

Undergraduate Research Fellowship Working Paper Series

Title:

Author(s):

U.S. Car Manufacturers Survival in New Trading Grounds

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<u>Abstract</u>: The text explores reasons why Ford and GM voluntarily increased their operations in China, and how policies of the Trump administration are affecting the U.S. automobile industry with its attempts to force Ford and GM to bring some of those investments back to the U.S. Policies enacted under President Trump have been successful in forcing Ford and GM to invest more in the U.S.; however, because of other hurtful government decisions and these companies' (Ford and GM) previous actions of increasing their presence in China, Trump's approach will lead to an increase in the companies' costs and potentially make them vulnerable to future financial struggles.

I. Introduction

President Trump's administration has begun to enact policies which will greatly impact economic and business decisions for U.S. manufacturers. These policies will directly impact the way U.S. car manufacturers will conduct business in the coming years, forcing them to stop their current investment plans. Ford and GM are on a constant race to increase their profits by increasing their revenue and lowering their cost, and due to the constant increase in sales until the 2016 U.S. Presidential Election, (Carsalesbase, 2019)^{1,2} increasing car production in China was the route to take for these companies to approach this goal. In a period when consumers have evolving tastes, one of the safest and effective ways of dealing with those uncontrollable forces is by lowering costs of production. Therefore, it makes sense for Ford and GM to increase their activity in China due to the potential of lowering cost because of China's low minimum wage, low corporate income taxes, and favorable exchange rate.

This paper will explore and minutely review the main reasons why U.S. car manufacturers moved part of their operation overseas, with an emphasis on the impact of the Trump administration's actions on the way U.S. car manufacturers do business in 2019 and suggestions to increase manufacturing jobs in the U.S.

II. Minimum Wage and Wage differences Between China and the U.S.

The minimum wage is a highly debated and controversial topic among policymakers. A minimum wage is a price floor that not only prohibits employers from paying people less than a certain amount per hour for their work, but simultaneously prohibits people from supplying their labor for less than that minimum amount. Arthur Laffer (a recognized American economist who served on President Reagan's Economic Policy Advisory Board) in a newsletter published by

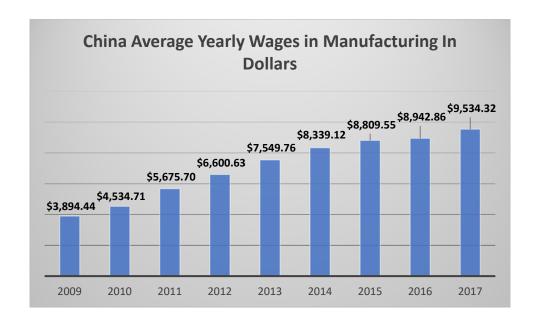
MSNBC (2014) argues that in the U.S. there should not be a minimum wage and that the market should have the power to find the equilibrium between labor supply and labor demand. For businesses, minimum wages are a disadvantage for the United States due to the increase in labor cost they are subject to in the country. Therefore, to lower their cost and keep their competitiveness in the market, United States industries outsource or move production outside the U.S. to take advantage of cheaper labor in countries such as China.

China's low-priced labor has been targeted by U.S. manufacturing companies for years. *Trading Economics* displays that in 2017 the yearly average manufacturing wage in China was \$9,534.32 and that the United States was close to \$42,024.00. In 2017, there was approximately a \$32,000.00 difference between the two country's yearly average manufacturing wages. For multi-million-dollar manufacturing industries that employ millions of people such as the automobile industry, reducing their variable labor cost could mean establishing a stronger position in the market (Tradingeconomics.com, 2019).

Because of increased demand for Chinese labor, there have been increases in manufacturing wages in China. Throughout the years, China has maintained a competitive advantage with respect to labor costs. In research published by the Pacific Economic Review titled *Rising Wages: Has China Lost Its Global Labor Advantage?* it is stated that "wage growth in this sector (manufacturing) has been below the national average. This is despite the fact that manufactured goods accounted for more than 90% of China's exports" (Tao Yang, 2019). ⁵ The demand for unskilled labor for manufacturing in China has proven insufficient to raise wages.

Statistics show that China offers a sustainable ground for the automobile industry to thrive and leverage China's comparative advantage: low cost labor. One cannot deny the fact that wages in China have risen, but in manufacturing, the increase has been gradual and predictable.

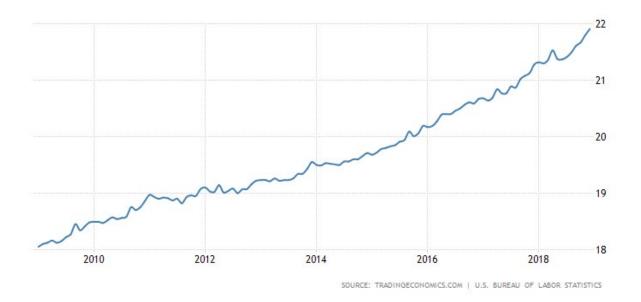
China's average yearly wages in manufacturing grew approximately 12% per year on average from 2009 to 2017. This is even with diminishing growth rates in 2016 and 2017 (years which had the smallest percentage increase in average wages over this period).⁴



There is an incentive for automobile manufacturers to take advantage of China's inexpensive labor, and this incentive is magnified by average manufacturing wages in the U.S. Pacific Economic Review assures that there "remains an enormous gap between manufacturing wages in China and those in developed economies" (Tao Yang, 2019 p. 493). U.S. manufacturing wages have shown an alarming upward trend that has kept its momentum for the past 9 years, as observed in the following graph shared by *Trading Economics* (Tradingeconomics.com, 2019).

Chinese labor has experienced a phenomenon that uses one of the U.S. disadvantages as an advantage, which is one of the main reasons why Chinese labor is so inexpensive. In 1990, China established a minimum wage in order to increase wages for their lowest paid workers. For China's export market, the minimum wage does not really function as a price floor, but rather is essentially the set price for labor. The reason this phenomenon has trended over the years in

China is because of where the supply of labor comes from and the decentralization of the minimum wage (Chan, 2006).⁷



The supply of labor for China's export market comes mainly from the migration of countryside workers who are used to a lower standard of living than the urban population. The constant supply of these countryside workers is the main force pushing the wages for the export sector to stay close to the minimum wage. 7

In combination with wages being pushed down to the minimum by China's supply of countryside workers, the government is the force keeping minimum wages low. Minimum wages in China are for the most part decentralized. Cities in China can set their own minimum wage, making it difficult for employers to perceive the minimum wage as a base price. This decentralized minimum wage also allows the government to formulate a minimum wage based on the standard of living, causing the minimum wage to move at a rate no faster than inflation.⁷

Apart from minimum wages, there are multiple factors driving U.S. wages to their current levels. Some of those factors are labor unions. U.S. labor unions were created to improve

worker's conditions in the country not only by helping workers improve their wages but also obtaining more benefits, such as health insurance. The Bureau of Labor Statistics states that in 2018, approximately 1,461,000 manufacturing workers in America were members of unions. Union workers are estimated to earn 22.2% more than non-union workers, which contributes to the rise of labor costs in the country. ⁸ In contrast to U.S. labor unions, David Metcalf and Jianwei Li from the CenterPiece online magazine assure that unions in China "are not properly functioning unions." They state, "despite their huge membership, unions are likely to remain largely nugatory in Chinese labor relations." Because labor unions in China fail to work as intended, China's labor costs have not been affected by these unions, making the gap between labor costs in the U.S. and China greater than it otherwise would be.⁹

Labor costs in the U.S. are very unattractive for U.S. automotive manufacturers. As a direct comparison, the Bureau of Labor Statistics shows that U.S. car manufacturers pay Chinese employees about a tenth of what they pay American workers. An abrupt change in policies that would bring mannufacturing labor to the U.S. will be ineffective and can prove to be harmful for U.S. automotive industries, which drive a high percentage of the country's GDP, between 3 to 3.5% (Hill, K., Cooper, A., & Menk, D.). Ceteris paribus, when the demand of something increases the price of it will increase. A sudden increase in the demand of labor in the U.S. will make average manufacturing wages increase even further. In order for the U.S. to have more attractive wages, there has to be a gradual change. Because the minimum wage has already been set into a standard in the U.S., the way wages could become more attractive would be by leaving the minimum wage at its current rate and allowing inflation to, in real terms, gradually decrease wages. The neccesity for this gradual decrease is because policies that would decrease nominal wages would not be popular among U.S. workers, making it a non-sustainable approach.

III. Exchange Rate

The strength of the dollar relative to the Chinese Yuan has been a main driver in moving production to China. Moving operations to China has enabled U.S. companies to gain an advantage from changing some of their cost to Yuan. For the past 10 years, the average closing price of the Yuan has ranged from 6.15 to 6.83 per dollar. One of the main reasons the Yuan attracts companies to increase production in China is that it is relatively stable. (Macrotrends.net, 2019).¹²



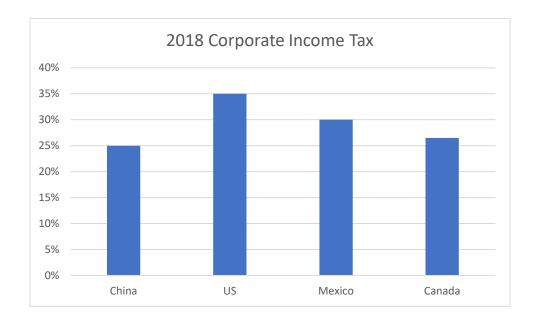
China's ability to maintain mild fluctuations in their currency despite their rapid increase in their current account surplus is admirable. Green (2008) states, "China's absolute current account surplus was the largest of any country in the world." ¹³ Despite the rapid growth in China's current account, China has maintained an even faster growth in their reserves, thus maintaining a low and stable currency.

In addition to the stability of China's currency, the relative exchange to dollar from China's Yuan has attracted Ford and GM to move some cost to Yuan. Having revenue in dollars and

expenses in Yuan has been a target for these two car manufacturers for more than a decade and could mean major production cost savings, ensuring these companies' future survival.

IV. Corporate Income Taxes

Taxes originated with the ideas of raising money and discouraging non-wanted behavior. However, U.S. corporate tax rates appear more of a punishment for conducting business in the country than a way to raise money for government operations. Between 1993 and 2017, the United States has had a flat 35% corporate income tax, making it the country with the higher corporate income tax between China and the U.S. (Tradingeconomics.com, 2018). ¹⁴



The automobile industry has historically been a source of the pride for the U.S. However, because of previous U.S. government decisions, GM and Ford have been subject to higher costs and less opportunities for growth in the country. The tax burden is substantial enough to be a relevant reason why U.S. car manufacturers are moving operations to China.

General Motors' Buick Envision is special because it is only manufactured in China, making Buick the "first Chinese import" (Trade.gov, 2019). During the first 6 months of the car's

release, GM sold "about 32,000" units at a base price at "\$34,065" in the U.S. Shortly thereafter, Ford announced that by 2019, it would move all production of the Ford Focus to China. Ford sold "113,345" (Ford Authority, 2019)¹⁶ units of the Ford Focus in 2018 alone, making it one of their top selling cars.

General Motors and Ford have taken steps to increase production in China, proving that manufacturing cars and importing them back to the U.S. is feasible and can be expected to be profitable. A company engaging in this strategy not only saves in production costs, but also increases its production in a big market that is rapidly growing. Geographically, moving production to China would be a key strategy for such companies to expand their business to new markets, or to simply grow existing ones. With the U.K. likely removing themselves from the European Union, U.S. manufacturers are in need of another location that can facilitate production for Europe.

V. Conclusion

Under the leadership of President Trump, actions have been taken which impact the way U.S. businesses will choose to operate. One of the most significant policy changes is the lowering of the corporate income tax rate from 35% down to 21%. A 21% corporate income tax is more competitive (relative to rates set by other countries) and will give U.S. automakers an incentive to produce more cars domestically, thus employing more people and positively impacting GDP growth in the U.S.

Art Laffer is most well-known for articulating (in a simple way) why increasing tax rates may lead to less tax revenue. That is, there is a point at which increasing the tax rate will only lead to lower tax revenues, due to decreased business activity and reduced economic growth. In a

newsletter published by MSNBC (2014), Laffer conjectures that a tax rate of around 20% is close to the peak, meaning the point where tax revenues will be maximized. Thus, U.S. companies are maximizing their production due to a moderate tax burden. Therefore, lowering the corporate income tax to 21% is a step to the right direction to lure U.S. car manufacturers to bring a higher percentage of their production to their home land.³

Despite lowering the corporate income tax being a favorable action to bring back U.S. car manufacturers to the United States, Trump's presidency has taken additional government actions that will prove harmful for Ford and GM. The adamancy of President Trump on punishing any activity outside of the United States from automotive companies created an even more challenging scenario for U.S. automakers. Changes in NAFTA will force U.S. car manufacturers to incur a higher cost for labor, raw materials and parts if they want to evade paying tariffs.

Owen Stuart a Market Research Analyst on his report *How Will the Shift from NAFTA to USMCA Affect the Auto Industry?* published by IndustryWeek state: "While NAFTA originally required automakers to use 62.5% of North American-made parts in their cars to be imported duty free, the new agreement gradually raises the bar to 75%..." (Stuart, 2018)¹⁷ These new NAFTA negotiations that increase the percentage of car parts to be produced in the U.S. will force U.S. automakers to increase their cost.

In addition, in attempts to protect the steel industry, President Trump has also renegotiated the tariffs on steel, imposing a 25% tariff on steel parts and 10% on aluminum. Because around 70% of the weight of a car is steel, U.S. car manufacturers are subject to a massive rise in their cost. Forcing these auto manufacturers to increase their purchases of local material, while increasing the price of those local materials, make it costlier to make business in the United States. (Trivedi, 2018). 18

President Trump secured a deal with China where China agreed to lower tariffs for the U.S. from 25 percent on cars and from 20 percent on trucks to 15 percent. Unfortunately, this deal will not lead to a meaningful increase of car and truck exports to China or the willing return of the auto industry to the U.S. since China only imports about 5% of its cars every year. 18

The policies of the Trump administration are unquestionably reducing incentives for Ford and GM to increase their activity in China; however, are Trump's policies increasing incentives for them to increase investments in the U.S.? Many of the trade policies of the Trump administration induce firm to behave in ways that they would not choose to act in a purely free market. Consequently, companies like Ford and GM's are being nudged to take actions which are in many respects "involuntary." So even if the policies provide incentives for business to increase investments in the U.S., it is likely that such decisions and outcomes are inefficient from the perspective of total social welfare.

Prior to the 2016 Presidential Election, Ford and GM had decided that China was a viable trading ground for increasing their profits. Therefore, increasing their presence in China was an effective business approach to secure their future survival. Looking forward, demand for automobiles in the U.S. may very well decrease; Michael Sivak and Brandon Schoettle found that the U.S. has experienced a massive decrease in the number of people getting a driver's license (Sivak, M., Schoettle, B., 2016)¹⁹ while Ford and GM's car sales were constantly increasing in the years prior to Trump's presidency's policies. ^{1,2} Throughout the years of economics research, economic freedom has led to important advances in the development of the economy and if the government wants Ford and GM to be prosperous and willing to keep investing in their home country, the government must provide trading grounds that are suitable for their growth instead of forcing them into trading grounds that are not.

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