Trump, Mexico's Auto Industry, And NAFTA

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President Donald Trump's campaign statements against free trade and in favor of levying tariffs on U.S. companies that move production to other countries, particularly China and Mexico, have sparked a great deal of debate worldwide. The auto industry has particularly been in the eye of the storm because of Trump's statements against Ford's recent investments in Mexico.

In recent years, Mexico has been very dynamic in attracting foreign direct investment (FDI) to the auto industry. The press has called it "the new Detroit," while that traditional U.S. auto center has been dubbed "Detroitosaurus wrecks."² The high FDI can be explained by the multinational corporations' global strategies to deal with the industry's difficult situation: mature markets with expectations of low consumption growth, productive capacity lying idle, dropping profit margins, increasingly strict regulations of polluting emissions, and the arrival on the scene of new competitors, particularly China. This scenario, together with the world crisis of the end of the last decade, have given rise to an important change in the auto industry: in addition to the 13-percent fall in world production overall in 2009, China has become the world's foremost car producer, while General Motors and Chrysler, historic icons of the industry, declared bankruptcy.³

This situation is reflected in the statistics published by McKinsey,⁴ showing that in 2007, the so-called BRICs (Brazil, Russia, India, and China —South Africa was added in 2010), together with the rest of the world outside of the U.S., Europe, Japan, and South Korea, accrued 30 percent of the industry's worldwide profits, but that by 2012, they had achieved 60 percent of all the profits from the auto industry, and that more than half of those went to China. And that's not all: the predictions are that by 2020, the emerging mar-



kets will obtain two-thirds of the world's profits from the auto industry and will grow three times as fast as the mature markets, with China heading the list, of course.⁵

The U.S. auto industry suffers from the same mediumand long-term problems that the other mature markets do. However, in addition, the bankruptcy of GM and Chrysler led them to take drastic measures to cut costs and, amidst an increasingly complex competitive environment and severe restructuring and adjustments as well as lay-offs, they have managed to eliminate idle industrial capacity and increase their profit margins notably. After going through this process, the U.S. auto industry reports that its earnings have recovered, rising from US\$9 billion in 2007 to US\$23 billion in 2012. This has not been the case, however, of the other mature markets like those of Japan, South Korea, and the European Union.⁶

Amidst this dynamic, the productive process has become increasingly fragmented and dispersed. As William Robinson has pointed out, since the 1990s, the world's auto industry has become a multinational spider web extending across the globe. Auto production processes become so transnationalized that the final products cannot really be considered national. This way of organizing production has been called global value chains or global production networks.

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Timothy Sturgeon presents a very clear expression of the transformation of the productive process in global value chains applied to the North American auto industry. He points to a very accelerated trend toward outsourcing in the auto industry since the 1980s. He goes on to say that until 1985, employment in the industry was divided equally between assembly plants and auto-parts manufacturers, but that after that, jobs among the suppliers increased notably; and that this trend rapidly became generalized among the big assemblers, and some companies even carried out acquisitions and mergers to achieve greater capacity.8 Sturgeon points out that as the big suppliers have captured a growing percentage of the sector, they have also gained control over their own suppliers. So, the industry has organized itself in different tiers. The first-tier suppliers sell directly to auto manufacturers, who assemble the final product. The second-tier suppliers sell to the first-tier suppliers, and so on down the productive chain. Since the leading firms have delegated design details to their suppliers, the first-tiers have gained considerable control.9

Later, the modes of outsourcing became increasingly sophisticated since assembly plants sub-contract to tier companies, which provide already assembled modular systems that are then integrated into the system through 0.5-tier firms, who coordinate the different modular activities. This new 0.5-tier links up synergies of the different modular systems (integrated instrument panels, braking systems, etc.), becoming companies that integrate systems. ¹⁰

Thus, we can see that automobile production is organized in increasingly complex ways, with a large number of suppliers who may be in different countries, and who participate in creating the inputs that will be turned into a final good. And the country that assembles that good imports a large quantity of parts and components with value added incorporated into them. This means that, for every car that Mexico exports, it imports a large number of parts whose value added was created elsewhere.

NAFTA has been key in creating an integrated auto industry in North America. Under this treaty, production has been relocated and the number of U.S. Big Three (or D-3) plants declined: in 1985, the trade area had 93 plants (75 in the U.S.,

4 in Mexico, and 14 in Canada). By 2005, 83 remained overall, of which 12 were in Mexico. Almost all the plants that closed had been in the United States.¹¹

The aim of all this was to achieve regional productive specialization in accordance with the multinationals' requirements and create economies of scale that would reduce costs. With this restructuring, vehicle production increased notably in the region, and Mexico managed to insert itself into the auto industry's global production circuits, increasing its output considerably, a high proportion of which is exported to the United States. This can be seen in the fact that, between 1985 and 2002, Mexico's auto industry went from being a secondary industry producing fewer than 400 000 units for the domestic market and with only 20 percent of output destined for export, to the world's ninth most important auto industry, producing almost two million units a year, with a strong tendency to export —around 75 percent—, the great majority to the United States. 12

VALUE ADDED INCORPORATED INTO MEXICO'S AUTO EXPORTS

In the era when one country would produce a car from beginning to end, traditional statistics, which reported only the export of final goods, whether in volume or in value, undoubtedly objectively reflected each country's exports as well as its competitiveness in the industry. But it doesn't work that way anymore. Today, world trade in goods is increasingly an exchange of intermediate goods, which will be integrated into the productive process of a certain item, and less an exchange of final goods. World trade dominated by the exchange of intermediate goods is a reflection of the globalization of productive processes, and the car industry has pioneered this transformation.

Within the global or regional value chain for making the world's cars, some countries contribute more value added than others. Trade balance statistics report only the export of finished automobiles. However, to really know how much value the country sending the final good abroad is exporting and to have a more objective idea about trade flows, the Organisation for Economic Co-operation and Development (OECD) and the World Trade Organization recently began publishing value-added statistics on trade. They allow us to see which countries are contributing more value added to auto industry exports.

How much value added is Mexico really incorporating into the cars it exports? Graphs 1 and 2 show the place in value added it occupies among the 20 main countries that add value to the world's auto industry for 1995 and 2011.

Graph 1 shows 1995, when the United States was in first place, followed by Japan and Germany. These three countries were by far the main contributors to the world's value added in this industry. They were followed by France, Great Britain, South Korea, and, in seventh place, Canada, while Mexico occupied thirteenth place.

Graph 2 shows the same data for the year 2011. We can observe a very important change in the structure of the industry: China heads the list, followed by the United States. Germany maintains its third place and Japan has dropped to fourth. Mexico has risen to seventh on the list, while Canada has fallen to twelfth place. We can also note that Mexico's value added in its exports has grown considerably and it has moved ahead four places in world participation.

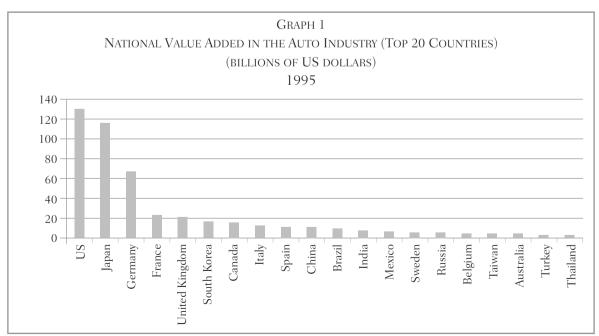
China has made a surprising qualitative leap forward thanks to its government's strategies, which, using the power its enormous potential market gives it, conditions the big multinational corporations to transfer technology and know-how and set up joint ventures with the emerging Chinese auto companies. This has given rise to the development of its own industry, which has learned from the many years of experience of the world's big corporations. Moving ahead to the first

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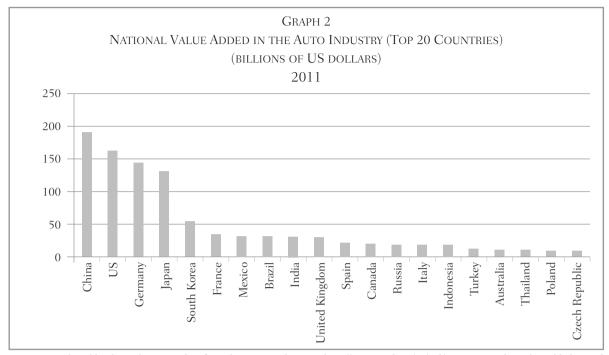
place in the world's auto production in a few short years is very surprising.

FUTURE CHALLENGES

NAFTA and the globalization of the auto industry has spurred Mexico to produce more and more efficiently and with more value added in the global schema of the U.S. multinationals, but a protectionist U.S. policy would affect all the mechanisms of the worldwide integrated auto production system, discouraging not only U.S. investment, but also that of companies from other regions, such as Audi, Toyota, or VW, which invest in Mexico to use it as an export platform mainly to the U.S. market. We will have to see if the new U.S. president maintains his campaign promises; if he does, he will be facing strong pressure not only from the U.S. multinationals, but also from the governments of a large part of the world. The consequences of a protectionist policy today, when production has been globalized, would be considerable.



Source: Developed by the author using data from the OECD and WTO at http://www.oecd.org/sti/ind/measuringtradeinvalue-addedano-ecd-wtojointinitiative.htm.



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