How Withdrawing from NAFTA Would Damage the U.S. Economy

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From 2005 to 2007, Dean Slaughter served as a Member on the Council of Economic Advisers in the Executive Office of the President. In this Senate-confirmed position he held the international portfolio, advising the President, the Cabinet, and many others on issues including international trade and investment, currency and energy markets, and the competitiveness of the U.S. economy. He has also been affiliated with organizations including the Federal Reserve Board, the International Monetary Fund, the World Bank, the Congressional Budget Office, the National Academy of Sciences, and the Council on Foreign Relations. Dean Slaughter is a frequent keynote speaker to many audiences in the business and policy communities, and he regularly works with leaders of both parties of the U.S. Congress.

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Executive Summary

Since it came into inception in 1993, the North American Free Trade Agreement (NAFTA) has generated substantial and sustained gains for the U.S. economy—as well as for Canada and Mexico alike. This paper explains how the United States withdrawing from the NAFTA would be at least a $50 billion-a-year mistake. That is, it explains how the United States fully withdrawing from NAFTA would eventually cost the U.S. economy about $50 billion a year in foregone output and income—with even larger losses each of the first several years after withdrawal. American workers would be hurt through a combination of fewer jobs and lower wages.

Drawing on the balance of research to date, this white paper explains how withdrawing from NAFTA would damage the U.S. economy. The paper is divided into the following three sections.

What's been built? NAFTA was a historic agreement for America: not only because it was one of the country's earliest and most ambitious free trade agreements (FTAs), but more importantly because it was the first FTA to integrate two large, advanced economies with a large emerging market.

- Over a 15-year period, NAFTA eliminated all tariffs and most non-tariff barriers on imports among the three countries. It also liberalized many dimensions of trade in services and related foreign direct investment.
- Some of NAFTA's largest market-opening measures entailed Mexico removing its tariffs and quotas on imports from the United States and Canada. In 1993, Mexico's average tariff on all imports from the United States was about 10 percent.

What's been gained? NAFTA presented new opportunities for U.S. companies and their workers: to sell into new markets, to spur additional innovation and investment, and to strengthen their supply networks. It also presented new opportunities for families: to purchase a wider variety of products at lower prices.

- These new opportunities translated into tangible gains of expanded trade, higher national output and income, more U.S. jobs and higher average U.S. real wages.
- Thanks to NAFTA, U.S. national output and income is now about $50 billion higher each year.

What's at risk? Withdrawing from NAFTA would damage the U.S. economy in substantial and sustained ways. For U.S. companies and their workers, withdrawal would limit access to foreign markets, it would dull additional innovation and investment, and it would weaken their supply networks. It would also curtail opportunities for households and families, narrowing the available variety of products and raising prices.

- These tangible costs would include reduced trade, lower national output and income, and fewer U.S. jobs and lower average U.S. real wages.
- In addition to these direct costs, almost surely there would be at least two other broader costs: uncertainty among families, companies, and communities about the effects of NAFTA withdrawal; and erosion of U.S. economic authority abroad.
- Withdrawing from NAFTA eventually would cost the U.S. economy about $50 billion a year in foregone output and income—with even larger annual losses initially, and with fewer U.S. jobs and lower average U.S. real wages as part of these losses.

Section 1
What's Been Built:
The Historic Structure of the NAFTA

The North American Free Trade Agreement (NAFTA) was a historic agreement for America: not only because it was one of the country's earliest and most ambitious free trade agreements (FTAs), but more importantly because it was the first FTA to integrate two large, advanced economies with a large emerging market. Over a 15-year period, NAFTA eliminated all tariffs and most non-tariff barriers on imports among the three countries. It also liberalized many restrictions both on trade in services and on foreign direct investment. Some of NAFTA's largest market-opening measures removed Mexican tariffs and quotas on imports from the United States and Canada. In 1993, Mexico's average tariff on all imports from the United States stood at about 10 percent.

Section 1.1: How the NAFTA Came to Be

One of the most consequential FTAs in U.S. history, the multilateral NAFTA sprang out of an earlier bilateral FTA: the Canada-U.S. Free Trade Agreement (CUSFTA).

Signed as an agreement between the U.S. and Canada on October 3, 1987, the CUSFTA was subsequently approved by the U.S. Congress and signed into U.S. law by President Ronald Reagan. At the time it came into force on January 1, 1989, "it was probably the most comprehensive bilateral FTA negotiated worldwide and contained several ground-breaking provisions."[1] This was America's second FTA, following the 1985 agreement with Israel, and was America's first with a fellow major economic power. Historic provisions included the following.

- *Tariffs on Goods*: Eliminated all tariffs on imports between the two countries. Many tariffs were eliminated immediately; all others were phased out within 10 years.
- *Liberalization of Services*: Provided national treatment for all services industries covered by the agreement. Trade in financial services was liberalized. Cross-border travel for business professionals was facilitated.
- *Support for FDI*: Provided national treatment for all companies engaging in cross-border foreign direct investment (FDI) between the two countries.
- *Local-Performance Requirements*: Banned restrictions on the operations of each country's companies in the other country, such as requirements to locally source intermediate inputs, or to achieve a minimum share of host-country content in products' overall value added.

During the years that Canada and America were negotiating the CUSFTA, Mexico was undertaking a historic liberalization of its economic policies that had for generations been very closed to international trade and investment. A major spur to Mexico's liberalization was the debt it suffered in the early 1980s. One of Mexico's most important unilateral changes came in 1986, when it joined the General Agreement on Tariffs and Trade (GATT, which in 1995 was succeeded by the World Trade Organization). Highlights of Mexico's GATT accession included reducing its maximum tariff rate, first to 50 percent and subsequently to just 20 percent. By 1989, Mexico's trade-weighted average tariff had fallen to about 19 percent.[2]

Mexico regarded joining the CUSFTA as an opportunity to solidify and extend its unilateral liberalizations. Many U.S. business leaders saw expanding CUSFTA as an opportunity to grow U.S. exports into an emerging market of about 100 million people—especially for small U.S. businesses, for which complicated trade barriers tend to be a larger burden. Many U.S. government leaders saw expanding CUSFTA as an opportunity to spur ongoing GATT multilateral negotiations in what was known as the Uruguay Round.

The NAFTA agreement was signed by President George H.W. Bush on December 17, 1992; its enabling legislation—the NAFTA Implementation Act—was approved by the U.S. Congress on November 20, 1993 and signed into law by President Bill Clinton on December 8, 1993. Entering into force on January 1, 1994, NAFTA was historic, not just because it was only the third time the United States signed an FTA but because it was the first such agreement signed with a large emerging market.

Section 1.2: Highlights of NAFTA's Liberalization

Trade in Goods. Over a 15-year period, NAFTA eliminated all tariffs and most non-tariff barriers on goods imports among the three countries. Many tariffs were eliminated immediately; most others were phased out within 10 years; and the remaining tariffs were phased out over 15 years. Major non-tariff barriers included sanitary and phytosanitary rules for agricultural goods.

It is important to note that at the start of NAFTA, the United States was already very open to imports from Canada and Mexico. The United States and Canada were at that point five years into the implementation of the CUSFTA, and so initial U.S. barriers to imports from Canada averaged less than 1 percent. And initial U.S. barriers to imports from Mexico were already quite low. In 1993, the average applied U.S. tariff for all imports from Mexico was just 2.07 percent.[3] Indeed, thanks to the U.S. Generalized System of Preferences (GSP) that governed all U.S. trade at the time, in 1993 over 50 percent of Mexican imports entered the United States tariff-free.

In practice, most of NAFTA's market-opening measures in goods entailed Mexico removing its tariffs and quotas on imports from the United States and Canada. In 1993, Mexico's average tariff on all imports from the United States was about 10 percent.[4] Across the three major industries of manufacturing, agriculture, and services, the nature and scope of removing trade barriers varied. Highlights include the following.

- In motor-vehicle manufacturing, prior to NAFTA, Mexico had extensive restrictions on auto imports and extensive domestic-content requirements. Initial Mexican tariffs against U.S. imports were 20 percent on automobiles and light trucks, and between 10 percent and 20 percent on automotive parts. NAFTA eliminated all tariffs on parts and final vehicles so long as the share of total value added produced in the NAFTA zone exceeded 62.5 percent for any automobile, light truck, engine, and transmission. For motor vehicles, NAFTA also removed most non-tariff barriers, enhanced protections of intellectual property, and liberalized government procurement.
- In agriculture, prior to NAFTA Mexico's average tariff (weighted by the value of trade) on U.S. exports was about 11 percent. About one quarter of U.S. exports to Mexico faced import-licensing requirements, and some of those exports also faced a tariff as high as 12

percent. At the time of entry into force, NAFTA eliminated about half of all barriers in U.S.-Mexican agricultural trade. In certain sensitive industries—such as avocados, corn, and wheat—tariffs and other non-tariff barriers were phased out over five to 15 years.

Trade in Services. For services trade, NAFTA established a set of basic rules and obligations—many of which expanded the provisions already well underway in the CUSFTA. Rights granted to companies based in one NAFTA country providing services in the other countries included non-discrimination and access to information. Liberalization in Mexico was especially dramatic in financial services, and all countries opened major parts of government procurement to national treatment from all three countries.

Foreign Direct Investment. NAFTA recognized that many services are provided across borders not via international trade but rather via FDI. NAFTA eliminated many national barriers to FDI, expanded basic protections for companies' FDI in other member nations, and established a dispute-settlement procedure. For example, in 1993, about one third of Mexican economic activity was not open to majority foreign ownership. More generally, NAFTA created a process to arbitrate commercial disputes among the three countries.

Beyond NAFTA's direct economic liberalizations, the agreement catalyzed many subsequent trade accords—directly by providing a template for these accords, and indirectly by infusing greater aspirations into them. "A legacy of the agreement is that it has served as a template or model for the new generation of FTAs that the United States later negotiated, and it also served as a template for certain provisions in multilateral trade negotiations as part of the Uruguay Round".[5]

In conclusion: NAFTA was an unprecedented, historic accord that dramatically liberalized international trade and investment across the entire continent of North America. As the next section details, this historic agreement created new opportunities—and thus tangible gains—for U.S. companies, workers, and families through channels such expanded market access, greater incentives to innovate and invest, stronger supply networks, and lower prices.

Section 2
What's Been Gained:
How the NAFTA Has Strengthened the U.S. Economy

NAFTA presented new opportunities for U.S. companies and their workers to sell into new markets, to spur additional innovation and investment, and to strengthen their supply networks. It also presented new opportunities for families to purchase a wider variety of products at lower prices. These new opportunities translated into tangible gains of expanded trade, higher national output and income, more jobs and higher average U.S. real wages. Thanks to NAFTA, U.S. national output and income is now about $50 billion higher each year than it would be otherwise.

Section 2.1: How a Trade Agreement Like NAFTA Enhances U.S. Economic Well-Being

By liberalizing trade and investment, NAFTA strengthens the U.S. economy and supports U.S. living standards.

With more open trade and investment, savings by the world's households, firms, and governments can be deployed to productive investment opportunities around the globe, not just at home. Much of these cross-border flows of capital that support investment and ultimately worker productivity and incomes happen through the FDI of multinational companies. Matching investors and investment opportunities globally creates new opportunities for businesses and their workers.

With more open trade and investment, ideas that improve technology can move across borders through many different channels. For example, ideas are deployed within multinational firms as they spread their innovations among parent and affiliate operations. As these ideas expand around the world, they help connect workers, firms, and communities. All these linkages that expand scale can spur companies to innovate new products and processes themselves.

And with more open trade and investment, a country no longer needs to produce what it consumes. Its companies and workers can concentrate in certain activities to which it is well suited compared to the rest of the world—activities in which a country holds a comparative advantage, in the lexicon of economics. It can then export some of these activities to the world in exchange for imports other goods and services—imports that can be enjoyed both in greater variety and at lower prices than would be the case without trade. These gains of comparative advantage are often manifested in productive and resilient global supply networks.

There are many channels through which NAFTA has contributed to U.S. economic prosperity. Expanding U.S. trade with Canada and Mexico allows U.S. companies to seize new opportunities: to export more of their existing products; to innovate and invest in new products; and to rationalize and strengthen their supply networks through, for example, new imports of intermediate inputs. Along the way, U.S. consumers enjoyed greater purchasing power: directly as the tariffs they were paying disappeared, and more generally through greater variety and lower prices from competition.

All this new economic opportunity from NAFTA has meant greater output and income for America overall, which for workers means a combination of more jobs and higher average real wages. The remainder of this section details the nature and size of these gains.[6]

Section 2.2: NAFTA Expanded U.S. Trade and Investment with Canada and Mexico

U.S. trade in goods and services with Canada and Mexico has *nearly quadrupled* under NAFTA—from $337 billion in 1994 to about $1.4 trillion in 2016. This annualized rate of growth of nearly 7 percent substantially exceeded the 4.6 percent annualized growth of U.S. output during that time. Research has shown that the sectors for which tariff reductions were the largest under NAFTA tended to experience some of the largest increases in trade volumes.[7] This surge in trade has been striking in several ways.

- In 2016, the top two destinations for U.S. exports were Canada and Mexico, respectively—together accounting for 34 percent of all U.S. exports of goods and services. That year Canada and Mexico were the second-largest and third-largest source of U.S. imports, respectively—together accounting for 26 percent of all U.S. imports. In 2017, about $3.6 billion in goods trade occurred daily among the three NAFTA partners.
- U.S. trade with its NAFTA partners is roughly balanced. In 2016, with Mexico and Canada the U.S. ran a slight surplus of $11.9 billion in trade in both goods and services. Even within goods, trade is roughly balanced. From 2008 through 2014, with Mexico and Canada the U.S. ran a cumulative goods-trade surplus of more than $79 billion.
- Industries with large liberalization experienced especially large increases in trade. Consider motor vehicles and parts. From 1993 through 2016, U.S. exports to Mexico and U.S. imports from Mexico in motor vehicles and parts grew by a cumulative 262 percent and 765 percent, respectively.
- NAFTA partners have become the largest destination for U.S. small-business exporters. In 2014, more than 125,000 small and medium-sized businesses (SME) exported to Canada and/or Mexico: this was over 95 percent of all U.S. exporters into the NAFTA market. For these small U.S. exporters that year, Canada and Mexico were the top two export destinations. The total value of these 2014 exports was $136 billion, fully 25 percent of all U.S. SME exports.[8]

Under NAFTA, cross-border investment among the three member countries has surged as well: from $126.8 billion in 1993 to $731.3 billion in 2016.[9]

Section 2.3: NAFTA Boosted the Competitiveness of American Companies

Driving NAFTA's trade and investment expansion were many U.S. companies seizing new opportunities: to export more of their existing products; to innovate and invest in new products; and to rationalize and strengthen their supply networks through, for example, new imports of intermediate inputs. The surge in NAFTA trade and investment described in the previous section was a vivid outcome of U.S. companies growing stronger thanks to these new opportunities.

NAFTA presented U.S. companies with the important opportunity to establish and/or expand their cross-border production networks. Eliminating tariffs and non-tariff barriers lowered the production costs of companies, thanks both to cheaper inputs at initial production configurations and to reconfiguring production throughout North America according to comparative advantage.[10]

Today a substantial amount of international trade within NAFTA is of intermediate inputs moving within well-integrated supply networks. One recent study found that U.S. value added now accounts for about 40 percent of the value of U.S. imports from Mexico and 25 percent of the value of U.S. imports from Canada. In contrast, U.S. value added accounts for only about 4 percent of the value of U.S. imports from China. [11]

NAFTA's trade and investment opportunities boosted the competitiveness of countless U.S. companies—which, in turn, created U.S. jobs and supported the wages of those jobs.[12] The next section discusses the economy-wide magnitude of these gains.

Section 2.4: The Bottom Line Is That NAFTA Raised U.S. Output and Income

There have been several studies of the bottom-line economy-wide gains from NAFTA. Many of these studies use a version of a complex global-economy model that has been built, maintained, and used by economists worldwide. Called the Global Trade Analysis Project (GTAP) framework, this model is maintained by a consortium of over two dozen U.S. and international organizations including the U.S. International Trade Commission, the World Trade Organization, and the World Bank. In all its versions, the GTAP framework models output, trade flows, jobs, and incomes for many industries and many countries.

Models like the GTAP framework are among the most sophisticated methods available to estimate the impact of trade on the U.S. economy. And yet, advanced though the methodology of the GTAP framework is, it does require researchers to make at least three important methodological decisions: how to isolate NAFTA from all other dynamic economic forces, which features of NAFTA's many aspects to examine, and how to quantify the impact of those chosen features.

Perhaps the most important of these research challenges has been isolating the economic effects of NAFTA's liberalizations from myriad other economic forces affecting the United States, Canada, and Mexico during the 15-plus years of full NAFTA implementation. These other forces included Mexico's macro-economic turmoil in the second half of the 1990s, which entailed a sharp devaluation of the peso and a severe recession; America's acceleration in labor productivity and related gains from the mid-1990s through the early 2000s; and the world financial crisis and great recession that hurt all three NAFTA countries staring in 2008. Over the past 25 years, NAFTA has been but one major economic force among many. All these forces contributed to the current economic environment, as well as the choices and actions of hundreds of millions of companies, workers, and consumers along the way.

Considering all this rich dynamism, it is essential to understand that all studies of NAFTA have their limitations, and that all conclusions of these studies carry some uncertainty about the estimated impacts. Different studies that have made different methodological decisions have reached different conclusions about the magnitude and nature of economic gains from NAFTA.

These caveats acknowledged, the repeated conclusion of several studies is that overall America gained from NAFTA. A 2016 U.S. International Trade Commission (ITC) report that summarized several studies concluded that NAFTA generated "a substantial increase in trade volumes … and a small increase in U.S. welfare." The same conclusion of overall U.S. gains was reached in a recent literature overview by the Organization for Economic Cooperation and Development.[13]

One very careful recent study, which focused just on NAFTA's tariff reductions on trade in goods, estimated that it boosted U.S. welfare by about 0.1 percent of gross domestic product (GDP).[14] The 2016 ITC report just mentioned estimated that all U.S. FTAs together have expanded annual U.S. GDP by over 0.2 percent of GDP, with most of this being attributable to the NAFTA. A third, more-general study that considered both tariffs and non-tariff barriers used a version of the GTAP model to estimate that NAFTA has generated an annual welfare gain of about 0.3 percent of GDP. A reasonable conclusion from these studies is that NAFTA in its entirety has elevated U.S. GDP by somewhere between 0.2 percent and 0.3 percent of GDP.[15]

Why has the aggregate effect of NAFTA on U.S. national output and income been small in relation to the overall U.S. economy? There are three reasons. First, total trade with Mexico and Canada was a small fraction of total U.S. output at the time NAFTA came into force: only about 4 percent of total U.S. GDP. Second, total trade with Mexico, which had much larger trade barriers to America than did Canada, was an even smaller share of total U.S. output when NAFTA began—only about 1.4 percent of U.S. GDP. Third, the United States entered NAFTA with relatively low barriers to imports and FDI from Mexico and Canada.

Although these estimated economy-wide gains have been small relative to total U.S. GDP, it is essential to see how large these gains have been in absolute dollars—and how they have been ongoing. In 2017, NAFTA boosting U.S. GDP by between 0.2 percent and 0.3 percent means U.S. output and income is somewhere between about $40 billion to nearly $60 billion higher than it would be without NAFTA. Take the midpoint of this range, and one arrives at an estimated increase in U.S. GDP of about $50 billion. And this ongoing boost to output and income is now enjoyed every year.

This increase in national GDP from NAFTA has manifested itself in the labor market mainly by boosting the quality of U.S. jobs rather than their number. The market opportunities of NAFTA have reshaped the mix of U.S. jobs, away from lower-skilled, lower-paying jobs towards higher-skilled, higher-paying jobs. This reshaping is driven by more open trade that allows U.S. companies and workers to focus more on America's comparative-advantage activities.

Several studies have found that NAFTA boosted U.S. wages. Two representative studies calculated that NAFTA raised average U.S. wages by somewhere between 0.2 and 0.3 percent--a boost to workers' wages that, like the boost to national GDP, recurs every year.[16] More generally, research has repeatedly shown that U.S. jobs linked to exporting or importing pay higher wages than purely domestic jobs. For example, a recent study by the U.S. International Trade Commission found that U.S. jobs in export-intensive industries pay about 16 percent more than jobs in less export-intensive industries.[17] Thus did the increased trade of NAFTA manifest its economy-wide gains in the labor market through an economy-wide shift towards higher-paying jobs.

This is not to say that every single American worker, firm, and community have gained from the trade liberalization of NAFTA. Indeed, recent research has highlighted that beneath the on-average gains in wages economy-wide, there has been substantial heterogeneity with measurable losses, at least in the short term during NAFTA implementation in certain industries and communities.[18]

But, on average, the labor-market gains have outweighed the labor-market losses. Indeed, one recent study calculated that NAFTA has cost about 15,000 U.S. jobs per year—but that for each of these jobs lost, the U.S. economy realized $450,000 in gains spread across other U.S. jobs created, income gains, and lower consumer prices.[19]

It is important to stress that the boost in jobs and wages in America often arises from U.S.-based multinational companies *expanding* (not contracting) their operations in NAFTA countries. FDI from U.S. companies into Mexico and Canada tends to complement, not substitute for, their U.S. operations. One recent study found that a 10 percent increase in employment at a Mexican affiliate of a U.S. multinational leads in its U.S. parent company to a 1.3 percent increase in employment, a 1.7 percent increase in exports, and a 4.1 percent increase in research spending.[20]

Where else did the boost in U.S. income appear? One source of higher U.S. income has been increased returns to U.S. inventors thanks to the expanded protections of intellectual property under NAFTA. A recent study estimated that because of NAFTA, U.S. companies are realizing nearly $1.4 billion each year in greater IP receipts from Canada and Mexico.[21]

Another important source of higher U.S. income from NAFTA has been greater variety and lower prices for all U.S. consumers. Studies have shown that NAFTA expanded the range of goods and services available to U.S. consumers, thanks to new varieties coming from Canada and Mexico. In addition, eliminating U.S. tariffs on Canadian and Mexican imports has meant lower taxes. NAFTA's tariff savings to U.S. households is now calculated to be over $10.5 billion each year—with over two-thirds of that accruing to households with annual incomes below $70,000.[22]

The bottom line is that the new opportunities of NAFTA translated into tangible gains of expanded trade, higher national output and income, and more U.S. jobs and higher average U.S. real wages. Thanks to NAFTA, U.S. national output and income is now about $50 billion higher each year than it would be otherwise.

The gains from NAFTA can be seen in particular industries, as is discussed below.

<u>Section 2.5: NAFTA's Gains to the U.S. in Action—The Case of Motor Vehicles and Parts</u>

One of the industries for which NAFTA has had its most vivid impacts has been motor vehicles and parts. Here is a concise and representative summary of the spark NAFTA provided.

> "NAFTA expanded the integration of the U.S. and Canadian automotive manufacturing footprint created under the Canada-United States Automotive Products Agreement to include Mexico. Continent-wide reduction or elimination of customs tariffs allowed

> vehicle manufacturers and suppliers to optimize operational structures by locating assembly operations and supply-chain manufacturing in their best location, which helps keep the domestic automotive industry competitive with growing global capacity. NAFTA has attracted billions of dollars of domestic re-investment and new foreign direct investment into the U.S., Canada, and Mexico."[23]

Trade data for 2015 underscore the extent of this pro-competitive integration NAFTA has fostered. That year fully 75 percent of U.S. exports of automotive parts were to Canada or Mexico, and only 51 percent of the value of U.S. imports of automotive parts came from Canada or Mexico. 40 percent of U.S. light vehicles exported in 2015 went to Canada or Mexico, and 50 percent of light vehicles imported into the U.S. that year came from Canada or Mexico. Studies of particular automobile models have found that "parts and components may cross the NAFTA countries' borders as many as eight times before being installed in a final assembly in one of the three partner countries."[24]

The dynamic gains that NAFTA provided U.S. automobile companies to remain competitive against China and other countries—not without difficult adjustments for many, to be sure—has been widely acknowledged. One recent study concluded that, "NAFTA allowed original equipment manufacturers [in autos] to optimize supply chains and weather competition from China."[25] This recent summary from *The New York Times* captures well the complex picture of how NAFTA's automotive rationalization, though hard on some, preserved many U.S. jobs against the rising competition of the global economy.[26]

> There is a good case to be made that without NAFTA, there might not be much left of Detroit at all … The integration of production across countries with complementary labor forces—cheaper workers in Mexico to perform many basic tasks, with more highly paid and productive engineers and workers in the United States—turned out to play a central role in reviving the auto industry in North America. In the final analysis, NAFTA might have saved hundreds of thousands of jobs. By offering a low-wage platform, Mexican plants increased the scale of production in North America, allowing domestic and foreign automakers to amortize their large fixed costs … This regional integration gave the United-States based auto industry a competitive edge that was critical to its survival … 'Without the ability to move lower-wage jobs to Mexico, we would have lost the whole industry,' said Gordon Hanson of the University of California, San Diego, who has been studying the impact of NAFTA since its inception two decades ago.

The U.S. ITC similarly concluded that under NAFTA, "the North American motor vehicle industry became increasingly competitive globally, fueling higher U.S. vehicle exports. Exports of motor vehicles from NAFTA countries to non-NAFTA countries rose from $10.7 billion in 1997 to $54.9 billion in 2014, an increase of 411 percent (273 percent adjusted for inflation) … U.S. real value added per worker went up 41 percent during this period."[27]

Section 2.6: NAFTA's Gains to the U.S. in Action—The Case of Avocadoes

U.S. agricultural exports to Canada and Mexico have more than quadrupled during the time of NAFTA, from $8.9 billion in 1993 to $38 billion in 2016. These exports to Mexico alone have more than quintupled. U.S. corn exports to Canada and Mexico have increased by more than 700 percent; U.S. wheat exports to Canada and Mexico have increased by 867 percent. At $21.3 billion in 2016, Canada is our second-largest agriculture export market—second only to China. Total intraregional trade has similarly grown: Exports plus imports among all three NAFTA countries grew from $16.7 billion in 1993 to about $82.0 billion in 2013.

This surge in NAFTA trade in agriculture reflects the gains being generated for producers and consumers alike. A vivid example of these gains can be seen in avocadoes.

Because of concerns about the presence of invasive seed weevils, from 1914 to 1993 the United States banned all imports of avocadoes from Mexico. NAFTA negotiators managed to break through generations of concern and mistrust to allow Mexican avocadoes into the United States while still addressing legitimate health and safety concerns in America. Central to this was establishing a NAFTA Agricultural Committee Working Group, which brokered and arrangement in which the U.S. Animal and Health Inspection Service (APHIS) established the health and safety of Mexican avocadoes through a program of actions including certifying orchards, inspecting packinghouses and ports, and monitoring U.S. distributors.

In 1993, the U.S. allowed the first shipment of Mexican avocadoes into the United States, limited at that time to just Alaska. By 2004, "APHIS had completed its draft risk assessment and noted that an examination of 10 million program fruit had not revealed any pests in six years of fruit cutting and inspection, giving APHIS the confidence that the systems approach in place provided adequate safeguards against avocado pests."[28] Finally, in 2007 the United States granted year-round permission for Mexico to ship avocadoes to all 50 U.S. states.

The market impact was massive. U.S. avocado imports from Mexico surged, crowding out other sources such as Chile. Total U.S. avocado imports rose 2,214 percent from 1990-92 to 2010-12. Despite this surge in imports, the overall U.S. market was growing so rapidly that the value of U.S. avocado production during this time rose, not fell: by 71 percent between 1990 and 2015. In California, America's largest producer, the number of avocado orchards has been rising, not falling: from 4,801 in 2002 to 5,602 in 2012. Moreover, many U.S. producers have established a high-end niche within the overall market, with U.S. varieties commanding a stable price premium in recent years.

Beyond avocadoes, NAFTA has greatly broadened the variety of foods available to U.S. consumers. One study found that products not imported into the United States from Mexico in 1993 accounted for fully 18 percent of agricultural imports from Mexico in 2005.

Section 3
What's at Risk:
How Withdrawing from NAFTA Would Damage the U.S. Economy

Withdrawing from NAFTA would damage the U.S. economy in substantial and sustained ways. For U.S. companies and their workers, withdrawal would circumscribe access to foreign markets, it would dull additional innovation and investment, and it would weaken their supply networks. It would also curtail opportunities for households and families, narrowing the available variety of products and raising prices. These tangible costs would include reduced trade, lower national output and income, fewer U.S. jobs and lower average U.S. real wages. Withdrawing from NAFTA would be at least a $50 billion-a-year mistake.

Section 3.1: What Exactly Would Withdrawing from NAFTA Entail?

The exact policy mechanics by which the United States might withdraw from NAFTA are unclear, in no small part because there is no historical precedent for such a withdrawal.

Article 2205 of the NAFTA treaty does allow for a country to withdraw from the agreement, "six months after it has provided written notice of withdrawal to the other parties." To gauge the economic damage that withdrawing would cause the critical questions are: (1) what tariff rates the United States would subsequently apply on imports from Mexico and Canada; (2) what tariff rates Canada and Mexico would subsequently apply to U.S. exports; and (3) what non-tariff barriers (NTBs) would apply.

Under Section 125 of the Trade Act of 1974, which was part of the NAFTA Implementation Act (discussed in Section 1), after withdrawing the president could implement the tariff rates that prevailed prior to NAFTA. For Mexico, this would likely be the set of Most-Favored Nation tariffs that the United States applies for trade with other countries with which it is a member of the WTO. For Canada, the new U.S. tariffs might be these MFN rates but they might also be the CUSFTA rates that were prevailing when the CUSFTA expanded to become the NAFTA.

A second critical question is whether Canada and Mexico would maintain open trade and investment with the United States after it withdraws from NAFTA, or whether these partners would institute new barriers to imports from the United States. And a third important question is what kind of NTBs the United States would levy against Canada and Mexico. One possibility seems to be more restrictive content requirements in sectors such as motor vehicles and parts. More generally, the United States might revert to other NTBs to limit trade and investment.

Section 3.2: How Much Economic Damage Would Withdrawing from NAFTA Do?

The uncertainties just described about the exact policy configuration that would prevail after a U.S. withdrawal from NAFTA make challenging estimating its economic damage. The estimated range of damage to the U.S. economy hinges on the three critical questions just discussed. In addition, where exactly in the U.S. economy damage would appear would depend on how exactly a drop in total output and income would manifest in the U.S. labor market. Would a drop in labor demand hurt only less-skilled workers or more-skilled workers as well, and would workers laid off stay unemployed permanently or move back into employment by pulling down overall wages?

Only a handful of studies have used an economy-wide model, like the GTAP framework discussed in Section 2, to estimate the costs to the U.S. economy from some form of NAFTA withdrawal. One of the most careful studies of withdrawal has used a GTAP model that incorporates cross-border supply chains into its analysis—and, like the gains-from-NAFTA studies discussed in Section 2, incorporates very recent data on worldwide production, trade, and tariff rates.[29] This study considers both the short term, when worker wages and capital stocks of industries are fixed, and the long term, when wages can adjust and when firms can shift investments across industries. It also focuses on two distinct scenarios of NAFTA withdrawal. In one scenario the United States raises its tariffs to MFN rates on Canadian and Mexican imports, Canada and Mexico similarly apply MFN tariffs to imports from the United States, and Canada and Mexico maintain open trade with each other. In the second scenario, Mexico is assumed to raise its tariffs on U.S. imports to much higher "bound" rates.

Under all scenarios, withdrawing from NAFTA is damaging: "Termination … would reduce the competitiveness of U.S. businesses both domestically and abroad. U.S. exports would drop, both to Canada and Mexico and globally as U.S. output becomes more expensive and therefore less competitive in these markets … These efficiency losses and trade shifts would have an impact on U.S. production of both goods and services, and thus also on U.S. employment."

In the short term, this study estimates that U.S. output would fall by at least 0.6 percent annually, which would be an annual loss of U.S. national output and GDP of at least $119 billion. U.S. exports would fall by at least 2.5 percent. This fall in output and exports would destroy about 1.8 million U.S. jobs, with every one of the 50 U.S. states losing jobs. In the long term, even with adjustments by U.S. companies and workers, NAFTA withdrawal would depress U.S. national output and income. This study estimates that the long-term cost of terminating NAFTA would be "about $50 billion annually," with at least 234,000 fewer U.S. jobs.

A second careful study of NAFTA withdrawal also used a GTAP model of the U.S. economy that incorporates cross-border supply chains into its analysis—and that incorporates relatively recent data on worldwide production, trade, and tariff rates.[30] The smaller-damage scenario for this study assumes that the U.S. alone levies new tariffs, and that the damage accrues to just less-skilled workers. In this scenario, U.S. GDP falls annually by about 0.1 percent and U.S. less-skilled employment falls by about 256,000 workers.

The larger-damage scenario for this study assumes that all three NAFTA countries levy MFN tariffs against each other, and that these tariffs hit U.S. workers of all skill levels. There is no logical reason to think more-skilled workers would not be at least somewhat hurt by NAFTA withdrawal, and so this larger-damage scenario seems more plausible. In this scenario, withdrawing from NAFTA reduces annual U.S. GDP by 0.64 percent. And with this large of a reduction in economic output, total U.S. employment would fall by over 1.2 million workers. This employment loss would be lessened only if laid-off workers bid down economy-wide wages to gain reemployment, which would thus spread the harm across many more U.S. workers.

A third study of NAFTA withdrawal modeled a somewhat different scenario: taking tariff rates for the three NAFTA countries back to their 1993 levels. This study also modeled a NAFTA economy with trade in intermediate inputs within and across industries, all calibrated to real-world data on production and trade. In this scenario, U.S. average real wages would fall by about 0.3 percent—a magnitude in the mid-range of the study above, and on par with the estimated gains from NAFTA reported in Section 2.[31]

So, the few studies that have carefully modeled the United States withdrawing from NAFTA share a central estimate of withdrawal damages of about 0.3 percent of GDP. In 2017, a loss of national output approaching 0.3 percent of GDP would have been a loss of about $50 billion.

<u>Section 3.3: An Example of the Damage of Withdrawal—The Case of Motor Vehicles and Parts</u>

Consider the damage that NAFTA withdrawal would do to the U.S. auto industry. One study estimates that withdrawing from NAFTA could cost the United States over 20,000 jobs in automobiles and another 25,000 to 50,000 auto-parts jobs—while at the same time raising costs per vehicle sold in America by $330 to $440.[32] What would drive this damage would be a combination of reinstituted tariffs and also the costs of any heightened requirements on U.S. content for imports to enter duty-free—all of which would impair the competitiveness of U.S. automobile companies that, as Section 2 discussed, NAFTA has supported.

It is important to recognize that in today's global automobile industry, it is naïve to assume that new NAFTA trade barriers would necessarily and materially boost U.S. production of autos and related parts. A clear option would be for automakers to supply the U.S. market from countries outside North America, which despite NAFTA have grown more numerous and more competitive. Today over half of Mexico's light-vehicle output is produced by foreign automakers. These companies will have many options to serve U.S. customers from locations such as Japan, South Korea, Europe, and China. Similarly, Canadian and Mexican companies may turn to these global sources to fill any void created by U.S. parts becoming more expensive in a post-NAFTA world.

Consider, for example, the prospect of the United States adding a U.S.-specific content requirement for vehicles imported through NAFTA. At the time of writing, the U.S. Trade Representative has proposed that these vehicles have at least 50 percent U.S. content to qualify for duty-free access into the United States. One study has concluded that rather than boost output and employment in U.S. autos and parts, "because U.S. content requirements would result in a less-competitive industry, they would likely lower North American production and fail to promote U.S. manufacturing. In particular, country-specific rules could cause foreign companies to leave North America and export from their home regions … For example, Japanese producers might decide to export more from Japan if the strict rule made production in Mexico less profitable. Vehicles imported from Japan have only 3 percent U.S.-Canadian content on average, so demand for U.S. parts would fall."[33]

In total, "any move by the United States to withdraw from NAFTA or to otherwise restrict automotive vehicle, parts, and components trade within North America will result in higher costs to producers, lower returns for investors, fewer choices for consumers, and a less-competitive U.S.

automotive and supplier industry."[34] All this damage, in turn, would lead to fewer U.S. jobs and/or lower U.S. wages in this industry.

Section 3.4: An Example of the Damage of Withdrawal—The Case of Retail Trade

Retail trade is among America's services industries. In December 2017, over 15.8 million Americans worked in retailing—nearly 11 percent of all payroll jobs in America. The gains from NAFTA have accrued to U.S. retailers in many ways, such as enhancing their ability to offer U.S. families greater variety at lower prices thanks to the integrated production networks across the NAFTA region.

U.S. retailers that source products within NAFTA's single market face substantial risk of any changes to content requirements like those discussed in the previous section for motor vehicles. Were the United States to impose more stringent duty-free content requirements on a broad range of imports, the damage to U.S. retailers could be substantial considering their substantial investments in sourcing relationships in Canada and Mexico. Losing duty-free treatment would impose costs that U.S. retailers would have to incur—in slimmer profit margins, and thus fewer resources for investing in workers, wages, and capital—or that U.S. retailers would have to pass onto U.S. families in higher prices.

The Retail Industry Leaders Association, a trade association of more than 200 members that account for millions of U.S. jobs in retail, recently wrote an open letter to the Office of the U.S. Trade Representative voicing strong concerns about any new trade barriers within NAFTA.[35]

> We strongly advise the Administration against moving towards a bilateral agreement because the uncertainty is too great a risk. Retailers also do not support moves to enact barriers to trade, including changes to rules of origin or any changes to increase duties, that impede the use of the NAFTA. For example, any changes impacting the NAFTA textiles and apparel supply chain, including the consideration of safeguards, must be carefully evaluated to avoid disruptions to existing current trade and undermine demand for U.S. exports or generate other unintended consequences that could undermine U.S. jobs. Similarly, we do not support efforts to impose new duties or taxes on imports from Canada or Mexico.

Section 3.5: What Broader Economic Damage Might Withdrawing from NAFTA Do?

Beyond the economy-wide loss of competitiveness, jobs, and income from withdrawing from NAFTA, there almost surely would be at least two other broader costs to account for: uncertainty about the entire withdrawal process, and erosion of U.S. authority in international policy making.

First, consider the additional cost of uncertainty about the process of withdrawing from NAFTA. What exactly would be the new U.S. policies, and in turn which companies would lose competitiveness, and in turn which workers would see job losses and/or wage declines? No one can predict for certain. The damage from NAFTA withdrawal would cumulate across the U.S. economy in ways impossible to foresee at the outset. This uncertainty would itself be an additional cost of NAFTA withdrawal.

How many U.S. jobs might be at risk from a NAFTA withdrawal? Millions. One study estimated that in recent years, about five million U.S. jobs were supported by NAFTA-related U.S. trade with Canada and Mexico.[36] Another more-recent study estimated the total number of jobs in each U.S. state that are linked to trade with Canada and Mexico. For several electorally critical states, here are the estimated jobs related to trade with Canada and Mexico.[37]

- Pennsylvania: 513,300 jobs
- Ohio: 463,200 jobs
- Indiana: 253,500 jobs
- Wisconsin: 249,600 jobs
- New Hampshire: 58,900 jobs

And, from the very careful recent study discussed in Section 3.2, here is an estimate of the short-term job losses these states would incur if the U.S. withdrew from NAFTA.[38]

- Pennsylvania: 71,328 jobs
- Ohio: 64,296 jobs
- Indiana: 35,381 jobs
- Wisconsin: 33,986 jobs
- New Hampshire: 8,287 jobs

Even though NAFTA withdrawal would destroy only a fraction of the millions of jobs in U.S. states related to trade with Mexico and Canada (and even though in the long term the number of lost jobs would be a fraction of the short-term job losses), at the outset of withdrawal all these millions of workers—and their families, companies, and communities—would face new uncertainty and risk about their prospects. And this uncertainty would almost surely last for years, both because the exact policy changes of withdrawing from NAFTA would take time and be uncertain—and because the adjustment of these workers' companies to the policy changes would in turn take time.

There is now substantial academic research demonstrating that companies respond to greater policy uncertainty by reducing their hiring, reducing their investments in physical capital and knowledge, and more generally taking less risk.[39] Moreover, this sort of policy uncertainty tends to be harder to absorb for smaller companies (*e.g.*, because they have fewer customers across which to spread risk). As the previous section noted, today about 95 percent of U.S. exporters into Canada and Mexico are small and medium-sized businesses. These small companies are likely to be hardest hit by all the uncertainty of NAFTA withdrawal. The uncertainty cost of NAFTA withdrawal would be real, and would increase the total annual cost of withdrawal to more than $50 billion.

A second broader cost to America from NAFTA withdrawal would be the erosion of U.S. authority and power in all international economic forums like the World Trade Organization. An America that reneged on NAFTA would be an America that all countries would find less reliable in all global economic partnerships. Global trade and investment agreements typically take years to negotiate, in no small part because it takes time for countries' leaders to build the trust essential for these agreements.

The magnitude of this cost would be hard to calculate, because it might manifest in possible new trade and investment agreements that never come into fruition because of America's lost stature. But this cost would nevertheless be real, would be sustained over time, and would increase the total annual cost of withdrawal to more than $50 billion.

Taking all these costs into consideration, the bottom line is clear. Withdrawing from NAFTA would be at least a $50 billion-a-year mistake for America. Withdrawing would reduce trade, lower national output and income, and destroy U.S. jobs and lower average U.S. real wages. In an increasingly competitive global economy, many U.S. companies and their workers would suffer, not win, were the U.S. to leave NAFTA.

Section 4
Conclusion

NAFTA has benefited the United States by boosting the productivity and competitiveness of U.S. companies, which in turn has boosted the output of the U.S. economy and the income of U.S. workers. Thanks to NAFTA, U.S. national output and income are now about $50 billion higher each year than it would be otherwise. Withdrawing from NAFTA would damage, not enhance, U.S. productivity and incomes.

To move away from the current economic crossroads towards that brighter future, America should broaden and modernize NAFTA, not withdraw from it. Withdrawing from NAFTA would be a $50-billion-a-year mistake—at least—that in today's increasingly competitive global economy would darken, not brighten, America's future.

Endnotes

[1] *The North American Free Trade Agreement (NAFTA).* M. Angeles Villarreal and Ian F. Ferguson. Congressional Research Service Report: Washington, DC. May 24, 2017, p. 2.

[2] *The Likely Impact on the United States of a Free Trade Agreement with Mexico*. Washington, DC: United States International Trade Commission Publication 2553. February 1991.

[3] *Study on the Operation and Effects of the North American Free Trade Agreement*. Washington, DC: Executive Office of the President. July 1997.

[4] In contrast, Canada's average tariff on all imports from the United States was just under 0.4 percent. *Study on the Operation and Effects of the North American Free Trade Agreement*. Washington, DC: Executive Office of the President. July 1997.

[6] Two edited volumes each compiled several studies of NAFTA's impact after its first decade. One is: *NAFTA Revisited: Achievements and Challenges*, edited by Gary Clyde Hufbauer and Jeffrey J. Schott, Washington, DC: Institute for International Economics. The other is: *NAFTA's Impact on North America: The First Decade*, edited by Sidney Weintraub, Washington, DC: Center for Strategic and International Studies.

[7] One study found that for the 389 commodities for which the U.S. tariffs against Mexican imports were cut by at least 10 percentage points, the simple average of Mexico's share of U.S. imports rose by 224 percent between 1989 and 2000. See "NAFTA's and CUSFTA's Impact on International Trade," by John Romalis, 2004.

[8] *The Facts on NAFTA: Assessing Two Decades of Gains in Trade, Growth, and Jobs*. Washington, DC: U.S. Chamber of Commerce white paper. Small and medium-sized businesses are defined as businesses that employ fewer than 500 workers.

[9] *Killing NAFTA Would Hurt the U.S. Economy and American Manufacturers.* S&P Global Research Report, by Beth Ann Bovino, November 8, 2017.

[10]Of course, not every single company and its workers thrived in response to NAFTA's liberalizations. See also note #17.

[11] "Give Credit Where Credit Is Due: Tracing Value Added in Global Production Chains." By Robert Koopman, William Powers, Zhi Wang, and Shang-Jin Wei. Cambridge, MA: National Bureau of Economic Research Working Paper #16426, September 2010.

[12] For a survey of how global supply networks have strengthened the competitiveness of American companies—and have supported the jobs of these companies—see: *American Companies and Global Supply Networks: Driving U.S. Economic Growth and Jobs by Connecting with the World*, by Matthew J. Slaughter, Washington, DC: Business Roundtable research paper, 2013.

[13] *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*. Washington, DC: United States International Trade Commission Publication 4614. June 2016. *Effects of NAFTA on U.S. Employment and Policy Responses*. Paris, France: Organization for Economic Cooperation and Development, Trade Policy Working Paper #131, 2012.

[14] "Estimates of the Trade and Welfare Effects of NAFTA." By Lorenzo Caliendo and Fernando Parro. *The Review of Economic Studies* 82(1), pp. 1-44, 2015.

[15] *Identifying the Effects of NAFTA on the U.S. Economy*. By Peter B. Dixon and Maureen Rimmer. Victoria University working paper, 2014. In general, another challenge of analyzing NAFTA has been how to reasonably model the trade impacts of removing non-tariff barriers: these barriers are much more varied and difficult to quantify than, say, *ad valorem* tariffs.

[16] "Estimates of the Trade and Welfare Effects of NAFTA." By Lorenzo Caliendo and Fernando Parro. *The Review of Economic Studies* 82(1), pp. 1-44, 2015. "A North American Free Trade Agreement: Analytic Issues and a Computational Assessment." By Drusilla K. Brown, Alan V. Deardorff, and Robert M. Stern. *The World Economy* 15(1), pp. 11-30, 1992.

[17] See "Export-Intensive Industries Pay More on Average: An Update," by David Riker. Washington, DC: U.S. International Trade Commission research paper 2015-04A, April 2015. Like studies like this one that analyze the earnings of individual workers, studies that analyze individual companies have repeatedly found that companies involved in exporting, importing, or both pay higher average wages than do purely domestic companies. For an overview of these studies, see: *How America Is Made for Trade*, by Matthew J. Slaughter, Washington, DC: HSBC Research Group research paper, 2014.

[18] For a survey of recent studies examining NAFTA's heterogeneous impacts, see US ITC Staff Working Paper, 2013: "Econometric Estimates of the Effects of NAFTA: A Review of the Literature," https://www.usitc.gov/publications/332/ec201312a.pdf, by David Riker.

[19] *NAFTA at 20: Misleading Charges and Positive Achievements*. By Gary Clyde Hufbauer, Cathleen Cimino, and Tyler Moran. Washington, DC: Peterson Institute for International Economics, 2014. For a survey of recent research on the disaggregated labor-market effects of NAFTA, see the following paper. "Econometric Estimates of the Effects of NAFTA: A Review of the Literature," by Justino De La Cruz, David Riker, and Bennet Voorhees. Washington, DC: U.S. International Trade Commission working paper, December 2013.

[20] *The U.S. Manufacturing Base: Four Signs of Strength*. By Theodore H. Moran and Lindsey Oldenski. Washington, DC: Peterson Institute for International Economics, 2014.

[21] *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*. Washington, DC: United States International Trade Commission Pub. 4614. June 2016, p. 132.

[22] *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*. Washington, DC: United States International Trade Commission Publication 4614. June 2016, pp. 144-146. More generally, by now many studies have analyzed how trade liberalization provides consumers greater variety and lower prices. For example, one study found that from 1992 to 2005,

U.S. welfare rose by about 1 percent thanks to both expanded product variety and lower mark-ups on prices. See: "Globalization, Markups, and U.S. Welfare," by Robert C. Feenstra and David E. Weinstein, *Journal of Political Economy*, 2017.

[23] *NAFTA Briefing: Trade Benefits to the Automotive Industry and Potential Consequences of Withdrawal from the Agreement*. Center for Automotive Research white paper, January 2017.

[24] *Working Together: Economic Ties Between the United States and Mexico*. Washington, DC: Woodrow Wilson International Center for Scholars, 2011.

[25] *A World Without NAFTA? A Look at the Future Through the Lens of the Motor Vehicle Industry*. Boston Consulting Group, October 2017.

[26] "NAFTA May Have Saved Many Autoworkers' Jobs." *The New York Times*, Eduardo Porter, March 29, 2016.

[27] *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*. Washington, DC: United States International Trade Commission Pub. 4614. June 2016, p. 179.

[28] *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*. Washington, DC: United States International Trade Commission Pub. 4614. June 2016, p. 165.

[29] *Terminating NAFTA: The National and State-by-State Impacts on Jobs, Exports, and Output*. Washington, DC: Report prepared by Trade Partnership Worldwide, LLC for Business Roundtable, January 2018.

[30] *Reversing NAFTA: A Supply-Chain Perspective*. ImpactEcon research report, March 2017.

[31] "Estimates of the Trade and Welfare Effects of NAFTA." By Lorenzo Caliendo and Fernando Parro. *The Review of Economic Studies* 82(1), pp. 1-44, 2015.

[32] *A World Without NAFTA? A Look at the Future Through the Lens of the Motor Vehicle Industry*. Boston Consulting Group, October 2017.

[33] *A U.S. Content Requirement in NAFTA Could Hurt Manufacturing.* Washington, DC: Peterson Institute for International Economics white paper, by Caroline Freund, September 2017.

[34] *NAFTA Briefing: Trade Benefits to the Automotive Industry and Potential Consequences of Withdrawal from the Agreement*. Center for Automotive Research, January 2017, p. 15.

[35] This letter can be found at the following web site: http://www.informz.net/rila-fonteva/data/images/061217%20RILA%20Comments%20on%20NAFTA%20Modernization.pdf

[36] *Opening Markets, Creating Jobs: Estimated U.S. Employment Effects of Trade with FTA Partners*. Washington, DC: U.S. Chamber of Commerce white paper, by Laura M. Baughman and Joseph F. Francois, 2010.

[37] State-level job estimates appear at: http://businessroundtable.org/resources/nafta-facts-0.

[38] Table 8a of *Terminating NAFTA: The National and State-by-State Impacts on Jobs, Exports, and Output*. Washington, DC: eport prepared by Trade Partnership Worldwide, LLC for Business Roundtable, January 2018.

[39] Several peer-reviewed academic papers have by now established new methods to measure the policy risk facing companies and the extent to which that policy uncertainty curtails investment and hiring by those companies. The leading work by economists Nicholas Bloom and Steve Davis can be found here: http://www.policyuncertainty.com/index.html.