



- b. Label the cartel's profit-maximizing output and price, as well as the output of each firm.
- c. Use your graphs to explain why each cartel member has an incentive to cheat on the agreement.

Application Questions

In current business publications, find examples of the continued oligopolistic behavior between United and Frontier airlines that we discussed in this chapter.

The following paragraphs provide a description of the behavior of OPEC in spring 2004:²²

In April, 2004, OPEC decided to move ahead with plans to cut its production target by a million barrels of oil per day in light of strong demand. Pump prices for gasoline in the U.S. are at a record high and crude oil is more expensive than almost any time since the first Gulf war in 1991. Saudi Arabia, the key player in OPEC and the only major producer that can quickly and significantly increase or decrease production, has been trying to expand its influence over energy markets even as major exporters outside OPEC, such as Angola, Norway, and Russia, supply more of the world's oil.

Skepticism exists that OPEC's decision will actually result in production cuts, since other announced cuts have never actually occurred. Most cuts would have to come from Saudi oil fields that account for one-third of OPEC's official production of 24.5 million barrels per day. Industry analysts believe that actual production is closer to 26 million barrels per day as many OPEC members disregard their official production targets. Saudi Arabia may make certain cuts simply to compensate for some of the overproduction by other OPEC members.

Analysts believe that most OPEC members will not cut production at all and some may increase output. Strong demand means that most members have a financial incentive to pump and export all they can. Several delegates to OPEC's meeting noted the importance of adhering to their quotas and acknowledged that few OPEC members actually do so.

Discuss how the theory of cartels and joint profit maximization presented in this chapter applies to the behavior of OPEC.

3. The following describes the ice cream industry in summer 2003:²³

Given the Federal Trade Commission's approval of Nestle's acquisition of Dreyer's Grand Ice Cream Inc., two multinationals, Nestle SA and Unilever, are preparing to engage in ice cream wars. Unilever, that controls the Good Humor, Ben & Jerry's, and Breyer's brands, holds 17 percent of the U.S. market, while Nestle, owner of the Haagen-Dazs and Drumstick brands, will control a similar share after buying Dreyer's.

Ice cream has long been produced by small local dairies, given the problems with distribution. Most Americans eat ice cream in restaurants and stores, although 80 percent of the consumption of the big national brands occurs at home. Both Unilever and Nestle want to move into the away-from-home market by focusing on convenience stores, gas stations,

²² Simon Romero, "OPEC Advances Plan to Cut Oil Production by Million Barrels a Day," *New York Times*, April 1, 2004.

²³ Deborah Ball, "Ice Cream Rivals Prepare to Wage a New Cold War," *Wall Street Journal*, June 26, 2003.