U.S. Auto Parts Content in Mexico's Motor Vehicle Production

In a recent Op-Ed titled "NAFTA rules are killing our jobs" - Wilbur Ross, the U.S. Secretary of Commerce, cited a study done by the U.S. Department of Commerce (Commerce) based on data generated and released earlier this year by the OECD on "value added trade."[1] As noted in Secretary Ross's Op-Ed, the OECD data and the corresponding analysis by Commerce concludes that U.S. content in imported motor vehicles has dropped significantly from 1995-2011 and claims that, "there is no reason to think that the situation has improved since then." These findings of the Commerce report are a central rationale for Secretary Ross's assertion that NAFTA has led to job loss in the United States and that significant changes in the U.S.-Mexico trade relationship are necessary, including dramatic changes to the automotive rule of origin.

However, the conclusions made in the study are inconsistent with the experience and performance of the U.S. automotive industry in recent years. Global trade models often fail to take into account unique bilateral dynamics and industry specific nuances, which appears to be the case here. Accordingly, the American Automotive Policy Council has conducted its own analysis to assess the conclusions drawn from the OECD data in the Commerce Department's analysis.

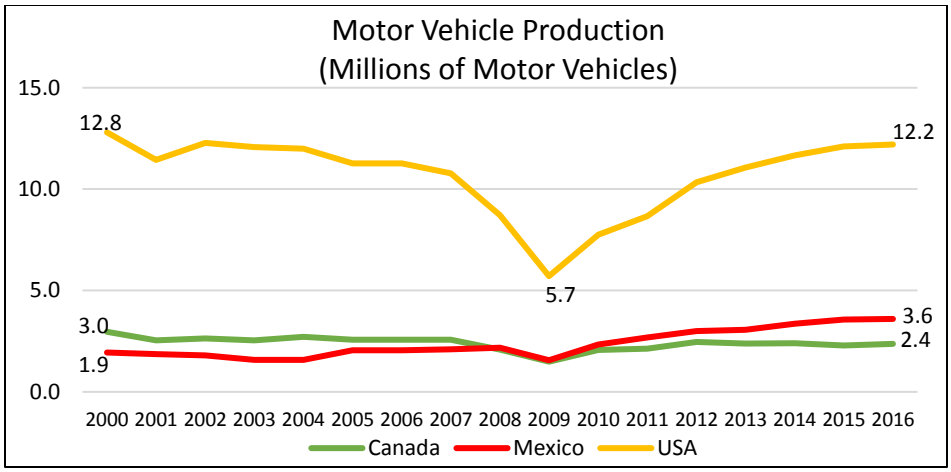
To start, AAPC identified several significant problems and inconsistencies in the data when the performance and the experience of the U.S. auto industry, since 2011, are considered:

- The OECD data is six years-old and the last year of that data (2011) falls squarely in the middle of the U.S. economy's recovery from the Great Recession, which coincided with a 50% reduction in U.S. auto production (see chart below).
- The growth in value of U.S. auto parts exports to Mexico (225%) outpaced the growth in Mexican auto production (186%) from 2000-2016.[2]
- By nearly all measures, U.S. manufacturing has become more globally competitive since 2000. For example:
    - The U.S. auto industry has grown substantially more than the overall economy since the Great Recession in both economic and job growth (the overall economy has seen 32% growth over 2009 levels, supported by a robust auto industry that has grown 67% over the same time period.)
    - Additionally, the auto industry has led the nation in job creation and growth, with the industry growing 48% as compared to the 13% growth in non-farm employment over the same time period.

The following chart shows the dramatic disruption on U.S. auto production of the great recession, the auto sector's bounce-back to pre-recession levels, as well as the significant increase in Mexican motor vehicle production.

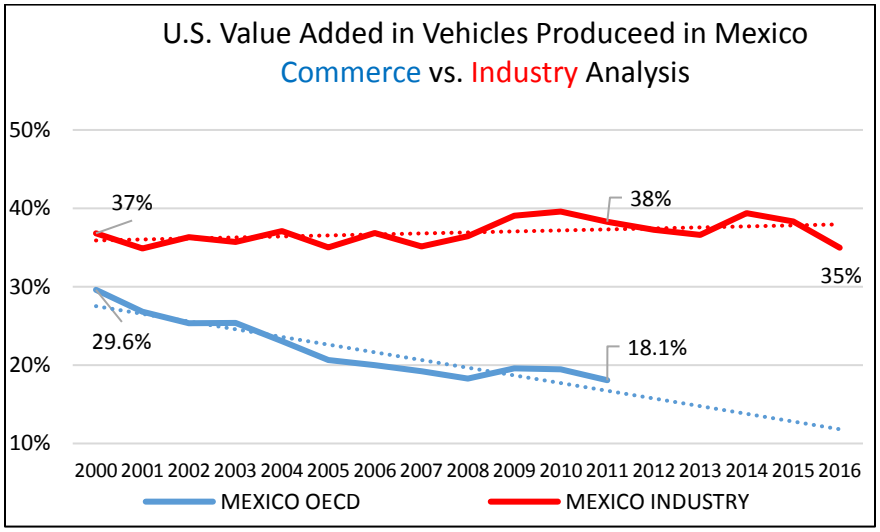
[1] Origin of value added from gross imports from the OECD Trade in Value Added Database with the U.S. selected as the importing country, Mexico the exporting country, and Motor Vehicles and trailers as the exporting industry (1995-2011)

[2] Source: OICA.net for Production and U.S. Department of Commerce, Bureau of the Census, US ITC Tariff/trade database with the USDOC Auto Office definition of auto parts (2000-2016).



Next, AAPC developed an independent straightforward way to assess and confirm the U.S. value added content of vehicles in Mexico. We were able to measure the value of the U.S. auto parts exports per vehicle produced in Mexico, which can then be calculated to determine the value of U.S. content in Mexican production[3] by using total U.S. auto parts exported to Mexico[4], total motor vehicle production in Mexico[5], and an average price per vehicle.[6]

This straightforward approach shows a higher (36% on average), and more importantly a steady state of U.S. auto parts content in vehicles produced in Mexico from 2000 through 2016. A comparison of Industry's findings with those produced by Commerce, using OECD data, is presented in the following chart:



[3] To guard against overestimating the value of U.S. auto parts used in Mexico's motor vehicle production, the value of the U.S. auto parts exported to Mexico is discounted by 40 percentage points to account for foreign content embedded in U.S. auto parts and aftermarket trade.

[4] U.S. Department of Commerce, Bureau of the Census, US ITC Tariff/trade database with the USDOC Auto Office definition of auto parts (2000-2016).and the UNCOMTRADE data base (BEC-53).

[5] Source: OICA.net – Motor Vehicle Production by Country

[6] Based on the average price per vehicle exported from Mexico (discounted 30 percentage points to account for post manufacturing costs.

The chart also includes a linear trend-line that extends beyond the last year of OECD data available (2011) through 2016. Following this trend-line through the Commerce study's analysis (based on OECD data), would lead to U.S. content dropping by 40% from 2000 to about 12% U.S. content in 2016. By any measure, this is clearly not consistent with global trade flows, production volume changes in both the U.S. and Mexico, and the recent performance and growing competitiveness of the U.S. auto industry.

We found that non-NAFTA auto parts inputs into Mexico-produced vehicles jumped nine percentage points, with most of this increase attributable to sources outside the NAFTA region (Japan, Korea, China, Germany and the rest of the world). This increase was consistent with the OECD data. We, however, also found that that increase was offset by an equally large 10 percentage point decrease in Mexico's domestic inputs into auto production. This was not consistent with the OECD data. Instead, the OECD concludes that the increase in non-NAFTA content is offset by a decrease in U.S. content. As noted above, this is inconsistent with the trade flows and import-production ratios.

The Commerce study also highlights the growth in auto parts into Mexico from non-NAFTA sources – citing that they had "more than doubled." Our numbers show a similar trend, but even after doubling, the non-NAFTA inputs total only 20% of the content of the vehicles in Mexico, and that has been flat since 2010. The study also cites China as a big factor in boosting non-NAFTA value embedded in Mexico's exports. But, despite the growth from nearly zero 15 years ago, Chinese inputs are still quite low – only 6% in the OECD Analysis (2011) and 5% in the Industry analysis (2016). So, as a percent of production, the role of Chinese auto parts imports in Mexico, like in the U.S., remains quite low.

In conclusion, the experience and performance of the U.S. auto industry in North America runs counter to the conclusions reached by the Commerce study, using OECD value added trade data. While we also came to different conclusions on the overall content levels, more importantly, there were major differences in the trend of the U.S. content in the vehicles produced and exported. Differences in the content levels can be explained by differences in what is or is not included in the value. But differences in trends – most evident in the Mexico data – points to more fundamental problems with the OECD data, or the conclusions reached by Commerce using this data in the study. It is important to note that we have looked at a broad range of other U.S. and global trade relationships, and the scale of the differences in the U.S. content in Mexico under the OECD and the Industry analysis is an outlier.

Based on our analysis, we strongly recommend that the Trump Administration reevaluate the data and analysis before using the Commerce study and the OECD trade in value added data as a rationale for making dramatic changes to U.S. trade policy, including the NAFTA automotive rules of origin.