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AN ANALYSIS OF FREE TRADE AGREEMENTS IN THE UNITED STATES:
NAFTA & THE AMERICAN AUTO INDUSTRY

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ABSTRACT

A free trade agreement (FTA) is an agreement between two or more nations that creates a free trade area in which goods and services can be imported and exported across borders with little to no tariffs or other markups, which are common in the global market. They allow for the formation of strategic partnerships to open up markets globally, and once established, stabilize and lower the cost of goods and services between partnered nations (“Free Trade Agreements”, 2017). In a time of continuous international globalization, mixed with recent nationalism in the United States since the turnover of presidential administrations, it is time for American companies to acknowledge their dependency on trade agreements over the previous two decades.

This research seeks to identify key pieces to free trade legislation and their effect on major industries within the United States. In order to analyze this material effectively, this thesis will focus mainly on NAFTA's impact on the American auto industry. Created in 1993, NAFTA is one of the most crucial and long-standing free trade agreements that the United States is still using. Time has allowed the successes and shortcomings of this agreement to polarize, which will be recognized in this piece.

As globalization continues to grow and complicate supply chains, the provisions laid out in current and future free trade agreements will become even more important in sourcing strategies for American manufacturers. This thesis will recommend best practices for renegotiation based on historical trends and NAFTA’s effect on the auto manufacturing industry.

TABLE OF CONTENTS

LIST OF FIGURES	iii
ACKNOWLEDGEMENTS	iv
Chapter 1 Introduction	1
Chapter 2 A Brief History of the American Auto Industry	4
Chapter 3 NAFTA Uncovered	12
Historical Trends	12
Successes and Shortcomings	13
Ford: A Case Study on Impact.....	18
Chapter 4 Free Trade Agreements	21
Corporate Supply Chain Perspective	21
Current United States Administration Perspective	22
Middle Ground - Where Do We Go From Here?	24
Conclusion Best Practices.....	26
Appendix A List of FTA Partner Counties	28
Appendix B Manufacturing Employment Graph.....	30
BIBLIOGRAPHY.....	31

LIST OF FIGURES

Figure 1 - Historical Automobile Industry Market Share by Country - 2016 8

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Chapter 1

Introduction

Since the days of the industrial revolution, manufacturing has been the cornerstone of the American economy. Further innovations have pushed capabilities to new heights across industries, from agriculture to automotive manufacturing, and now creating a surge in service industries (Wilson, 2014). This final surge has created yet another adjustment for which the United States, its government, and the companies that call it home need to prepare.

As consumers, the typical American's expenditures have shifted dramatically in the past half of a century. Necessities like food, clothing and housing are drastically cheaper than they were, which allowed non-necessity consumerism to blossom to the full stature that it is today (Smiley, 2017). In theory, NAFTA and other free trade agreements that have been made over this same time period have encouraged American consumers to buy more by driving price down. There is a classic pull of demand as consumers bought more, manufactures produced more, and prices dropped as production quantities increased.

This pull only perpetuated the dependence of American consumers on international products, and vice versa. As this relationship has continued to build since the years of their creation, international economies become more and more interdependent. Now, with a draw towards nationalism and protectionism by the new presidential administration, it is difficult for companies—both American and international—to understand the full implications of adjustments and the complete termination of the free trade agreements in which each nation is currently engaged.

The United States has engaged in fourteen free trade agreements with twenty different countries since 1985 (see Appendix A). This has allowed the United States to hold its reign as a top exporter once again, while still depending on other countries for many of our consumer goods. In 2016 alone, the United States economic output due to exports was 7.8 percent, which amounted to over \$1.454 trillion USD (Workman, 2017). Opening borders for trade have allowed the United States and other nations to focus on the strongest elements of their workforce and of their respective economies and strengthen them. Countries' top exports have grown more concentrated as our economies continue to spread across the globe, and in the United States, manufacturing was not one of the top industries that kept up.

Despite its importance in the past, manufacturing has been declining steadily and as of recently, more rapidly over the past forty years. In the 1990s, other industries took a more prominent role in the United States' output. During this time period, the production of services, finance, insurance and real estate became the dominant sectors of the US economy and manufacturing took a back seat (Baily, 2014). At this same time, the United States signed NAFTA into being. Manufacturing has continued to take a hit since NAFTA's creation, but how much of its decline can actually be attributed to the liberation of commerce between Mexico and Canada specifically? Canada and the United States had negotiated a free trade agreement that was in act beginning in 1987, and Mexico was not added to the agreement until 1994. While the latter nation has quickly become an integral part of American commerce, the timing coincided with a major manufacturing decline and has continued to create negative sentiment toward the partnership. This is especially the case for conservative nationalists, many of who are impacting today's new economic policies in Washington. NAFTA is unsupported by American lawmakers on both sides of the aisle, but for different reasons and each side possesses their own idea as to

how to approach the imperfect legislation to align with current economic goals for our nation and its allies (Luhby, 2016).

Chapter 2

A Brief History of the American Auto Industry

Since the birth of the automobile industry in 1890, the United States has maintained its position as one of the largest, if not the largest, manufacturers of motor vehicles in the world. World War I created a manufacturing-based economy that left the United States in a prime situation for the manufacturing of cars for both a domestic and international markets, if manufacturers were able to survive the rough economic conditions of the Great Depression. After World War I, the United States left peace settlements without the disadvantage of a physically harmed homeland. As European nations worked to rebuild areas and economies affected by war, the United States built up the existing manufacturing centers that were created in urban areas for weapon construction. Fewer natural resources were allocated to the government's assembly lines and companies were able to buy in bulk again, creating price decreases as well as the potential for higher production quotas. The United States also built up their power grid and telegraph lines during this time and invested in electricity production. With electricity more readily available to companies without generating their own power on site, production rates continued to climb. Ideas moved more quickly across the country as communication technology, like the telegraph, was improved upon. Each of these elements allowed for the breakthrough of manufacturing methods, especially in terms of Henry Ford's assembly line. Put into place in 1913, the idea took off and was implemented across automobile companies and across manufacturing settings. (Smiley, 2017)

By this time, the “Big Three” –Ford, General Motors, Chrysler—and 122 other automobile companies centralized around Detroit, Michigan to develop the rapidly urbanizing metropolitan area. The area was centrally located to major suppliers of natural resources needed for car manufacturers, like coal, copper, and iron. It was located near the Great Lakes, so it was accessible by water transportation. Ford originally began its company there in 1903 despite the fact that Detroit was only the thirteenth largest city in the United States, but that was soon to change. Possibly the most significant reason that so much of the auto industry surrounded Detroit, Michigan was simply because that is where Ford had sewn its roots. Bringing innovation and new methodology to the industry in 1913, Ford followed up the next year by enacting a five dollar per day salary. Skilled blue-collar workers moved to the area to work for this premium wage, as industry standards sat at \$2.25 per day. Better talent recruitment and retention allowed for less turnover and training time, and better output. In the first year alone, car production jumped to 202,000 from its previous level of 170,000 (Sugrue, 2017). More importantly for the industry, however, was the volume of workers that poured into the area.

As the Great Depression hit in 1929, the demand for cars dropped swiftly, both in the United States and globally. Sales plummeted and automobile companies were forced to rely on existing finances to stay in business. Only large companies could afford this kind of economic hardship and all but eight American auto producers were forced out of business. The “Big Three” still remained, along with Willy, Studebaker, Nash, Hudson, and Packard. The latter five companies only held about fifteen percent of the market share, and were only beat out more by the favorable industry standards that accompany firms of a certain scale (Smiley, 2017). Suppliers flocked to the area to support these growing companies and their massive manufacturing operations, creating thousands of jobs and exporting factory-line created vehicles.

By 1950, one in every six employees in America was either directly or indirectly employed by the automobile industry. Whether these people were employed by one of the major automobile manufacturers, or for one of their parts and raw materials suppliers, they were all directly impacted by the strength and success of the industry. Around this same time, however, where these jobs were located began to shift. Detroit would lose more than 130,000 manufacturing jobs over the next decade as production facilities moved to suburbs, the upper Midwest, and even the Sunbelt states (Sugrue, 2017). As Detroit grew and urbanized, it became more expensive and more dangerous to host a manufacturing center in the city. The increased productivity and efficiency in processes at auto firms from the previous decade in combination with the continued technological improvements during this time period created a decrease in dependency on mass quantities of laborers needed for the previous disorganized, laborious quality of work that existed during Detroit's peak. This was the first shift away from the epicenter of the United States auto capital, but this time it was only to other U.S. markets. Manufacturing as a whole has always been a key part of the American economy, stabilizing around eleven percent since the 1960's (Short, 2011). However, it should be noted that this share has been stabilized by the introduction of new products to manufacture, especially technology and computers. American automobiles, on the other hand, saw a dramatic shift during the 1960's.

During this period of global transition, an international presence began to take ownership of the market share that American-based companies used to dominate. German and Japanese companies began selling compact cars that were unlike anything that the "Big Three" firms were selling. Right before the turn of the decade, there was a jump in foreign market share. This was mainly due to the increased federal regulation enacted by the United States Environmental Protection Agency (EPA) and other safety features that were not typical of Ford muscle cars that

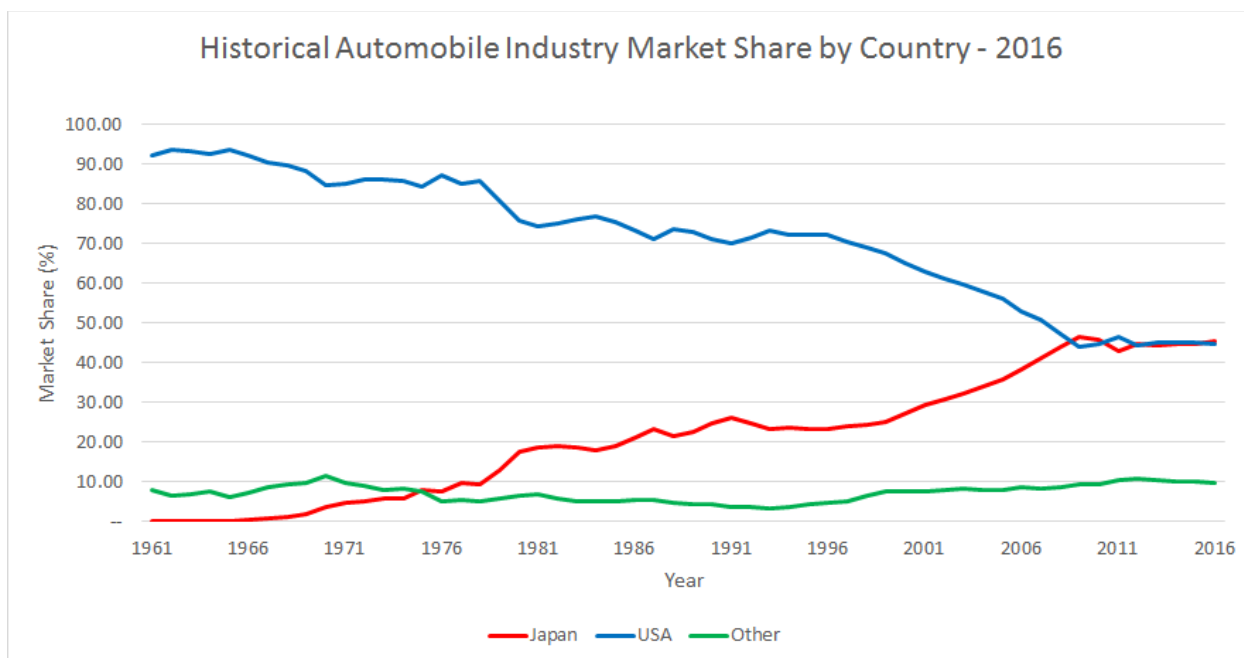
were popular at the time. American companies were forced to manufacture cars that they had no experience in and for which they had no market base. They suffered losses as small foreign cars took precedence. Value-added elements of “Big Three” vehicles, like horsepower and performance measures, were severely limited by new government regulations and American automobile manufacturers pivoted their strategies to hit the newest niche in the market.

American automakers tried using lighter materials, front-wheel drive, and smaller engines to drive down the weight of cars to meet lower carbon emission requirements and higher safety standards. That being said, it was done with haste and without proper investment in the necessary technology and methodology for which foreign markets held standard. Brands’ reputations were tarnished as a result. Between the Ford Pinto, Chevrolet Vega, and Cadillac Cimarron, major American brands saw failure in the manufacturing quality of their cars and American consumers did not want to pay for their inferior product (Fuss, 1992).

The Volkswagen Beetle hit the American market and began to change the way that American consumers viewed foreign vehicles. This perception was only pushed further in 1973 thanks to the oil embargo. Suddenly, the price of oil grew rapidly as OPEC forced payments from oil-importing countries. Oil supply was lacking heavily, which upset the previous growth pattern of the products it powered; automobiles were one of these products. As oil was rationed to certain days and customers, and cars lined up around the block waiting to refuel, fewer people were eager to buy new vehicles. If they did buy new vehicles, they were looking for more efficient gas consumption that would align with the current crisis. Before the oil crisis in 1972, foreign industry competitors only held thirteen percent of automobile market share in the United States. After the crisis ended and the oil market steadied in 1975, it had climbed to 15.8 percent (Treece, 2017). This was the highest portion of the market that U.S. auto companies had ever

seceded at the time, and that number only continued to climb once American consumers were exposed to foreign brands. In Figure 1, there is a clear shift in market share as Japanese brands began to pick up momentum.

Figure 1 - (“U.S. Vehicle”, 2017)



These Japanese Toyotas and German Volkswagens were popularized on roads domestically and beyond their borders. Toyota’s success stemmed from its ability to eliminate waste and change dynamically with changing market conditions and consumer demand. While Ford found success in eliminating waste earlier through standardization and assembly lines, the firm was unable to keep up its commitment to innovation. They relied on consumer demand for a constant product, only pushing inventory into a market that was changing with the political and economic environment around them. This constant product oversaturated Ford’s inventory and gave foreign competition the opportunity to step in and satisfy this shifting consumer demand (Glauser, 2006).

Toyota seized this opportunity to infiltrate the market in the United States by bringing their lean manufacturing methods to American soil. They opened their first operations site in 1972. Toyota production facilities focused on the premise of Just-In-Time (JIT) inventory production. Instead of pushing out long-term forecasts to a potentially changed marketplace, they study and streamline their process so that each value-added step is ready at the last possible timeframe (Toyota Motor, 2017). Inventory levels are kept low and processes are identified in a way which allows pivot points to be determined quickly for swift decision-making. The entire lean production concept relies on the prevention of waste and identification of root causes, rather than the reaction and repair of mistakes. Work is highly specified through the installation of standard work manuals and workers are empowered to stop the production line when there are any issues to ensure first time quality and avoid rework. Instead of allowing inventory to run through the entire process only to be found faulty in the final step, problems are identified at their lowest level source. Taiichi Ohno and other leaders at Toyota built a better process which yielded better results than their competitors as they sought long-term solutions, rather than mass production at all costs (Fuss, 1992). As they continued to improve on this process, their reputation for high quality vehicles at low prices grew, as did their market share.

It was not until the 1990s when the United States' economy truly transitioned, however. Between 1990 and 2014, the American economy transitioned from one where in thirty-six states, most jobs were in manufacturing-based companies to an economy where manufacturing was the dominant industry in only seven states. Some of the causes of this shift include recessions; transition of manufacturing to other countries; the rise of the healthcare industry in the U.S.; and the increase in automation in manufacturing (Cutcher-Gershenfeld, 2015).

In 1990, the United States entered a recession that would last throughout the year. It was caused mainly by the post-war economy and policies in place during the George H. W. Bush administration. Unemployment was on the rise, and the Federal Reserve in the United States had a restrictive monetary policy that aimed to decrease inflation, but had a number of paralyzing economic results. When Iraq invaded Kuwait in August of 1990, there was an immediate threat to oil access and prices again. While some economic advisors urged the Fed to raise interest rates to compensate for this threat, a conservative administration pushed the Federal Reserve to maintain its current interest rates. As predicted, oil prices rose dramatically and had a similar, but less dramatic, effect on the auto industry. Sales decreased across the industry and firms' manufacturing facilities operated at losses. American automakers suffered the most, losing 2.91 percent of the total market, while many their Japanese competitors captured an additional 3.58 percent market share within the span of twelve months during 1990 (Hutchinson, 1991). With each oil crisis, United States automakers suffer because they are not manufacturing high quality, low cost, gas efficient vehicles. Their competitors specialize in this part of the market and take from the existing customer base.

Learning from this and previous oil dilemmas, many United States auto manufacturers sought alternatives to make their products cheaper. Outsourcing different elements of their supply chains was the easiest way to cut costs, especially as the study of logistics rose in the 1990s. The "Big Three" began to focus on their core competencies and shifted the production of parts to other areas of the world where labor was cheaper and there was less regulation required to manage manufacturing centers. However, it should be noted that during the 1990s, the "Big Three" struggled with the concept of supplier management. Accustomed to a competitive, exclusive environment that they had used with suppliers in the past, U.S. automobile companies

were very secretive with these foreign suppliers. This led to a breakdown of communication and quality specification between the suppliers and the companies for which they were supplying parts. Quality control became an issue and there were a number of recalls during this time period for American automakers. In outsourcing their suppliers, they also contributed to the shift in industry contribution in the United States. The manufacturing jobs that once existed in Detroit and then the southern United States were pushed across the border and overseas (Cutcher-Gershenfeld, 2015). When NAFTA was enacted in 1994, the speed to which auto production moved across the border was expedited. Until then, shifting suppliers outside of the United States was a slow process. The federal regulation and additional tariffs created a divide and kept American automakers from making a swift transition elsewhere.

Healthcare and social services now dominate the job market in thirty-four states, with retail trade jobs in second place (Wilson, 2014). This transition was seen during a time in which the United States' automotive industry was taking a major dive compared to previous years. In order to combat this issue, many United States automobile companies bought out foreign competitors, and even some domestic firms as well (Hammond, 2005).

Chapter 3

NAFTA Uncovered

Historical Trends

Before NAFTA, the United States was involved in a bilateral agreement with Canada known as the Canada-United States Free Trade Agreement. It opened up borders and trade to a tariff-free environment between the two nations. Because the United States and Canada have more similar markets, strengths, standards of living, and labor and environmental standards, an agreement mutually benefits the two like nations without substantial reactionary shifts in industry. In adding Mexico to their pairing, the United States and Canada were incorporating a developing nation with different strengths and weaknesses. Mexico served as an untapped market, so when negotiations began in 1991, the United States' Republican President George H. W. Bush supported it. The free trade agreement was pushed on by Democratic President Bill Clinton and signed into law at the end of 1993. With bipartisan backing, the agreement served as a uniting factor as the presidential administrations transitioned power. Today, however, the North American Free Trade Agreement unites parties in a different way; Republicans and Democrats alike rally around NAFTA's failures and the need to make adjustments to the free trade agreement. Philosophies on how NAFTA should change differ across party lines and within individual United States political parties as well (McBride, 2017).

The North American Free Trade Agreement was created initially to eliminate tariffs to free up trade across borders, particularly with agriculture, textiles and automobile manufacturing.

In exchange for the elimination of tariffs, the three nations also agreed to maintain standards across the fields of intellectual property, labor standards, and environmental protection practices.

Terms were gradually implemented from the time when the deal was signed in 1993 through 2008 at the beginning of the Obama administration. By this time, the United States was facing serious repercussions across industries from the provisions provided under NAFTA.

It should be noted that NAFTA was by no means the only contributing factor to economic change at the turn of the century. Technological improvements had a significant impact on the American economy, especially in terms of education in the labor market and manufacturing practices. As technology spread and became more accessible throughout the workplace, communication traveled faster too. So while borders were opening, the goods and services that passed through them moved at an accelerated rate. The crash of the Mexican peso contributed to the extremity of the low-cost labor model in Mexico in comparison with their NAFTA partners just after the agreement was signed in 1994. Other trading partners had an impact on the American economy as well; China was growing drastically and posed a threat to competition in North America. They drew a lot of companies to Chinese shores in search of inexpensive suppliers, and supply chains grew even larger than was intended with NAFTA (“In Defense”, 2017).

Successes and Shortcomings

At its origin, the North American Free Trade Agreement was intended to improve a wide array of economic and political functions across its three participants. When it was signed, the United States felt that it would create new markets for American exports, increase foreign

investment, and lower prices while still upholding labor and environmental standards. While it has accomplished a lot over the past two decades, there have been some unexpected repercussions for the United States, Canada, and Mexico alike.

By reducing tariffs with Mexico, there was an expectation that the Mexican economy would jump-start with foreign investment. With a bustling economy and better labor standards, the United States government felt that Mexican citizens would be more content to stay in Mexico. This would ultimately provide aid to the illegal immigration problem that the United States was facing with Mexican immigrants which originally peaked during the Clinton administration in 1995. While foreign investment did help in some industries, agriculture really suffered in Mexico and many farmers lost their land, home, and profession because they could not keep up with cheap, unhealthy exports coming in from the United States. This left the unemployed farmers with three major options: go work for the growing manufacturing industry in their home country; clear out forests to accommodate for growing farmland; or, attempt to cross the border to find work in the United States. None of the options listed previously were ever intended or anticipated at the initial creation of the North American Free Trade Agreement (Mcbride, 2017).

While American agriculture was stripping the Mexican agriculture industry of stability with its scale, the Mexican manufacturing industry began its quick ascent. Many American companies, like General Motors and Ford, moved production to Mexico to lower costs. Those who did choose to stay in the U.S. faced competitive price losses. In order to keep competitive with companies that went across the border to lower their manufacturing costs, companies that stayed in the United States had to lower their prices in the marketplace which meant cutting internal expenses and wages (Gillespie, 2016).

Wage stagnation in the United States was a complex, yet serious issue resulting in part from NAFTA and which was originally created by the difference in compensation for comparable work between the United States and Mexico. Manufacturing wages in the United States average \$20.65 per hour, whereas the similar jobs in Mexico are compensated \$1.90 per hour. Despite the drastic difference, the manufacturing hourly wage should have increased more since 1993 to align with real prices and inflation in the United States (“Mexico Nominal”, 2017). With such a difference in pay, there continues to be a serious pull for companies to manufacture in Mexico versus the United States, and NAFTA only reinforced that further by deteriorating the trade barriers and tariffs that kept companies from moving manufacturing facilities in years prior. It was the intention of NAFTA to use Mexico as a means to decrease manufacturing costs to drive prices down and develop more competitively priced products for the global market. However, the ultimate price that the free trade agreement had on employment within specific sectors of industry has been criticized harshly over the past decade.

Wages may have stagnated in manufacturing industries, but there were also a lot of benefits to lower costs in Mexico that trickled into a variety of facets of the United States economy. Lower costs in labor and capital in Mexico allowed for low cost investments to be made by United States companies across the border. It was no longer just the largest firms that had the resources to source and manufacture outside of the United States. Smaller companies were able to participate in this move outside of the United States now as well, which increased competition and allowed for more competitive, lower costs in the United States for consumers. Competition, in addition to the absence of tariffs, lowered prices across industries. This was especially true for the United States government, as they were permitted to award government contracts to bidders from firms that belonged to any of the three countries that participated in

NAFTA. Bidding wars became more competitive and government spending decreased as a result (“In Defense”, 2017).

Lower costs across products and industries increased customer consumption levels, and not just in the United States. Mexico served as an untapped market for a number of firms, which was promptly accessed by the agriculture and consumer goods industries. Companies which supplied cheap, sweet food were particularly successful in infiltrating the Mexican market. Coca-Cola now owns seventy-three percent of the market share in Mexico, whereas it only controls forty-two percent in the United States. Processed foods that hit the United States with the obesity epidemic are now hitting our Mexican trading partners with the same problems. As Mexican agriculture failed, United States processed foods were popularized and spread across Mexican geographies, both urban and rural. Fruit and vegetable consumption has dropped by thirty percent as Mexicans drop their fresh produce for the American processed foods that are being pushed into their markets (Rosenberg, 2015). While this has had a significant and beneficial impact for American exporters, it has taken a toll on health and policy in Mexico.

In an attempt to curb other negative social and political effects across countries, NAFTA included some provisions to protect intellectual property, the environment, and workplace conditions. In order to combat the piracy of intellectual property across borders, each member of the trade agreement had to “provide adequate and effective protection and enforcement of intellectual property rights,” which, at minimum, included adhering to the standards laid out by the Geneva Convention in 1971, Berne Convention in 1971, Paris Convention in 1967, and International Convention for the Protection of New Varieties of Plants (UPOV) in 1978 and 1991. These standards protected literary, artistic, industrial, scientific, and auditory property

internationally, and by incorporating them into NAFTA, the United States validated their measures of intellectual property protection (“NAFTA”, 1993).

The North American Agreement on Labor Cooperation (NAALC) was also created to supplement NAFTA legislation to improve labor conditions and standard of living in each of the three countries across North America. This was especially important as American companies moved manufacturing centers into Mexico, where labor conditions were not up to the same standards as that of the United States and Canada. The NAALC created the Commission for Labor Cooperation, an international council which works cooperatively on matters of worker safety, wages, regulations, unions, and child labor across the United States, Canada, and Mexico. (“North American Agreement”, 2005). In regulating labor conditions, American companies can safely source manufactured goods from Mexico without the same fear of ethical implications as sourcing from other low-cost countries, like China or Vietnam. American companies are also given the liberty to justify the movement of their manufacturing centers to Mexico by citing the NAALC as holding all standards constant, blaming the move on cost-savings alone.

To support environmental standards, the North American Agreement on Environmental Cooperation (NAAEC) was initiated to supplement NAFTA and NAALC. This agreement created the Commission for Environmental Cooperation, which facilitates standards outlined in the Stockholm Declaration on the Human Environment of 1972 and the Rio Declaration on Environment and Development of 1992. Similar to the action supporting labor, environmental provisions simply reinforce reputable standards held across international policies (CEC, 2017). By using existing documents to set standards, NAFTA gained credibility in the validity of its provisions, but they struggled to enforce these provisions. Because they were not incorporated into the actual NAFTA documentation, however, they were weaker than the central economic

elements of the agreement, which gave advantages to industry and economic growth (Mumme, 1999). NAALC and NAAEC were added on due to pressure from lobbyists, and were not the central focus of the free trade agreement.

Ford: A Case Study on Impact

When NAFTA was first signed into being at the end of 1993, Ford, along with the rest of the automobile industry, worked to take advantage of the provisions provided by this new trade agreement. However, transitions were not immediate. Mexican automotive products were introduced to the American and Canadian markets right at the beginning in January 1994, but other pieces of the plan, like the Mexican tariff on American and Canadian cars and auto parts, were not rolled out until 2003 (McBride, 2017). NAFTA was implemented slowly from 1994 to 2008, so the real effects would not be in full force until the Great Recession in 2008.

After facing \$8.7 billion loss for the second quarter of 2008, Ford decided to make a big move within its manufacturing strategy in North America. The Ford F-Series was still their best-selling vehicle in the United States with 515,513 vehicles sold, but by the end of the year, Ford would see a 25.4 percent decrease in sales volume from that model. At the same time, the Ford Focus and other competitors' small compact cars were increasing in comparison to the year before; the Ford Focus increased sales volume by 13.1 percent to take the position of Ford's second-best selling vehicle in 2008 (Cain, 2013). The Ford F-Series had seen declining sales volume in the previous two years as well.

This trend can mostly be attributed to rising gas prices during this time period and the 2008 recession. At this point in time, Americans developed an increased focus on fuel efficiency

and were less willing to pay for a more expensive truck or SUV. Demand was shifting and Ford needed to react to avoid bankruptcy and direct support from the United States government.

Following this trend, Ford made the decision to transition its Wayne, Michigan plant from the production of trucks and SUV's to small compact cars. Trucks and SUV's would be moved to production plants in Mexico. Ford executives claimed that the recession caused a shift in the market in which small compact cars were in higher demand.

While small compact cars may have been in higher demand than historical demand showed, they were still less profitable to manufacture than trucks and SUV's. So despite the fact that the Wayne, Detroit facility remained open and fully staffed, Ford was moving a more profitable truck and SUV operation south of the border to make it even more profitable in their low-cost mode (Knowlton, 2009). Later in 2015, Ford would go back and reverse this move. F-650 and F-750 trucks began assembly in Ohio at the end of the year as Ford announced continued investment into Mexico (Isidore, 2015).

During the 2016 presidential election, Ford was heavily criticized by President Donald Trump. In campaign speeches across the country, Trump called out Ford in particular for announcing the move of its parts manufacturing and Ford Focus manufacturing to Mexico in the previous year. Despite the fact that no jobs would be lost at the Michigan plants from which the Ford Focus was transitioning away, Trump issued threats to encourage the industry to create jobs in the United States (Glinton, 2016).

In a change of plans one January 4, 2017, Ford announced that they would be canceling their plans to build a \$1.6 billion plant in Mexico to build the Ford Focus and other more sophisticated electric vehicles (Long, 2017). Despite the fact that the Mexican plant would cost forty percent less to build and operate than one of a similar nature made in the United States,

Ford CEO, Mark Fields, announced the decision to instead invest \$700 million in Michigan confidently, claiming repeatedly that it was “the right call for their business.” With President Trump just a few weeks from inauguration at this point in time, Ford articulated their confidence in the revival of a pro-manufacturing business environment in the United States under the new administration. In particular, Ford found it favorable that President Trump had claimed that he wanted to reduce the corporate tax rate to fifteen percent and reduce regulatory policy in the United States (Gillespie, 2016).

Furthering their decision to invest in the United States, Ford made another announcement on March 28, 2017 that they would be investing a total of \$1.2 billion across three different facilities in Michigan. Ford has been spoken with President and Vice President repeatedly regarding the issue of an American pro-manufacturing business environment, and based on these announcements, are ready to place their confidence in the new administration (Isidore, 2017).

A lot of the movement that was taking place among Ford manufacturing centers was due to the complexity of tradeoffs in low-cost labor, American tax policy, and transportation costs. Each of these tradeoffs is provided by NAFTA, and when combined with other outside factors, Ford needs to choose a new direction. High gas prices, recessions, and pro-business leaders can all have a more drastic effect on Ford and companies like it when amplified by NAFTA.

Chapter 4

Free Trade Agreements

Corporate Supply Chain Perspective

When making sourcing decisions, free trade agreements have significant impacts on regulation and pricing. Lower-cost labor and tariff elimination aside, one of the largest costs associated with supply chain management from a corporate perspective is transportation. Transportation is the largest variable cost in logistics across firms, but free trade agreements, like NAFTA, can help. NAFTA allows for the unabated crossing of borders by suppliers, which lets inventory to pass through customs and border control with much less difficulty. As this time crossing borders decreases, transportation time and total costs decrease as well.

Transportation costs are related to many costs associated with both suppliers and customers, including lead time. Lead time then has an effect on inventories and reorder points for stock, and therefore reducing lead times reduces costs to the firm. Shorter lead times allow firms ordering supplies to keep lower levels of inventory on hand because they can react more quickly to uncertainty in demand (Coyle, 2017). By simply opening borders, NAFTA and other free trade agreements allow companies to be more strategic with other elements of their supplier evaluations, and to worry less about regulatory policy and taxes which could render a top supplier obsolete.

In furthering the connectedness of Canada, Mexico, and the United States' international supply chains, NAFTA was able to lower costs, increase productivity, and allow the United States to maintain and improve its competitiveness within the global market.

After twenty years of North American interdependence, pulling out of the treaty entirely would be devastating for companies of any scale. The networks that have been created over the past two decades are highly dependent and carefully negotiated around current regulations, and any change would create a chain reaction. Interference may be likely, however, based on the scrutiny NAFTA has been subjected to by the United States' political leaders.

Current United States Administration Perspective

NAFTA has been supported and opposed from both sides of the political aisle in the United States. Originally in 2008 when President Barack Obama was running for his first term, he stated that he wanted to work with leaders in Mexico and Canada to “reflect the basic principle that our trade agreements should not just be good for Wall Street, it should also be good for Main Street” (“AFL-CIO”, 2007). He pointed to the influence of corporate lobbyists and the conflict of interest that lies in their support, which may have had something to do with the lack of provisions available to enforce the labor and environmental standards laid out in the NAALC and the NAAEC.

This direct opposition quickly changed once President Obama took office. Instead of renegotiating the agreement as he originally intended during his election run, the Obama administration claimed to be seeking alternative methods to help combat the major issues of enforcement and conflict of interest. Little effort was made to amend anything in NAFTA, despite the criticism the agreement continued to face.

As President Obama's term came to a close at the end of 2016, he and his administration showed a surge in commitment to NAFTA and the other free trade agreements with which the

United States is involved. Part of the recommitment was associated with President Obama's push to engage in the Trans-Pacific Partnership (TPP), a free trade agreement with Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. Perhaps looking to leave a legacy, or open up the opportunity for even wider supply chains, President Obama was unsuccessful in passing the TPP during his term, only to have President Trump dismiss the plan in his first ten days in office.

Throughout the duration of his campaign in 2016, President Donald Trump called NAFTA "the worst trade deal" ever signed by the United States. He even went so far as to say, "NAFTA has been a terrible deal, a total disaster for the United States from its inception" (Rosevear, 2017). However, like President Barack Obama, he softened his attack on NAFTA once entering office. Issuing an executive order on January 23, 2017, President Trump called for a ninety-day study of trade practices that could prove harmful to the United States before renegotiations take place with Mexico and Canada. Commerce Secretary Ross and United States Trade Representative Lighthizer are preparing to negotiate on behalf of the United States (Amadeo, 2017). However, before any negotiations can take place, President Trump and Mexican President Nieto need to reschedule their initial meeting. The original meeting, set for January 31, 2017, was canceled after tensions rose following President Trump's executive orders on a Mexican-funded wall on the border between Mexico and the United States.

During his campaign, Donald Trump threatened a thirty-five percent tariff on Mexican imports in hopes of encouraging domestic commerce. He has been issuing the majority of changes through executive orders during his first three months in office, but such an increase would require a Congressional approval. If the tariff is over fifteen percent and over 150 days in duration, then Congress needs to approve it. Even if Congress attempted to pass this "border

tax,” it would violate sections of NAFTA that originally limited tariffs across borders. In order to truly make this 35 percent tariff a reality, Trump will need to wait until negotiations begin.

Trump has also proposed the termination of the Mexican value added tax (VAT). Mexico currently charges all business sales with an additional sixteen percent tax, which is incorporated into finished products assembled in Mexico and shipped across the border to the United States. Regardless of whether or not these are American companies, anything sourced from Mexico is affected. (Amadeo, 2017) Trump has compared this to his border tax idea, which is sure to come up during negotiations later in the year.

Middle Ground - Where Do We Go From Here?

Both Republicans and Democrats of the United States political parties agree that NAFTA is imperfect, and needs a change after twenty years of progression. However, change is highly disruptive to the American economy and puts international policy at risk.

Change has been proposed in a wide array of manners, ranging from more populist, protectionist views to inclusive, utilitarian views. When it was originally proposed, NAFTA was intended to raise income for Mexican workers to increase standard of living there while increasing demand for United States made products. While this was implemented in theory and has had a great deal of positive change thus far, by implementing further labor standards the United States can continue to benefit from economic growth in Mexico’s middle class.

It should be noted that simply because the United States is providing economic stimulus and trade advantage for Mexico through NAFTA, does not mean that revoking NAFTA preferences will necessarily result in the displacement of industries and jobs back to the United

States; they could go anywhere where costs are lower and there is an advantage for business. In the case of the automobile industry, the United States could source parts and materials from wherever the labor and facilities are the least expensive.

The U.S. economy has changed to benefit the service sector, and placing tariffs on our biggest trade partners and manufacturers will not automatically create more domestic trading and manufacturing; we live in a completely different and more global world than that which existed in 1993 when NAFTA was created. Technology improvements have allowed products, data, and communication to move more quickly and supply chains are woven across borders with ease. These kinds of intricate economies have been scaled for an international scope and to try to undo all of the connections that have been created over two decades puts the United States, or whoever attempts this move, at an extreme disadvantage.

NAFTA's biggest flaw may be that it is outdated, not that it is obsolete. As our economy and businesses have changed to fit trade and industry advantages through NAFTA and other free trade agreements, the United States should look to revisit the provisions that protect workers and the environment and incorporate them into the heart of the agreement. Currently, nations are working according to different standards, which creates an imbalance in fair competition. NAFTA attempts to protect economic interests, but is unable to do so unless it establishes real standards across all facets of trade for which participating countries can verify and be held accountable.

Conclusion

Best Practices

The North American Free Trade Agreement is a flawed document, but one that serves its purpose and one from which the United States can learn for future free trade agreements. It serves its purpose for the United States, Canada, and Mexico as it creates a free trade area in North America in which goods and services can be imported and exported across borders with little to no tariffs or other markups. It allows for the formation of strategic partnerships across suppliers and industries to expand global markets. It has stabilized and lowered the cost of goods and services between North American partnered nations over the past two decades, despite external economic influences. NAFTA has allowed North American nations to develop dynamically interwoven supply chains and build upon existing industries.

Despite the positive aspects of NAFTA, the United States should enter new deals and negotiations with the knowledge of shortcomings in this existing agreement, and navigate accordingly. First, before entering negotiations, data should be gathered from all stakeholders. The primary criticism of NAFTA right now by the left is its narrow-minded interest in business. Mexican manufacturing has grown, stripping the United States of one of its major economic contributors in part because of the significance of cost differences. These cost differences exist between nations, but are only made more drastic by the disparity in labor and environmental standards. In order for free trade agreements to function in a fair market, each signatory should align themselves and be held accountable to the same minimum standard for working conditions and environmental impact.

In negotiating free trade agreements, it is also best to consider unplanned events and provide provisions that will set guidelines for action, rather than simply reacting and holding steady to a rigid set of rules. Based on environmental factors that impacted NAFTA, other free trade agreements should consider random events, like the rapid growth of a third-party trading partner and initial shock after war or terror. In planning for these random, unplanned events, nations can allow for a more flexible trading structure. Free trade agreements should also provide provisions with instructions on recovery from common, yet unplanned events. Episodes of oil price spikes and recessions are likely to happen every few years, yet they have had significant impacts on NAFTA trading partners, particularly in the auto industry. In creating contingency plans for these likely events, economies may have a better chance of rebounding more quickly and can use free trade agreements as an aid on the road to recovery.

NAFTA's implementation process was considered a success, despite some economic fluctuations. Free trade agreements should model a similar gradual roll out process to allow each participating country and its industries ample time to react. In the future, however, there should be a set time period stated in the agreement in which the signatories should meet, renegotiate, revise, and recommit. In doing so, the free trade agreement will serve as a living document that can be more flexible to economic interests over time. As the world continues to shrink and supply chains continue to expand across borders, it will become more important to strategically partner and negotiate favorable terms that benefit all parties in the United States. It is critical that the United States develop these ties, learning from their past, holding true to their standards, and remaining flexible to the uncertainty of the future.

Appendix A

List of FTA Partner Counties

Country	Agreement Name	Year Enacted
Australia	Australia - United States Free Trade Agreement	2004
Bahrain	Bahrain - United States Free Trade Agreement	2006
Canada	NAFTA	1994
Chile	Chile - United States Free Trade Agreement	2004
Columbia	United States - Columbia Free Trade Agreement	2012
Costa Rica	DR – CAFTA	2005
Dominican Republic	DR – CAFTA	2005
El Salvador	DR – CAFTA	2005
Guatemala	DR – CAFTA	2005
Honduras	DR – CAFTA	2005
Israel	Israel - United States Free Trade Agreement	1985
Jordan	United States - Jordan Free Trade Agreement	2001
Korea	United States - Republic of Korea Free Trade Agreement	2012
Mexico	NAFTA	1994
Morocco	Morocco - United States Free Trade Agreement	2006
Nicaragua	DR – CAFTA	2005
Oman	Oman - United States Free Trade Agreement	2006

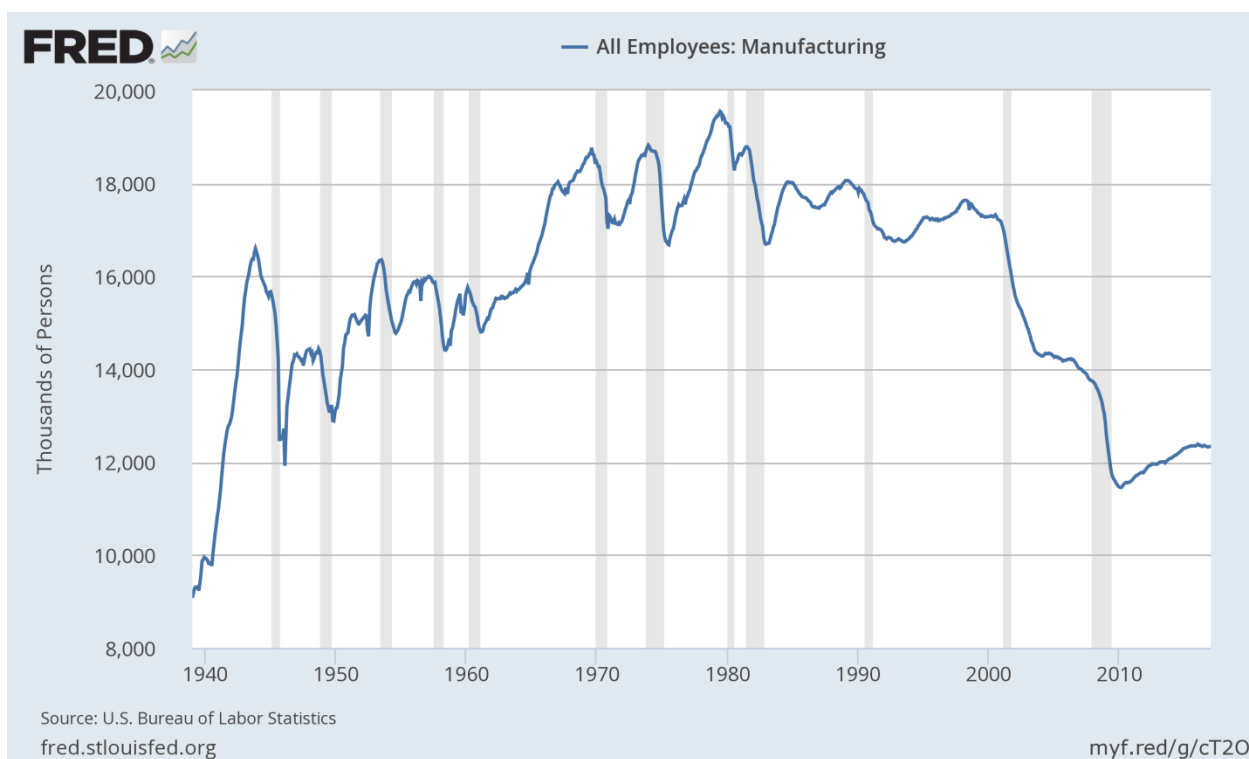
Panama	Panama - United States Trade Promotion Agreement	2012
Peru	Peru - United States Free Trade Agreement	2007
Singapore	Singapore - United States Free Trade Agreement	2004

(“Free Trade Agreements”, 2017)

Appendix B

Manufacturing Employment Graph

(“All Employees”, 2017)



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