

Manufacturing in »high-cost« regions

Ron Harbour,
Stephen Weisenstein

There is a general belief that, due to the high unit cost of labor, OEMs either cannot or will soon be unable to competitively build vehicles in the United States, Canada, Western Europe, and Japan. It is certainly correct that the high wage rates typically cannot be offset by higher productivity (measured as Hours Per Vehicle) realized in these countries. However, when the full cost of delivering parts, manufacturing, and delivering vehicles is considered, it is frequently more cost effective to »build where you sell« when it comes to mass-market vehicles in the developed markets.

For example, in a specific case of an OEM transferring production from the United States to Mexico, once all expenses were fully understood, the OEM actually incurred a cost penalty of between \$90-100 for each vehicle exported back to the United States. It is important to note that this example does not automatically apply to all cases. Sourcing to a productive plant in a low-cost region typically compares favorably with an inefficient plant in a high-cost region even after the vehicle is exported and all the additional charges are taken into account.

»The key point is that when manufacturing operations are enabled and set up to run in the most productive manner, it is typically cheaper to build where you sell when it comes to the large developed markets.«

Understanding the complete cost impact of sourcing to low-cost countries

A misperception exists largely because wage rates are the easiest of the input variables to compare across regions. The other elements of the cost structure tend to be less visible and harder to understand. You may be familiar with the differential in wage rates, but what about utility rates? And the downtime cost incurred due to less reliable utility service? The expenses for logistics and the tariffs to import parts and then export the vehicles again may seem somewhat straightforward, but how about all the costs associated with such a long and cumbersome supply chain? Many other additional costs also contribute to the high overall cost of off-shoring to »low-cost« regions. A common result is that the initial business plan shows a cost benefit, but the actual total cost impact turns out to be a penalty.

Four critical elements to competitively build in high-cost regions

- 1 Adhere to a capacity model that is based upon fully utilized and fully flexible facilities. Higher labor rates not only impact vehicle assembly costs, but also the cost of capacity.
- 2 Minimize the impact of the higher labor rates by adopting and maintaining world-class labor productivity practices. This includes optimizing the mix of labor and automation and continually refining processes to eliminate waste.
- 3 Unionized facilities must have a labor agreement that is not hindered by legacy costs and out-dated work rules and classifications that would put them at a cost disadvantage compared with non-union facilities. This applies in all regions, but it is of critical importance in regions with high labor rates.
- 4 Optimize sourcing. Making intelligent use of in-sourcing, local outsourcing, and low-cost country sourcing has a significant impact on overall cost compared with blindly following one sourcing strategy.