



Ford: Fusion Across Borders

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In January 2017 Ford Motor Company canceled its plans to build a new \$1.6 billion plant in Irapuato, Mexico that was earmarked to manufacture the Ford Focus, the company's best-selling model. The move followed President Trump's threat to impose a 35% tariff on cars imported from Mexico to the USA, aimed at repatriating manufacturing jobs and reducing the Mexico-USA trade deficit. This protectionist movement upends Ford's supply chain and jeopardizes its cost structure. Rather than yielding to political pressures, Ford should continue to invest in Mexico to remain cost-competitive while refocusing its American workforce on higher value-added activities to secure Ford's continued relevance in the rapidly-changing automotive landscape.



The introduction of the North American Free Trade Agreement in 1994 fostered the integration of supply chains across North America, enabling Ford to capitalize on Mexico's lower production and sales costs in order to become more competitive globally.

As shown in **Exhibit 1**, the cost advantage of producing a Ford Fusion in Mexico versus in the USA is \$4,300 and \$1,200 for units sold in Europe and the USA, respectively. The difference is driven by lower assembly line wages¹, less expensive materials, and reduced tariffs for units sold overseas, resulting from Mexico's 12 free trade agreements².

Exhibit 1: Comparison of Ford Fusion Production Costs in Mexico vs. USA



Ford Fusion

Produced in Flat Rock, MI and Hermosillo, Mexico

Cost advantages	Cost difference between USA and Mexican production for sale in the USA (USD\$)	Cost difference between USA and Mexican production for sale in Europe (USD\$)
Assembly plant labor	\$600 less in Mexico	
Parts	\$1,500 less in Mexico	
Transportation to market	\$900 more from Mexico	\$300 more from Mexico
Tariffs	\$0	\$2,500 less in Mexico
Total cost advantage	\$1,200 less costly to produce in Mexico for sale in the United States	\$4,300 less costly to produce in Mexico for sale in the United States

Source: Center for Automotive Research

Contrary to President Trump's allegations, NAFTA did not provoke an outsourcing of the American automotive supply chain, but rather an integration of operations across North America. According to the Center of Automotive Research, automotive components cross North American borders as many as eight times before being assembled³, and the Wilson Center estimates that 40 cents of every dollar imported from Mexico to the USA is "Made in the USA" content, compared to only five cents for products imported from China⁴. Because of this supply chain integration, Ford can leverage the entire continent's competitive strengths to compete more effectively against lower cost manufacturers, particularly from Asia.



Ford has taken measures to counter the costs of curtailing its investments in Mexico. During the 2017 shareholder meeting, CEO James Hackett announced initiatives to cut materials and product engineering costs over the next five years by \$10 billion and \$4 billion⁵, respectively, by rationalizing specifications throughout the product line, sharing more parts across vehicles, and cutting new product development times by up to 20%⁶. Additionally, the company announced that the production of the Ford Focus, originally planned for the cancelled plant in Mexico, would be transferred to China, where operating costs are lower and there is more available production capacity than in the USA⁷.

These measures are a temporary fix to Ford's political pressures and investors' concerns. If President Trump's protectionist march continues, Ford will inevitably be forced to re-shore operations from China as well. This will require substantial investment in new American plants, since the current ones are already operating near full capacityⁱ, and new factories will have to be largely automated to maintain their cost competitiveness. Ford's cost structure will likely still be higher than it is in Mexico, especially if it makes similar automation investments across the border, and few American jobs will be created⁸.ⁱⁱ.

Instead of capitulating to political pressures to repatriate manufacturing jobs, Ford ought to continue investing in Mexican manufacturing capacity while retraining its USA work force in higher value-added skills, such as materials science and artificial intelligence. In a world in which companies like Uber, Lyft, Tesla and Google are redefining personal transport, it is not manufacturing, but the ability to innovate and self-disrupt that will sustain the vitality of the USA automotive industry. The looming question is: what changes does Ford need to make to its American operations to successfully transition to the networked economy? Will the Trump administration support this transformation, or will it continue clinging to the manufacturing economy of last century?

[Word count: 747]

ⁱ According to the Center for Automotive Research, automotive manufacturing plants were already operating at 96% of capacity in 2014.

ⁱⁱ Oliver Wyman estimates that a recent \$1.2 billion plant modernization plant by Ford in the USA created a mere 130 jobs.

End Notes

- ¹ Menk, D., & Swiecki, B. (2016, July). The Growing Role of Mexico in the North American Automotive Industry – Trends, Drivers and Forecasts. Center for Automotive Research. Retrieved from <http://www.cargroup.org/publication/the-growing-role-of-mexico-in-the-north-american-automotive-industry-trends-drivers-and-forecasts/>
- ² Secretary of the Economy of Mexico. (2016, May 30). Secretary of the Economy. Retrieved from <https://www.gob.mx/se/articulos/mexico-cuenta-con-12-tratados-de-libre-comercio?idiom=es>
- ³ Dziczek, K., Swiecki, B., Chen, Y., Brugeman, V., Schultz, M., & Andrea, D. (2017, January). NAFTA Briefing: Trade benefits to the automotive industry and potential consequences of withdrawal from the agreement. Center for Automotive Research. Retrieved from <http://www.cargroup.org/publication/nafta-briefing-trade-benefits-to-the-automotive-industry-and-potential-consequences-of-withdrawal-from-the-agreement/>
- ⁴ Wilson, C. (2011, December 13). Working Together: Economic Ties Between the United States and Mexico (Rep.). Retrieved <https://www.wilsoncenter.org/publication/working-together-economic-ties-between-the-united-states-and-mexico>
- ⁵ Ford Motor Company, Investor Relations. (2017, October 3). CEO Strategic Update [Investor Presentation]. Retrieved from <http://shareholder.ford.com/news-and-events/events/2017/10-03-17>
- ⁶ Ford has a clear plan to fix its present failings. (2017, October 5). The Economist. Retrieved from <https://www.economist.com/news/business/21730056-puzzle-future-carmaking-remains-unsolved-ford-has-clear-plan-fix-its>
- ⁷ Vlastic, B. (2017, June 20). Ford Chooses China, Not Mexico, to Build Its New Focus. The New York Times. Retrieved from <https://www.nytimes.com/2017/06/20/business/ford-focus-china-production.html>
- ⁸ Kautzsch, T., & Chien, A. (2017, October). Bringing Manufacturing Jobs Back to the US? (Rep.). Retrieved http://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2017/oct/Bringing_Manufacturing_Jobs_Back_To_The_Us.pdf
- * Images obtained from Google; hyperlinks lead to source.