Illustration 17.1
Firms Close Inefficient Plants

So far you have seen that a multiplant firm will produce a larger percentage of its output in those plants that are more efficient, that is, have lower marginal cost curves. You have also seen that if demand declines sufficiently, the firm will be induced to shut down its less efficient plants. This illustration looks at two classic examples of just such plant closings.

In December of 1983, ***The Wall Street Journal*** reported that U.S. Steel (now USX) had undertaken still another retrenchment of its steel operations.* The firm had announced the closing of nearly one fifth of its steel-making capacity and 23 finishing and fabricating mills. The closings were expected to affect a total of more than 15,000 employees.

This behavior is entirely predictable given the preceding discussion of profit maximization in a multiplant firm. The demand facing U.S. Steel had declined, due in part to the lower price charged for imported steel. This decline in demand led to a decline in output, and the facilities that bore the brunt of the cuts were the efficient plants. Indeed, that is what ***The Journal*** article concluded: The plants closed were those that had higher (marginal) costs at a given level of output.

In 1986, General Motors was experiencing similar difficulties.† Although GM was still the largest auto manufacturer, its market share had fallen from its traditional 45 percent to 42.5 percent the year before. Ford had made inroads into GM's share with its extremely popular Ford Taurus and Mercury Sable. Also foreign manufacturers were taking bigger chunks of the U.S market.

GM had planned capital spending of between $9 and $10 billion a year through 1990. But heavy spending on overhauling old plants had depressed earnings for several quarters. GM then announced that it would cut its proposed capital spending budget to between $6 and $7 billion annually. Cuts in plant modification and other projects were being considered, and ***The Journal*** indicated that some might be scrapped altogether. One GM source said, "Maybe we can get the [right] amount of products from fewer plants."

The point is that the multiplant theory we described is basically a short-run theory. The firm allocates its output among its plants so that the marginal cost of production in each plant is equal. In the long run, however, the firm would close down less efficient (higher cost) plants as U.S. Steel did and GM was probably going to do. And, in the long run, the firm can completely modify and modernize the less efficient plants and lower its overall costs, as GM has done. Or firms can replace the high-cost plants with completely new ones, again as GM has done. Nonetheless, once the new plants have been built or old plants modified, the firm will still allocate production so as to equalize marginal cost for all plants.

*"U.S. Steel to Trim Output Capacity by Almost 20 Percent," by Thomas F. O'Bayle and J. Ernest Beasely, ***The Wall Street Journal,*** December 28, 1983.
†GM Begins Cuts in New Projects, Other Spending," by Dale D. Buss and Amal Kumar Naj, July 14,1986.