Management Accounting

Why the Big Three Put Too Many Cars on the Lot

Ford, General Motors, and Chrysler used "absorption costing" to make themselves look more profitable, researchers say. But the practice can be costly, and other companies may want to think twice before they follow suit.

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It's no secret that in the years leading up to 2008, the Big Three automakers — Ford, General Motors, and Chrysler — were producing above market demand. But researchers say they know why the automakers did it, and they are warning other companies to avoid the same temptation.

To boost profits and keep up with short-term incentives, the automakers used an accounting trick, overproducing while "absorption costing," according to professors from Michigan State University who wrote a study on the topic that was recognized this January for its contribution to accounting by the American Institute of CPAs and other groups. Ultimately, the practice hurt the automakers, tacking on advertising and inventory holding costs and possibly causing a decline in brand image, the researchers say.

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From 2005 to 2006, long before GM and Chrysler filed for bankruptcy and appealed for federal aid, the automakers had abundant excess capacity. They could make more cars with their resources than consumers were willing to buy. They also had high fixed costs, including leases on factories and labor contracts that prevented them from laying off workers when demand was low, says Karen Sedatole, associate professor of accounting at MSU and a co-author of the study.

To take advantage of these factors, the Big Three produced above market demand while using absorption costing — a technique that allows companies to calculate the cost of making a product by dividing total costs by the total number of products made, Sedatole says. Using this method, the cars the automakers made "absorbed" all manufacturing costs, including the cost of paying rent an incentive to spread that cost among more products to make the cost-per-product appear lower. If this company has excess capacity, produces all the products it can, and sells up to demand, its cost of goods sold will be lower than it would if the company had only produced up to demand. This lower cost boosts profits on the income statement. Instead of writing off the cost of these idle plants as an expense, companies shift it to the balance sheet as inventory.

Say fixed costs for a given factory are $100, and that the factory can make 50 cars. Consumers, however, demand only 10. Under absorption costing, if the company makes all 50 cars, its cost-per-car is $2. If it makes only up to demand, or 10 cars, the cost-per-car is $10. Although each car adds variable costs for steel and other parts, if those costs are low, the company still has an incentive to make more cars to keep the cost-per-car down.

If the company makes all 50 cars but can only sell 10, its cost of goods sold will appear on its income statement as 10 cars at $2 per car, or $20, plus variable costs. The cost of making the other cars will land on the balance sheet as ending inventory.

If, on the other hand, the company makes just 10 cars, its whole overhead cost of $100 will fall on its income statement, raising its cost of goods sold and lowering profits. Companies that overproduce to avoid the latter scenario "are, in a way, managing earnings upward by trapping costs on the balance sheet as inventory, so they won't hit the income statement," Sedatole says.

Absorption costing is legal. FASB Statement 151 allows companies to use the practice for "normal" excess capacity and to expense "abnormal" excess capacity. But it doesn't clearly define what's normal, leaving room for companies to overproduce in order to lower unit cost.

But business leaders should think twice before letting this accounting method influence their production decisions, Sedatole says. Even though they can make their companies appear more profitable in the short term by concealing excess capacity costs on the balance sheet, holding so much excess inventory could be costly, she says.

"When [the automakers] couldn't sell the cars, they would sit on the lot. They'd have to go in and replace the tires, and there were costs associated with that," Sedatole says. The companies also had to pay to advertise their cars, often at discounted prices. And by making their cars cheaper and more readily available, they may have turned off potential customers, she adds.

"If you see a $12,000 car in a TV ad is being auctioned off for $6,000 at your local dealer, that affects your image of that vehicle," says Sedatole. This effect on brand image is difficult to quantify, but the researchers correlated 1% of rebate with a 2% decline in appeal in the J.D. Power Automotive Performance Execution and Layout (APEAL) Index.

The Central Lesson

Some might argue that it's good strategy for a company already obligated to pay rent and salaries on its factories to make products up to its capacity. "An economist would say as long as I could sell the car for more than its variable cost, I'm better off selling it," Sedatole says. But "that's a very, very short-term way of thinking," because it neglects the costs that come with having a high volume of excess inventory.

The central lesson? Companies shouldn't use their financial-reporting methods to make internal decisions, says Ranjani Krishnan, MSU professor of accounting and a co-author of the study. "The objective of financial accounting is to provide information for stakeholders that are external to the company," Krishnan says. "But that is not adequate from the perspective of internal decision-makers. Managerial accounting needs to focus on the best way to provide information that will lead to strategic economic decisions."

Using absorption costing to monitor efficiency can lead companies to make poor production decisions, Krishnan says. A company that does this could seem to be growing less efficient when demand decreases. If a factory makes fewer cars this year than last year, for instance, its cost-per-car will look higher, and it may then overproduce in order to present itself more favorably to shareholders, consumers, and analysts.

Instead, Krishnan suggests, companies should write off the cost of excess capacity as an expense on their internal income statements, a practice that may help give them perspective.

Another way to avoid overproduction: companies can change the way they pay executives. Like many companies, the automakers put their managers under pressure to deliver in the short term by structuring executive-compensation incentives around metrics like labor hours-per-vehicle, which the auto industry's Harbour Report uses to compare companies. With fixed labor hours, the only way to look more efficient under this measure is to produce more cars.

"A lot of this behavior was frankly driven by greed," Krishnan says. "If you look at the type of managerial incentives they had during the time of our study, the executive committee deliberations, it was all about meeting short-term quarterly traffic numbers or meeting analysts forecasts so that they could get their bonuses."

Instead, companies "have to look at performance from a more holistic perspective, and not just look at financial numbers like net margin or profit, or return on investment, but also at things like customer satisfaction or brand image, things which may be a little bit more difficult to measure because they're not as quantifiable."

Sedatole and Krishnan co-authored the study with Alexander Brüggen, an associate professor at Maastricht University in the Netherlands.

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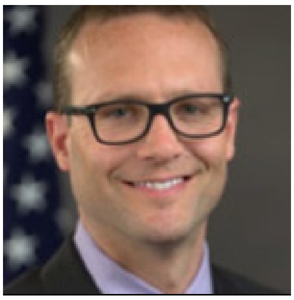

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