFTA nations has been remarkably consistent, constituting between 69 percent and 73 percent of exports since the mid-1990s.¹⁹ In other words, Michigan depends on the NAFTA nations for a large portion of its economic health.

NAFTA "Losers": Trade Adjustment Assistance and False Claims of Harm

Companies and union and nonunion employee groups that believe they have been hurt by NAFTA can petition the U. S. Department of Labor for compensation. This compensation, known as NAFTA Trade Adjustment Assistance (TAA), covers workers laid off as a result of heightened imports from Mexico or Canada, or because of a shift of production to those countries. Both NAFTA TAA and regular TAA (started through the Trade Act of 1974) entitle a laid-off worker to 52 weeks of additional unemployment compensation beyond the usual 26 weeks offered. Thus, a worker certified by the Department of Labor as being injured by NAFTA can receive up to 1.5 years of unemployment benefits. The first 26 weeks of standard unemployment compensation are provided by the state, whereas all NAFTA TAA and regular TAA are funded by the federal government.

NAFTA TAA covers not only workers hurt by heightened imports due to NAFTA or a shift in production to Mexico and Canada, but covers workers whose jobs are indirectly affected by NAFTA or by "foreign competition." For instance, TAA provides benefits to workers who lose jobs at a company that does business with a company that trades with Mexico or Canada.

In other words, it makes sense for many individuals and companies to claim harm as a result of NAFTA because the government gives them an economic incentive to do so. While no one denies that increased competition makes it tougher on companies that are not prepared to meet the challenge, one also must be somewhat skeptical about company claims of injury *by NAFTA*, regardless of whether they are "certified" by government sources.

Indeed, throughout the country, dubious claims have been filed and certified. For example, in 1995 *The Wall Street Journal* noted the case of the nation's oldest saw mill, which shut down in Port Gamble, Washington, in 1995. Manager Jerry Clark was surprised to learn that all 135 of the mill's workers were certified as injured by NAFTA. "If anyone can find some legitimate connection to NAFTA in this," said Clark, "I'd sure like to see it."²⁰

Perhaps no state's economy has been more closely tied to foreign markets than that of Michigan, which leads the nation in exports to Canada and is the thirdlargest state exporter to Mexico. In another example, a Pittsburgh-based clothing manufacturer, Reidbord Brothers Co., was "certified" as hurt by NAFTA. Forced to lay off 380 employees, the company blamed its problems on the fact that its major customer switched to Mexican apparel manufacturers. This, the company claimed, was the fault of NAFTA. In fact, upon investigation it was discovered that this "switch" would have happened with or without NAFTA. Those companies that bought clothing from Reidbord, such as Wal-Mart and Levi Strauss, found another company that could provide less expensive clothes due to its use of less costly Mexican labor. A company official admitted as much, stating: "We made jeans for Levi Strauss. We were charging about \$2.75 a pair. They were getting them made in Mexico for \$1.00. It's simple: cheaper labor Even prior to NAFTA they were buying things from Asia, Hong Kong In fact, the only reason our buyers went for Mexico rather than Asia is because of timing and lower transportation costs [in Mexico]."²¹

Most of those "certified" as hurt by NAFTA, like Reidbord, are losing out to the more competitive wages that have existed in Mexico for generations. The lower wages would have existed regardless of NAFTA. In many cases, the pre-NAFTA tariff levels would not have been high enough to offset Mexico's much lower wages. According to the U. S. Department of Labor, Mexico's wages are eight times lower than U. S. wages. Given that reality, a U. S. tariff would have to be extraordinarily high to offset the wage difference. Still, there are other factors that go into economic development in the Americas including location, cost of transportation, and education level of the labor pool.

Motor Coils Manufacturing Co., located in the Pittsburgh area, had 50 workers certified as eligible for NAFTA "retraining" under TAA. Yet, none of these workers was laid off. This suggests that TAA was ultimately used by the company for something other than its intended purpose. In another example, Anchor Glass Containers, Inc., shut down one furnace at its Connellsville, Pennsylvania, plant and laid off more than 100 workers, who were then certified for NAFTA benefits. Asked how these workers were hurt by NAFTA, Mark Karrenbauer, the company's vice president of human resources, stated, "This had absolutely nothing to do with NAFTA at all."²²

Examples of such questionable certifications are prevalent in Michigan as well. Eagle Precision Technologies, a maker of metal tube forming machines, filed for NAFTA TAA on May 29, 1998. The company's Jackson, Michigan, plant was certified as hurt by a "shift in production to Canada."²³ This certification was contested by an upper-level manager at the company who explained that the Jackson plant was closed simply due to a "reorganization of global manufacturing," which, he said, "had nothing to do with NAFTA." Not surprisingly, this executive requested anonymity.²⁴

Another Michigan company, Peregrine Incorporated, received NAFTA TAA certification for two of its Michigan plants after filing on February 22, 1999. Peregrine Incorporated manufactures interior and exterior automotive components for car companies. Both the Flint stamping and assembly facility and the Livonia door-trim plant were approved, deemed injured by Canadian competition. Yet, the company had announced the plant closings a year prior to filing for TAA. A July 7, 1998, company press release states that both plants would be closed as part of a "turnaround plan." The press release mentions nothing about NAFTA competition, but explains that the plants were "unprofitable" and would "require enormous capital investments in dies and presses as well as infrastructure improvements." According to the press release, this was due to "outmoded facilities and

expensive, inefficient processes."²⁵ Again, external competition from Canadian companies was not mentioned, contrary to the TAA certification.

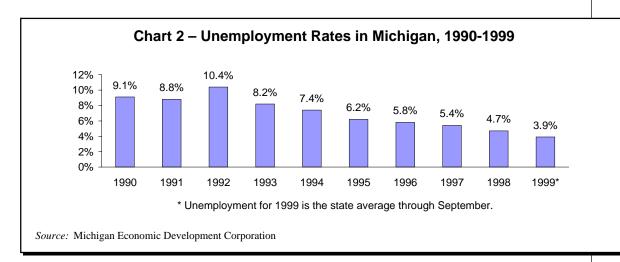
According to Public Citizen, a nonprofit group founded by activist Ralph Nader, 57 percent of NAFTA TAA petitions are approved nationwide. The following lists some notable Michigan TAA approvals. Unfortunately, there is no way to confirm whether all of these were truly due to NAFTA.

- In the first successful NAFTA TAA petition, 35 workers at First Inertia Switch in Grand Blanc were certified in July 1994. The company's accelerometer business was allegedly hurt by increased customer imports from Mexico.
- Reef Gear Manufacturing, Inc., in Marine City produced transmission gears for golf carts. In December 1997, 143 workers were certified as being hurt by increased company imports from Canada.
- Visy Paper, in a petition filed by a labor union, was certified for 122 workers. The Menominee plant, which produced linerboard and tubestock paper, claimed injury by increased customer imports from both Mexico and Canada.
- Workers at Breed Technologies' St. Clair Shores plant filed a successful petition, granted in March 1998, for 429 employees. The company, which builds seat-belt assemblies, reported it was hurt by a shift in production to Mexico.
- The United Auto Workers union at Walbro in Cass City filed a successful NAFTA TAA petition in August 1998. The union said the company's production of small-engine carburetors had been hurt due to a shift in production to Mexico, costing 138 jobs.
- Borg Warner's Sterling Heights automatic transmission plant petitioned in August 1998 as well. Again, a shift in production to Mexico was alleged to affect 259 jobs.
- Indiana Knitwear was certified in May 1999 for 31 workers at their Colon plant. The maker of knit sportswear was supposedly hurt by a shift in production to Mexico.

Based purely on NAFTA TAA certifications, over 10,000 Michigan workers have been certified as injured by NAFTA and were thus eligible for government assistance.²⁶

Overall job losses are difficult to estimate. It is clear, however, that NAFTA has not caused a massive job drain and certainly has not produced an overall decrease in employment across the state. Indeed, exorbitant job loss claims are also refuted by statewide unemployment statistics. Since the initiation of NAFTA, unemployment rates have dropped every year. We do not propose this as evidence for NAFTA's success, as falling unemployment is characteristic of the broader economic expansion. Nonetheless, the numbers are useful in rebutting the assertion that NAFTA has led to a huge decline in Michigan jobs. Clearly this is not the case: Employment has grown in Michigan during the

It is clear that NAFTA has not caused a massive job drain and certainly has not produced an overall decrease in employment across the state. NAFTA years (see Chart 2, below). Also, as noted in the next section, employment in the auto industry—a substantial component of Michigan's jobs—increased by 110,000 between 1993 and 1996.



NAFTA "Winners"

Companies and employees being helped by NAFTA are benefiting primarily via the lower tariff rates charged to their exports to Canada and Mexico. Although many tariffs on goods exported to Canada were already low due to the 1989 Canada-U. S. Free Trade Agreement (CUFTA), NAFTA has had the added benefit of nearly eliminating the oncecommon trade frictions among North American countries, frictions that often led to tariff battles and other general trade disputes.

In a speech in Detroit in April 1999, Canadian Senior Trade Commissioner Ray Guy said that NAFTA's dispute settlement clauses have "been very effective in eliminating the tit-for-tat, temporary trade escalations that used to occur all the time," especially among Canada-U. S. trading partners. Such escalations distorted the notion of free trade, as the two countries would go back and forth, adding new obstacles to the trade of a certain product in response to another country's new, stricter regulations on that same good. "NAFTA has helped us avoid costly trade wars," said Guy.²⁷

LOWER TARIFFS

NAFTA is effectively a tax cut on American products sold in Mexico and Canada. Prior to NAFTA, Mexican tariffs charged on the products of Michigan companies averaged around 20 percent, about the same as those of most non-NAFTA nations who export to Mexico currently. Mexican tariffs on American goods were once over 100 percent, but had been reduced in the years leading up to NAFTA as a sign of good faith by the Salinas administration as it postured itself for future NAFTA negotiations. As noted earlier, the tariff rates to Mexico will be totally eliminated over a 15-year period that started January 1, 1994. NAFTA is effectively a tax cut on American products sold in Mexico and Canada.

Michigan businesses are already enjoying the benefits of tariff-free trade with Canada thanks to CUFTA. As a result of the lower cost of exports and imports, Ray Guy stated that trade between Michigan and the province of Ontario now exceeds that of Michigan to Japan.²⁸

Table 2, below, is an actual tariff-reduction schedule from a Michigan company, Steelcase International. The schedule delineates tariffs on exports of Steelcase's products namely, chairs, furniture, and furniture parts. Both Canada and Mexico each have NAFTA rates and most-favored nation (MFN) rates that they apply to certain products. This schedule shows those rates and makes clear the lower-tariff advantage under NAFTA.

Country	Type of Tariff	1994	1995	1996	1997	1998
	Chairs, MFN	N/A	10.1%	7.6	6	0
	Chairs, NAFTA	N/A	0	0	0	0
Canada	Chair Parts, MFN	N/A	10.1	7.6	5	0
	Chair Parts, NAFTA	N/A	0	0	0	0
	Furniture, MFN	N/A	10.1	7.6	5	0
	Furniture, NAFTA	N/A	0	0	0	0
	Furniture Parts, MFN	N/A	10.1	7.6	6	0
	Furniture Parts, NAFTA	N/A	0	0	0	0
	Chairs, MFN	15.5	15.5	15.5	15.5	15.5
Mexico	Chairs, NAFTA	15.5	13	11	9	6
	Furniture, MFN	20	20	20	20	20
	Furniture, NAFTA	18	16	14	12	10

The tariff schedule shows that the rates on Steelcase's exports to Canada have zeroed out. These cuts were facilitated by the 1989 CUFTA accord. The rates on Steelcase's exports to Mexico have been cut substantially since NAFTA started in 1994, and are now below MFN rates, after being near equal to the MFN rates when NAFTA first began. The tariff reductions on Steelcase's exports to Mexico have been cut by roughly two percent per year. Note, also, that the MFN rates on the Mexico side of the schedule have not gone down.

TRADE RATIONALIZATION

Canada's Guy also speaks of "trade rationalization" that has occurred since NAFTA went into effect. Prior to the agreement, manufacturers often had to produce the same product in three different factories to meet the requirements of the North American market. He mentions Battle Creek-based Kellogg Company as an example. Prior to NAFTA, Kellogg had to produce Corn Flakes in Mexico, Canada, and the United States so it could export to each of those countries and avoid the high tariffs that the company would otherwise encounter. Now, under NAFTA, Kellogg can consolidate its operations.

It is important to note that companies that benefit from NAFTA are not specifically tracked the way those that claim to be hurt are tracked for purposes of TAA benefits. It is easy to consult NAFTA TAA petitions to get an idea of how many businesses have claimed injury by NAFTA, but there exists no such tabulation for companies that have thrived under the agreement's changes. Therefore, the information on "winners" is more difficult to tabulate.

While companies of all sizes and industries have benefited from NAFTA, an examination of Michigan companies should begin with the auto industry, where the results could not be more apparent—and good—for Michigan. Ford calls NAFTA an "unequivocal success"²⁹ and General Motors says, "NAFTA has definitely lived up to its promise."³⁰

Ford, General Motors, DaimlerChrysler, and their employees are all benefiting from tariff cuts generated by NAFTA. These include the following:³¹

- Mexican tariffs on cars and light trucks originating in the United States or Canada were immediately reduced from 20 percent to 10 percent on January 1, 1994.
- The passenger car tariff was subsequently reduced by 1.2 percent in 1995 and has been and will continue to be reduced by 1.1 percent each year until it is eliminated on January 1, 2003.
- The Mexican tariff on light trucks was reduced by 2.5 percent per year, beginning in 1995, until it was eliminated on January 1, 1998.
- Mexican tariffs on heavy trucks (all vehicles weighing over 8,864 kilograms), cab chassis, truck tractors, buses, and specialty vehicles were cut from 20 to 18 percent on January 1, 1994, and are being phased out in increments of 2 percent each year until they are eliminated on January 1, 2003.

These tariff cuts, plus other NAFTA changes, have helped Ford and GM. According to the Ford Motor Company, "[P]rior to NAFTA, not only did automakers have to assemble vehicles in Mexico in order to sell there, but all auto producers were subject to a 'trade balancing' system, which required each company to export substantially more than it imported."³² Ford explains that U. S. automakers were required to purchase a high percentage of parts from Mexican suppliers, which often did not meet quality or price standards. This resulted in "less-than-maximum efficiency," and exports to Mexico. NAFTA has changed all of that. It has "allowed Ford to make its established plants in Mexico more efficient."

Now that it can act regionally rather than country-by-country, Ford has consolidated all production of Mercury Cougars at a U. S. plant, discontinuing low-volume production at its Cuautitlan, Mexico, plant. Cuautitlan production of the Grand Marquis has also been moved to Canada. Ford's ability to produce all of a car model at a single North American plant is a prime example of how trade rationalization is helping U. S. companies—and Michigan companies in particular. In this case, says Ford, "NAFTA has allowed Ford to improve its competitiveness by planning production to meet the needs of all of North America, rather than having to focus on single-country markets."³³

Ford cites numbers to back up its claims of NAFTA's benefits. Before NAFTA, sales of Ford products accounted for less than one percent of the Mexican market. By 1996,

Ford calls NAFTA an "unequivocal success" and General Motors says, "NAFTA has definitely lived up to its promise." sales of Ford products from the United States and Canada already accounted for almost 11 percent of the Mexican market. Ford says that success has not come at the expense of American jobs. Ford vehicles assembled in Mexico maintain a high level of U. S. content. For example, the 1998 Ford Contour was produced in high volume at the Cuautitlan plant, but less than 10 percent of its parts come from Mexico. Furthermore, the company says, "Ford employment levels in each of the NAFTA economies . . . have increased since the signings of the Agreement."³⁴

Prior to NAFTA in 1993, General Motors exports to Mexico were "virtually zero."³⁵ By 1997, they had grown to over 60,000 vehicles,³⁶ making GM "the largest seller of vehicles in Mexico." According to a report on NAFTA issued by the company, "The assessment of NAFTA is very positive."³⁷

GM further touted NAFTA's success in congressional testimony given by its chief economist, G. Mustafa Mohatarem, before the House Ways and Means Committee on September 11, 1997. Mohatarem provided the following remarks on NAFTA:

GM was an early and strong supporter of NAFTA. We believed that it would promote economic growth, improve living standards and enhance cooperation and goodwill between the U. S., Mexico, and Canada. Although all of NAFTA's provisions will not take effect for another 12 years, NAFTA is living up to its promise three years into its implementation. The U. S. auto industry has long benefited from free trade with Canada, but prior to NAFTA, Mexico's market was effectively closed to exports of autos from the U. S. Now, GM is the largest seller of vehicles in Mexico. What is quite remarkable is that this increase in exports has occurred in the face of one of the deepest recessions in Mexican history. We expect exports to rise even more as Mexico's economy recovers. Indeed, Mexico is rebounding far more quickly and strongly than anyone could have imagined. Clearly, Mexico's decision to honor its NAFTA commitments despite the plunge in demand in its domestic market ultimately served to accelerate recovery.³⁸

Mohatarem also points to a boon in jobs and wages in the U. S. auto industry during the first three years of NAFTA:

Contrary to fears expressed by NAFTA opponents, employment in the auto industry increased by 110,000 between 1993 and 1996 On average, wages in U. S. companies that export tend to be 10-15 percent higher than wages in non-exporting companies. And, in the motor vehicle and equipment industry, wages have increased an average of \$1.74 between 1993 and 1996—74 percent above the average for the U. S. private sector.³⁹

GM is quite happy with NAFTA and its impact on GM, Michigan, and the United States: "All in all," concludes Mohatarem, "we think the assessment of NAFTA is very positive and that the benefits of NAFTA will continue to grow. Thus, not only does General Motors continue to be a strong proponent of NAFTA, but we also support its expansion to other hemispheric countries, beginning with Chile."⁴⁰

In 1993, 49 percent of Chrysler's American motor vehicle exports went to Canada and Mexico. By 1998, that figure had increased to 66 percent. From 1993 to 1998 Chrysler (now DaimlerChrysler) motor vehicle exports to Mexico increased from 5,613 to 34,830 motor vehicles. In addition, these increased exports to Mexico were accomplished without eliminating a single U.S.-based job. Indeed, not only has hourly employment at DaimlerChrysler increased by 21 percent since 1993, but profit sharing has increased from \$4,300 in 1993 to an average of \$7,400 per hourly worker in 1998.⁴¹

Midland-based Dow Chemical Company claims NAFTA is benefiting the company in more ways than one. In addition to saving Dow \$25 million annually as a result of reduced tariffs, NAFTA has helped Dow increase its exports as well.⁴² According to Frank Farfone, a company representative in Dow's Washington D. C. office, Dow's plastics business has had the largest increase of any Dow business sector since the inception of NAFTA. It is also noteworthy that this growth has come without the relocation of any Dow plants to Mexico or Canada.

Listed below are companies the Embassy of Mexico considers "NAFTA success stories."⁴³ The embassy compiled this list from various company press releases, newspaper articles, wire services, business journals, and other sources. Like many of the TAA claims of injury, we were not able to fully confirm whether each of these NAFTA successes are in fact successes. Nonetheless, here are Michigan "NAFTA successes":

- Durakon, truck bedliners, Lapeer.
- FANUC, robotics, Rochester Hills.
- Delphi Automotive, automotive components, Troy.
- Pulte Homes, home construction, Bloomfield Hills.
- Comshare, management software, Ann Arbor.
- CMI International, automotive components, Southfield.
- Hayes Lemmerz International, automotive components, Romulus.
- TEMIC Automotive, automotive components, Detroit.
- Budd Company, automotive sheet metal, Troy.
- Kellogg Company, cereal, Battle Creek.

IV. The Impact of NAFTA on Michigan Exports to Canada and Mexico

The best measurement of NAFTA's effect on the state of Michigan is export data. The anecdotal evidence from firms becomes more powerful in explaining NAFTA's positive effect on the state's economy when it is combined with export figures. This section analyzes total Michigan exports to Canada and Mexico and breaks down exports statewide on an industry-by-industry basis.

There are two primary sources of data on Michigan exports: The University of Massachusetts Institute for Social and Economic Research (MISER) and the U. S. Department of Commerce. MISER data go back to 1988, while Commerce Department data go back only to 1993. Both sources are used to evaluate the state's overall change in exports

In 1993, 49 percent of Chrysler's American motor vehicle exports went to Canada and Mexico. By 1998, that figure had increased to 66 percent. to Mexico and Canada. Both sources are credible; however, they collect export data very differently.⁴⁴ The Commerce Department counts a company's home headquarters as the source of the export, while MISER counts the point of manufacture, whether in the same state or elsewhere. For instance, a GM automobile assembled in Kentucky and shipped to Mexico would be counted as a Kentucky export by MISER, but also would be considered a Michigan export by the Commerce Department.

This seemingly minor difference can lead to widely divergent numbers for states such as Michigan. MISER data show that Michigan increased exports to Mexico by 375 percent from 1993 to 1997. On the other hand, Department of Commerce data show a far more modest gain of just 15 percent. Likewise, there are differences in the data from 1993 to 1998, with MISER showing a 148-percent gain and Commerce showing a rise of just 40 percent. This same wide divergence is seen in the numbers for Canada, as one source shows Michigan's exports to Canada increasing by 72 percent and the other shows a much smaller 9 percent rise.

In other states, the discrepancy is small. For instance, Pennsylvania exports to Mexico after NAFTA's first year increased 31 percent according to MISER and 38 percent according to the Department of Commerce. Exports to Mexico from Texas increased by 53 percent or 47 percent according to MISER and Commerce figures, respectively. The numbers for Texas to Canada are also close, which show increases of 122 percent and 113 percent, respectively.

Of the five states we examined in our research, Michigan was the only one with such significant differences between sets of data. This is largely due to the uniqueness of Michigan's auto industry. Few industries ship as many parts and employ as many out-of-state suppliers. No other state has the "Big Three" auto makers headquartered there. Thus, it is understandable that the different means of collecting export data would produce such vastly different figures.

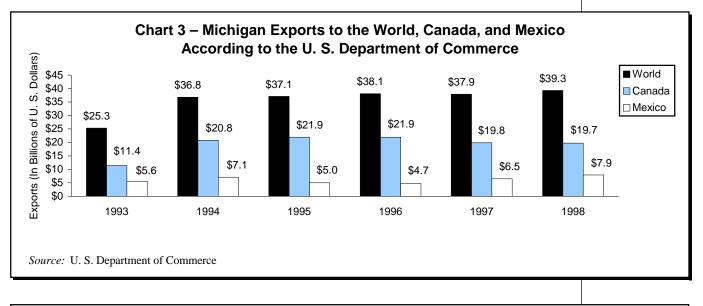
Both the Commerce Department and MISER's data are acceptable for use in research—there is no evidence that one method is better than another. In an interview with the *Detroit Free Press*, the Mexican ambassador to the United States, Jesus Reyes-Heroles, stated that NAFTA has led to a six-fold increase in exports from Michigan to Mexico since 1993.⁴⁵ Clearly, he was citing MISER data and ignoring the Commerce Department's much smaller rate.⁴⁶ We have seen this bias exhibited by both proponents and opponents of NAFTA. To avoid such bias, as well as to provide a complete and accurate picture of NAFTA's effect on Michigan, this report includes both sources of data. Used in tandem, the two sources provide a more complete picture. Ignoring one set of data would not offer a full picture.

Total State Exports

Of the 50 states, Michigan is Canada's largest trading partner, exporting over \$19 billion to Canada in 1998. Michigan's trade with Canada is over three times larger than its trade with its second leading partner, Mexico. Almost three-fourths (70 percent) of Michigan exports are bought by Mexicans and Canadians.⁴⁷ Michigan's export industry

Of the 50 states, Michigan is Canada's largest trading partner, exporting over \$19 billion to Canada in 1998. depends on the NAFTA nations. This is especially notable when considering that 15 percent of Michigan's gross state product is from exports.

As seen in Charts 3 and 4, below, Michigan exports to Canada and Mexico rose to record levels under NAFTA, annually adding billions of dollars to the state's economy. Although the gains in exports have been impressive, they are not complete without an idea of how Michigan's exports to Mexico and Canada compare to the state's broader export market and to the years prior to NAFTA.





Although it is difficult to arrive at definite conclusions from the pattern of Michigan exports to Canada (which had been increasing prior to NAFTA because of a free-trade agreement already in place), the MISER data do show a trend of expansion in exports to Mexico. It is important to note that these data show a 25-percent drop in Michigan's exports to Mexico in the five years prior to NAFTA—from \$1.7 billion in 1989 to \$1.3 billion in 1993. Significantly, the value of 1993 exports to Mexico were actually below those of 1988.

That \$1.3 billion in 1993 increased to \$3.2 billion after five years of NAFTA. Taking into account the pre-NAFTA slump, this represents a post-NAFTA rise of 148 percent.

According to MISER, Michigan exports to Mexico dropped in three of the four years prior to NAFTA. Post-NAFTA, they have risen steadily each year, even during the 1995 Mexican recession and peso crisis. The state's exports to Mexico increased 18 percent in 1994 and another 104 percent in 1995 (the first two years after NAFTA), compared to decreases of 13 percent in 1992 and 9 percent in 1993 (the last two years before NAFTA). Clearly, Michigan exports to Mexico have made a remarkable turnaround since NAFTA.

For Michigan's exports to Canada, the Commerce Department shows a 72-percent gain since NAFTA, and MISER shows a 9-percent rise. MISER lists a 19-percent increase in the five years prior to NAFTA. MISER data show increases in four of the five years after NAFTA and drops in three of the five years prior to NAFTA. It is important to note that trade liberalization between Michigan and Canada actually began after the 1989 Canada-U.S. Free-Trade Agreement and merely continued under NAFTA. Thus, the type of five-year comparisons made between Michigan and Mexico should be viewed differently than the comparisons made between Michigan and Canada.

The results are mixed when comparing Michigan's exports to Mexico and Canada to its exports to the world as a whole over the same period. According to MISER data, Michigan's 148-percent increase in exports to Mexico was nearly six times higher than its 25-percent increase in exports to the world as a whole. The 9-percent increase in exports to Canada, however, was almost one-third less than exports to the world as a whole. According to Commerce data, exports to Mexico increased by 40 percent, to the world as a whole by 55 percent, and to Canada by 72 percent.

Table 3, below, compares Michigan exports to non-NAFTA and NAFTA nations using both longer-term MISER data as well as Commerce Department figures.

As might be expected for Michigan, the Commerce Department data show a very different result than that showed by MISER. While Commerce does not offer data back to 1988, it shows that Michigan exports to the NAFTA nations since 1993 have exceeded those to the rest of the world over that period. The Commerce Department data also show the increase in Michigan exports to the NAFTA nations exceeding the increase to the non-NAFTA nations by 20 percent.

Table 3 – Change in Michigan Exports to NAFTA and Non-NAFTA Nations, 1988-1998									
٦	MISER Data (Billions o	f Dollars)	Department of Commerce Data (Billions of Dollars)						
Year Non-NAFTA Nations NAFTA Nations (Mexico/Canada) Year Non-NAFTA Nations					NAFTA Nations (Mexico/Canada)				
1988	\$4.61	\$16.41	N/A	N/A	N/A				
1993	\$6.61	\$18.53	1993	\$8.26	\$17.06				
1998	\$9.51	\$21.93	1998	\$11.72	\$27.55				
% change 1988-93	43.6%	12.9%	N/A	N/A	N/A				
% change 1993-98	43.9%	18.3%	% change 1993-98	41.9%	61.5%				

It is also illuminating to show the trends in Michigan exports to the NAFTA and non-NAFTA nations (i.e., "rest of the world") in the five years before and after NAFTA. According to MISER, in the five years prior to NAFTA, Michigan's combined exports to Mexico and Canada increased by 13 percent.⁴⁸ This is well behind its exports to the non-NAFTA nations in the rest of the world, which increased by 44 percent. While post-NAFTA exports to the NAFTA nations have not caught pace with those to the non-NAFTA nations, they have increased more post-NAFTA, at 19 percent, than pre-NAFTA, at 13 percent. This contrasts with the pattern for exports to the non-NAFTA nations, which stayed nearly constant over the pre- and post-NAFTA periods.

While the discrepancy between Commerce figures and MISER is once again frustrating, both sets of data illustrate results that reflect positively on NAFTA, rather than negatively. For instance, the post-NAFTA increases exceeded the pre-NAFTA increases by wide margins. Indeed, even the more conservative MISER data show impressive increases in exports from Michigan to NAFTA and non-NAFTA nations.

The Impact of NAFTA on Michigan Exports by Industry

The next level of analysis examines export statistics by industry group in Michigan. The Department of Commerce uses the Standard Industrial Classifications (SIC) to break down exported goods by industry.⁴⁹ SIC codes classify businesses by industry and economic activity. This section employs only the much more conservative Commerce Department data.

A wide range of Michigan industries have experienced an increase in exports. According to the Commerce Department, 25 of 30, or 83.3 percent, of Michigan industries have experienced increases in exports to Canada since NAFTA began, and 20 of 30, or 67 percent, saw rises in exports to Mexico. Despite the robust trade with Canada prior to NAFTA, 11 of the 25 industries that showed an increase in exports to Canada experienced double-digit increases, and eight sectors saw triple-digit increases, after NAFTA took effect. Of the exports to Mexico, there were eight double-digit increases, seven triple-digit increases, and an astounding rise of over 5,000 percent in the scrap metal industry. Thus, of the 20 industries with export gains to Mexico, 16 were double or triple-digit increases.

Most important to Michigan are the healthy gains in the transportation industry. Despite being hit hard by the 1995 peso crisis, the sector has steadily grown in Mexico, with Michigan recording a 36.2-percent export gain since 1993. (The gain is even higher using MISER data.) The crucial auto trade with Canada has fared even better. Prior to NAFTA in 1993, Michigan exported \$6.25 billion to Canada in the transportation sector. As of 1997, that figure had grown to \$11.77 billion, a rise of 88.5 percent.

Table 4, next page, shows that Michigan exports were affected across the board by the Mexican recession in 1995. The severity of that event cannot be ignored. Trade began to recover in 1996 and, in most cases, was back above previous levels by 1997. It is remarkable that the numbers rebounded so quickly. One area of stellar growth for Michigan exports to Mexico was the agriculture industry, which has increased exports by 935 percent in the years since NAFTA went into effect.

According to the Commerce Department, 83.3 percent of Michigan industries have experienced increases in exports to Canada since NAFTA began, and 67 percent saw rises in exports to Mexico.

SIC Category	1994	1995	1996	1997	1993-97
Food products	38%	-65.2%	32.6%	58.9%	gain of 1.2%
Tobacco products	N/A*	N/A	N/A	N/A	N/A
Textile mill products	6.0%	-14.8%	-51.7%	8.2%	loss of 52.8%
Apparel	104.9%	-39.3%	28.0%	28.0%	gain of 103.5%
Lumber & wood products	373.3%	34.0%	-89.9%	-28.6%	loss of 54.4%
Furniture & fixtures	-13.9%	-5.6%	-66.5%	-16.4%	loss of 77.2%
Paper products	6.16%	-6.14%	-23.0%	56.3%	gain of 19.9%
Printing & publishing	07%	-3.8%	-9.2%	70.6%	gain of 48.8%
Chemical products	-4.1%	-30.2%	21.7%	49.8%	gain of 22.1%
Refined petroleum products	-6.0%	3.6%	-2.0%	49.7%	gain of 42.9%
Rubber & plastic products	4.6%	-9.8%	-5.0%	3.8%	loss of 6.9%
Leather products	17.1%	93.2%	17.7%	24.5%	gain of 231.6%
Stone, clay, and glass products	17.5%	-1.9%	-6.7%	-12.9%	loss of 6.3%
Primary metals	.24%	-40.3%	2.6%	-6.1%	loss of 42.4%
Fabricated metal products	7.6%	-43.9%	20.5%	-9.3%	loss of 34%
Industrial machinery & computers	43.75%	23.4%	6.4%	24.7%	gain of 135.4%
Electric & electronic equipment	3.9%	-41.5%	-2.19%	46.1%	loss of 13.2%
Transportation equipment	47.3%	-37.5%	-9.1%	62.8%	gain of 36.2%
Scientific & measuring instruments	37.43%	-6.2%	-16.2%	34.2%	gain of 45%
Miscellaneous manufacturers	-33.3%	-72.6%	-21.0%	587%	loss of 0.9%
Agricultural products	139.9%	31.3%	210%	-2.8%	gain of 935.1%
Livestock & livestock products	113.1%	-99.3%	133%	3,957.1%	gain of 43%
Forestry products	50%	-43.3%	-100%	N/A	gain of 44.8%
Fish & marine products	N/A	N/A	N/A	100%	loss of 25.9%
Metallic ores & concentrates	-100%	N/A	-7.7%	50%	gain of 122.1%
Coal & lignite	N/A	112.5%	-23.5%	-30.8%	N/A
Crude petroleum & natural gas	N/A	-100%	N/A	N/A	N/A
Nonmetallic minerals	208.5%	-39.8%	106%	28.5%	gain of 394.4%
Scrap & waste	298.6%	188.4%	147.0%	98.6%	gain of 5,539.9%
Used merchandise	-7.0%	-90.6%	1,700%	451%	gain of 773.8%

Table 5, next page, shows that exports to Canada have grown for an even broader spectrum of industries.

SIC Category	1994	1995	1996	1997	1993-97
Food products	23.4%	2.14%	3.9%	5.8%	gain of 38.6%
Tobacco products	N/A*	N/A	N/A	N/A	N/A
Textile mill products	3.9%	23%	2.6%	24.9%	gain of 63.8%
Apparel	31.5%	232.6%	5.56%	-7%	gain of 329.4%
Lumber & wood products	15.9%	-16.6%	8.36%	-1.5%	gain of 3.1%
Furniture & fixtures	2.4%	26.4%	18.1%	3.2%	gain of 57.7%
Paper products	20%	20.2%	17.5%	-14%	gain of 45.7%
Printing & publishing	21.6%	.6%	-10.97%	-10.5%	loss of 2.5%
Chemical products	33.6%	37%	75.1%	16.2%	gain of 272.2%
Refined petroleum products	-4.8%	-8.4%	70.59%	-13.0%	gain of 29.4%
Rubber & plastic products	34.8%	17.5%	27.8%	13.0%	gain of 128.7%
Leather products	29%	17.9%	24.7%	51.3%	gain of 186.5%
Stone, clay, and glass products	26.4%	13%	15.2%	1.6%	gain of 67.3%
Primary metals	32.9%	14.8%	-12.2%	8.1%	gain of 44.8%
Fabricated metal products	-65%	19.7%	.4%	9.8%	loss of 53.8%
Industrial machinery & computers	64%	-6.7%	5.9%	31.6%	gain of 113.2%
Electric & electronic equipment	1%	20.5%	8.0%	-2.4%	gain of 28.4%
Transportation equipment	140.3%	3.5%	-3.2%	-21.64%	gain of 88.5%
Scientific & measuring instruments	93%	51.0%	3%	38%	gain of 301.1%
Miscellaneous manufacturers	19.5%	-9.7%	-11.6%	10.3%	gain of 5.2%
Agricultural products	18.3%	6.2%	7.1%	44.9%	gain of 34.7%
Livestock & livestock products	-8.81%	-32.8%	-36.7%	-20.4%	loss of 69.1%
Forestry products	24.4%	30.3%	32.9%	250%	gain of 357.4%
Fish & marine products	39.9%	5.0%	-12.5%	4.3%	loss of 42.3%
Metallic ores & concentrates	21,915%	1,603.5%	-90.1%	-96%	gain of 1,325.4%
Coal & lignite	N/A	-18.9%	-32.1%	-100%	N/A
Crude petroleum & natural gas	33.7%	53.9%	-28.1%	-26.1%	gain of 9.2%
Nonmetallic minerals	11.4%	10.1%	-3.4%	-7.62%	gain of 9.5%
Scrap & waste	59.2%	24.5%	-16.56%	11.0%	gain of 83.7%
Used merchandise	1.73%	39.2%	-13.9%	10.4%	gain of 34.7%

Most notable are the exports in the metallic ores and concentrates, which increased by 1,325.4 percent; forestry, which increased by 357.4 percent; scientific and measuring instruments, which increased by 301.1 percent; apparel, which increased by 329.4 percent, and chemical products, which increased by 272.2 percent.

Industries that have experienced the largest export drops since NAFTA's passage include livestock, down 69.1 percent; fabricated metal, down 53.8 percent; and fish and marine products, down 42.3 percent.

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Conclusion

Overall, the evidence suggests that Michigan's economy has reaped tremendous benefits as a result of NAFTA trade liberalization. It is clear that Michigan's exports to Mexico and Canada have grown faster after NAFTA than they did before the pact was signed. This can be seen in both MISER and U. S. Department of Commerce data. For various reasons, the two sets of data differ for Michigan. While the Department of Commerce data do not go back to 1988, they show that Michigan exports to the NAFTA nations since 1993 have exceeded those to the non-NAFTA nations by 62 percent to 42 percent.

It is clear that Michigan's exports to Mexico and Canada have grown faster after NAFTA than they did before the pact was signed.

Has NAFTA caused Michigan workers harm? We believe that many of the highly publicized "job losses" trumpeted by newspaper headlines are actually attempts to blame NAFTA for general business failures that would have occurred anyway. Some companies have been legitimately hurt by the trade accord, however; the data showing impressive increases in exports suggests that many more companies are benefiting from NAFTA than are not.

Far from decimating the U. S. auto industry, as some suggested, NAFTA has been a great boon to auto makers. Ford called NAFTA an "unequivocal success." General Motors says the trade accord has "definitely lived up to its promise." Ford increased its presence in Mexico from one percent of the market to over 11 percent since the inception of NAFTA, while GM has increased its exports from almost no vehicles prior to NAFTA to over 60,000 units since the agreement went into effect. DaimlerChrysler exports to Canada and Mexico increased from 49 percent of its total exports to 66 percent since NAFTA became law.

Today, the economies of both the United States and Michigan are in such tremendous shape that many who predicted certain economic doom as a result of NAFTA have fallen silent on the subject. However, it is instructive to recall their prophecies of yesterday in order to understand how easy it is to be caught up in the fear that the free interplay of economic forces will wreak havoc upon American businesses and workers. One measure of this fear is the title of billionaire and presidential aspirant Ross Perot's best-selling 1993 book, timed to have an impact on the NAFTA debate: *Save Your Job, Save Your Country: Why NAFTA Must Be Stopped—Now.*

Again, not every industry has benefited from NAFTA; in fact, some companies have been harmed. However, Michigan's exports to Mexico and Canada have become much stronger since NAFTA was passed and many Michigan businesses have grown due to NAFTA. At the very least, it is difficult to statistically argue that NAFTA has harmed Michigan's economy, its workers, or its consumers. On balance, lifting trade restrictions and lowering tariffs have been positive steps toward increasing the prosperity and standards of living for Michigan citizens—and citizens throughout America, Canada, and Mexico.

Endnotes

¹ Information provided by Arthur Humphrey, national sales manager for Mexico, Heinz Co., April 28, 1997.

² Juan R. Espana, "Impact of the North American Free Trade Agreement (NAFTA) on U.S.-Mexican Trade and Investment Flows," *Business Economics*, July 1993, pp. 41-7.

³ For an overview of many of these studies, see: "Economy-Wide Modeling of the Economic Effects of a FTA with Mexico and a NAFTA with Canada and Mexico," USITC Publication 2516, United States International Trade Commission, May 1992. Among the more well-known studies, see: G.C. Hufbauer and J.J. Schott, "North American Free Trade: Issues and Recommendations," Institute for International Economics, Washington, DC, 1992; U.S. Department of Labor, "Industrial Effects of a Free Trade Agreement between Mexico and the USA," Washington, DC, September 15, 1990; KPMG Peat Marwick, "Analysis of Economic Effects of a Free Trade Agreement Between the United States and Mexico," U.S. Council of the Mexico-U.S. Business Committee, Washington, DC, 1991; R. Hinojosa and S. Robinson, "Alternative Scenarios of U.S.-Mexico Integration: A Computational General-Equilibrium Approach," Working Papers 609, University of California, Department of Agricultural and Resource Economics, 1991; R.K. McCleery and C.W. Reynolds, "A Study of the Impact of a U.S.-Mexico Free Trade Agreement on Medium-Term Employment, Wages, and Production in the United States," Stanford University, 1991; "Economy-Wide Modeling of the Economic Effects of a FTA with Mexico and a NAFTA with Canada and Mexico," USITC Publication 2516, United States International Trade Commission, May 1992; and U.S. International Trade Commission Memorandum, March 8, 1991.

⁴ Michael A. Kouparitsas, "A dynamic macroeconomic analysis of NAFTA," *Economic Perspectives*, Federal Reserve Bank of Chicago, January 1997. Also see: Sydney Weintraub, "NAFTA at Three: A Progress Report," *Significant Issues Series*, Vol. XIX, No. 1, Center for Strategic and International Studies, Washington, DC, 1997.

⁵ John Sweeney, "NAFTA's Three-Year Report Card: An 'A' for North America's Economy," *The Heritage Foundation: Backgrounder*, No. 1117, May 16, 1997.

⁶ Ibid.

⁷ A common criticism is that NAFTA has led to higher trade deficits with Canada and Mexico. In fact, the United States has had trade deficits with both nations on and off for many years prior to NAFTA. For instance, America had a trade deficit with Mexico in 1990, which swung to a surplus from 1991 through 1994. It fell to a deficit during the Mexican recession of 1995 and stayed at deficit throughout 1996, before heading toward surplus again in 1997. Also, it is debatable as to whether a trade deficit is economically unhealthy for a nation.

⁸ Most studies will show a dip in exports to Mexico from 1994 to 1995 due to the severity of the Mexican recession and peso crisis that occurred that year. The dip rebounds in 1996.

⁹ Helene Cooper, "Experts' View of NAFTA's Economic Impact: It's a Wash," *The Wall Street Journal*, June 17, 1997, p. A20.

¹⁰ Charlene Barshefsky, "Yes, NAFTA is good for America," *Pittsburgh Post-Gazette*, June 22, 1997, p. B4.

¹¹ "Critics say NAFTA has cost 420,000 jobs," Associated Press, June 27, 1997.

¹² Raul Hinojosa and Goetz Wolff, North American Integration Three Years After NAFTA: The

National and Regional Labor Market Impacts, UCLA's North American Integration and Development Center, December 1996 and Sara Silver, "Job impact of NAFTA negligible, study says," Associated Press, December 20, 1996.

¹³ Cooper, "Experts' View of NAFTA..."

¹⁴ Donald Lambro, "NAFTA Success Saga Beyond Expectations," *Washington Times*, June 2, 1997 and "NAFTA at Five," *Dallas Morning News*, January 4, 1999.

¹⁵ See: The Trade Partnership, "The Impact of the North American Free Trade Agreement on Pennsylvania," Prepared for the U.S. Council of the Mexico-U.S. Business Committee, Washington, DC, September 1992; and Systems Synthesis Project, "NAFTA: A Regional Impact Study for Southwestern Pennsylvania," Carnegie Mellon University, H.J. Heinz School of Public Policy and Management, April 1994, pp. 112-13.

¹⁶ Paul Kengor, "The Three-Year Effect of NAFTA on Pennsylvania and the Pittsburgh Region," Allegheny Institute for Public Policy, Allegheny Institute Report #97-08, July 1997. Also see: Paul Kengor, "NAFTA: Its Early Effect on Pennsylvania and the Pittsburgh-SWPA Region," *Economic Development Commentary*, Vol. 20, No. 3, Fall 1996, pp. 24-30.

¹⁷ The state's first-year increase in exports to Mexico made the nation the second-largest market for Pennsylvania products, hitting \$854 million in 1994 and surpassing Japan and the United Kingdom.

¹⁸ Michael Phillips, "States Rely on Exports to Ease Downturns," *The Wall Street Journal*, December 26, 1996.

¹⁹ Calculations by the authors using data from the Bureau of Economic Analysis and the Department of Commerce's International Trade Administration.

²⁰ Bill Richards, "Layoffs Not Related To NAFTA Can Trigger Special Help Anyway," *The Wall Street Journal*, June 30, 1997, p. A1.

²¹ Interview with Reidbord Bros. official who requested anonymity, May 5, 1997.

²² Cesca Antonelli, "Uncommon adjustment," *Pittsburgh Business Times*, November 14-20, 1997, pp. 1 and 47.

²³ All NAFTA TAA certification decisions and dates are taken from the Employment and Training Administration's Workforce Development Service Center at http://www.wdsc.gov.

²⁴ Correspondence with Eagle Precision Technology executive who requested anonymity, April 28, 1999.

²⁵ "Peregrine Turnaround Plan Announced." Official company press release, July 7, 1998.

²⁶ Based on calculation from NAFTA TAA determinations provided by the North American Integration and Development Center, UCLA.

²⁷ Interview with Ray Guy, Canadian Consul and Senior Trade Commissioner in Detroit, April 30, 1999.

²⁸ Ibid.

²⁹ Ibid.

³⁰ General Motors report on NAFTA.

³¹ "Compilation of Foreign Motor Vehicle Import Requirements," U. S. Department of Commerce, International Trade Administration, Office of Automotive Affairs, February 1999.

³² Ford Motor Company report on NAFTA.

³³ Ibid.

³⁴ Ibid.

³⁵ General Motors report on NAFTA.

³⁶ Ibid.

³⁷ Ibid.

³⁸ "Statement of General Motors Corporation," presented by G. Mustafa Mohataram, Chief Economist, before Committee on Ways & Means, U. S. House of Representatives, September 11, 1997.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ DaimlerChrysler memo from Lisa Maher and Yancy Molnar to co-author Michael LaFaive, November 2, 1999.

⁴² The company did not provide specific export figures. Communications with Dow Chemical officer Frank Farfone, June 1999.

⁴³ See Web site, "www.naftaworks.org."

⁴⁴ The U. S. Census Bureau issues two principal data sets that provide merchandise export statistics for sub-national (i.e., state and regional) jurisdictions. They are the Exporter Location (EL) series and the Origin of Movement (OM) series. This document refers to the EL series as the Commerce data. The OM series is known as the "MISER" data. The EL series is more new. The EL data allocates exports according to the physical location of exporters—i.e., it typically traces the export initiative to the point of sale. The EL series is based on the exact data recorded on U.S. export declarations. For instance, if a Detroit company sends its manufactured product to an exporter located in Florida, which in turn is exported abroad by the Florida exporter, that product is considered a Michigan export according to the Department of Commerce's EL series, whereas MISER's OM series considers it a Florida export.

⁴⁵ John Gallagher, "NAFTA Results Lauded," *Detroit Free Press*, May 6, 1999.

⁴⁶ Data from MISER and the Office of Trade and Economic Analysis, Department of Commerce.

⁴⁷ Authors' calculation from MISER data.

⁴⁸ The 13-percent gain is almost entirely driven by exports to Canada during the period.

⁴⁹ Most Department of Commerce data look at data from 32 categories, but we chose to omit the "special classification provisions" and "unidentified manufacturer" categories. These classifications are ambiguous and analyzing them provides little useful information. There is also a 33rd category included with the Canadian data, "goods imported and returned unchanged." Since this doesn't represent any actual Michigan production, it, too, is omitted from our calculations.

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About the Authors

Paul Kengor, Ph. D., is an adjunct scholar with the Mackinac Center for Public Policy and a research fellow at the Allegheny Institute for Public Policy in Pittsburgh. Kengor has published studies on NAFTA's effects on Pennsylvania, Texas, Florida, and Arizona. He is assistant professor of political science at Grove City College and is director of the Allegheny Institute's Privatization Center and editor of the weekly *Pennsylvania Privatization Monitor*.

Kengor's work has been cited in *The Wall Street Journal*, *Political Science Quarterly*, *Presidential Studies Quarterly*, *Buffalo News*, *Defense News*, *The Detroit News*, *Houston Post*, and the *Washington Times*.

Kengor is a former research analyst for the Political-Military Affairs program at the Center for Strategic and International Studies in Washington, D. C. for which he still does occasional work. He is also a former Salvatori Fellow with the Heritage Foundation.

Kengor's doctorate is from the University of Pittsburgh's Graduate School of Public and International Affairs.

Michael LaFaive is a policy analyst with the Mackinac Center for Public Policy and a graduate student of economics at Central Michigan University. He is also managing editor of *Michigan Privatization Report*, a quarterly publication of the Mackinac Center. LaFaive's previous work includes the Mackinac Center study *Washington Should Kick the Mandate Habit: The Fiscal Impact of Medicaid Mandates on Michigan* as well as a number of commentaries analyzing economic development in Michigan.

Grady Summers is a research assistant at the Allegheny Institute for Public Policy. He holds bachelor of arts degrees in political science and business/computer systems from Grove City College.



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