



Worksheet 7.1

American Auto Makers insult the intelligence of high school Econ students

In 2008, the American automobile industry was in trouble. In the face of a nationwide recession, the ‘big three’ auto makers found sales falling and losses mounting. Ford Motor Company announced in December 2008 its ambitious plan to cut costs and restore its profitability as it appealed to Washington for a \$25 billion ‘low-interest bridge loan’ (aka bailout). Read the section entitled **Salary cuts** and also **More hybrids...no more corporate jets** in [this article](#).

So the CEOs of the three largest auto companies agreed to be exploited for one year by accepting a salary of one dollar. The combined savings from the salary cuts of the three companies' CEOs would equal roughly \$6 million, or about 0.024% of the sum the companies were asking for from the government. Selling corporate jets during a recession when demand for such frivolous luxuries was at a record low would also do little to cut the costs of the incredibly inefficient US automakers.

As for any serious cost cutting plans, Ford had little to report. Real cost savings will only be achieved by the further closing of plants. With the economy in a deep recession and auto sales at their lowest in decades, the demand for new cars was just not there in late 2008. Ford and its American competitors would have to adjust their plant capacities to the realities of weakened market demand if they were to return to profitability.

Firms, as IB Economics students know, are profit maximizers. In fact, all companies are trying to make the same thing as all other companies, *profits*. When a firm experiences negative profits, or *losses*, as American auto makers were in 2008, it can do one of two things to restore profitability: 1) increase its revenues or 2) lower its costs. Since demand for new cars was so low, the revenue increasing option was just not there, so American auto makers were in a situation in which they had to reduce costs to return to profitability.

There are two main types of costs we study in microeconomics. Short-run and long-run costs. In the short-run, which in the case of the auto industry we can consider the few months before this article was written and since the financial crisis in the United States had begun, firms can do one thing to lower their costs: reduce the use of labor. Workers can be asked to take unpaid vacations, jobs can be eliminated, work hours can be cut back. In the short-run, plant size is fixed, meaning firms cannot add or eliminate capital and land resources. The only variable resource is labor. By reducing the number of employees over the past few years Ford had taken steps to lower its short-run costs of production.

Long-run costs must also be considered when firms are faced with negative profits. The long-run in the automobile industry is considered the period of time over which auto makers can either add new plant facilities or shut down existing facilities, lowering the costs of capital and land to firms. Long-run cost



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reductions had also been undertaken by Ford by December of 2008, including closing a number of plants over the past three years.

Clearly, Ford had made an effort to reduce short-run labor costs and long-run capital costs by eliminating some of its work force and closing some of its factories in recent years. In 2008, as the US had entered a recession, Ford's announcement that it would cut costs by paying its CEO one dollar and making him drive around the country in a hybrid car should be viewed as IB Econ students as a sorry attempt at returning the firm to a profitable situation.

Questions:

1. What is the 'variable resource' that firms can use less of in the short-run if cost reductions are needed?
2. In microeconomics, we sometimes refer to the long-run as the 'variable plant period'. Explain the meaning of this concept.
3. The law of diminishing marginal returns would indicate that if Ford were to close additional factories, it would almost certainly have to simultaneously lay off thousands of additional workers. What is the law of diminishing marginal returns and why does it require firms to lay off workers as plants are closed?
4. What is meant by 'diseconomies of scale'? If Ford and the other US auto makers were to close plants, how could this actually reduce their *average* costs of production? Refer to the concept of diseconomies of scale in your response.