

# The Economics of Sports

FIFTH EDITION



## Chapter 3

# Sports Franchises as Profit- Maximizing Firms

# Team Cost, Profit, and Winning

- ⦿ Maximize Profits
- ⦿ Maximize Wins (Utility of team owners)
- ⦿ Net worth of NFL owners
- ⦿ Net worth of NBA owners

# Profits: A Touchy Subject

- ⦿ Team owners are condemned if they worry about profits
  - Mark Cuban (like individuals) maximizes utility
- ⦿ Corporate CEOs are condemned if they don't worry about profits
- ⦿ Bad things happen if teams ignore profits
- ⦿ Consider the 2002-2003 Ottawa Senators
  - They had the NHL's best record
  - They also filed for bankruptcy

# Do Owners Really Maximize Profits?

There is plenty of owner behavior consistent with profit maximization.

- ❖ Toward fans.
- ❖ Toward players.
- ❖ Toward host governments.

# Do Owners Really Maximize Profits?

Ultimately: Testable Hypothesis.

- ❖ Don't confuse the hypothesis with perfection!
- ❖ Owners are human and can make mistakes.
- ❖ Uncertainty makes maximizing profits a tough job!

# Maximizing Profits or Wins?

- ◉ We usually assume that firms maximize profits
  - Stockholders expect firms to do that
  - Sports teams and leagues are different because fans prefer wins to profits
- ◉ Different teams might have different goals
  - The Kansas City Royals seem to maximize profit
  - The New York Yankees seem to maximize wins
  - See Table 3.1
    - The two goals can be traded off



## Table 3.1

**TABLE 3.1** Performance Measures for the Phillies, Yankees, Indians, and Royals

Team	Winning Percentage	Attendance	Revenue <sup>a</sup>	Operating Income <sup>a</sup>
Phillies	0.630	3,680,718	439	−11.6
Yankees	0.599	3,653,680	249	10
Indians	0.494	1,840,835	178	30.1
Royals	0.438	1,724,450	161	28.5

<sup>a</sup> In millions of dollars

*Sources:* *Forbes* data on revenue and operating income are compiled by Kurt Badenhausen, Michael K. Ozanian, and Christina Settimi, “MLB Team Values,” *Forbes*, at [http://www.forbes.com/lists/2011/33/baseball-valuations-11\\_land.html](http://www.forbes.com/lists/2011/33/baseball-valuations-11_land.html); Winning percentages are from “MLB Standings—2011,” *ESPN.com*, at [http://espn.go.com/mlb/standings/\\_/year/2011/seasontype/2](http://espn.go.com/mlb/standings/_/year/2011/seasontype/2); Attendance data are from “MLB Attendance Report—2011,” *ESPN.com*, at [http://espn.go.com/mlb/attendance/\\_/year/2011](http://espn.go.com/mlb/attendance/_/year/2011).

# Detailed look at Revenues

$$\text{Total Revenue} = R_g + R_b + R_m + R_l + R_v + R_t$$

$R_g$  = Gate Revenues (ticket sales)

$R_b$  = Broadcast Revenues (television sales)

$R_m$  = Advanced Media Revenues (live stream)

$R_l$  = Licensing Revenues (official team logo)

$R_v$  = Venue Revenues (concessions, etc.)

$R_t$  = Transfer Revenues (between teams)





# Gate Revenue

- This revenue comes from ticket sales
  - Season tickets and individual game tickets
  - (Price discrimination future topic)
- Baseball has the largest variation in gate revenue and the NFL has the smallest
  - The differences among leagues are caused by revenue sharing
    - NFL—Home team 60% League Pool 40%
    - MLB—Home team 100%
    - NBA—Home team 50% plus expenses League Pool



# Broadcast Revenue

- The advent of television has permanently changed team finance
- All four major sports currently enjoy huge revenue streams from both local and league-wide national broadcast rights
- The leagues have profited differently
- Sports entertainment is a derived demand
- (A whole lecture devoted to broadcast revenues)



# Broadcast Revenue: NFL

- TV is the largest revenue source
  - All national contracts are evenly shared
- TV revenue makes the NFL very prosperous and equal
  - On five different networks (See Table 3.3)
  - Each team receives \$117M/year from TV
  - The NFL has no big market-small market disparity
    - Broadcast revenue is almost identical regardless of market size



# Table 3.3

**TABLE 3.2 Continued**

League/ Team	Market Value	Revenue <sup>a</sup>	Total Payroll	Gate Revenue	Operating Income
<b>NFL</b>					
Top 3	Cowboys: 1,850	Cowboys: 406	Giants: 138	Cowboys: 95	Cowboys: 119
	Redskins: 1,555	Redskins: 332	Dolphins: 126	Patriots: 93	Redskins: 65.6
	Patriots: 1,400	Patriots: 333	Texans: 122	Giants: 87	Cardinals: 56.4
Middle 2	Seahawks: 997	Colts: 252	Jaguars: 197	Cardinals: 49	Saints: 28.9
	49ers: 990	Chiefs: 252	Eagles: 106	Falcons: 48	Broncos: 28.5
Bottom 3	Rams: 775	Lions: 228	Seahawks: 89	Lions: 40	49ers: 1.5
	Raiders: 761	Vikings: 227	Bucs: 85	Rams: 39	Browns: -2.9
	Jaguars: 725	Raiders: 217	Chiefs: 82	Raiders: 35	Lions: -7.7

<sup>a</sup>Revenue figures reflect revenue sharing by teams.

<sup>b</sup>Reflects actual sale price of Dodgers as announced on March 28, 2012, and not the *Forbes* estimate.

*Sources:* Data on market value, revenue, and operating income are from Kurt Badenhausen, Michael K. Ozanian, and Christina Settimi, "NFL Team Values," *Forbes*, at [http://www.forbes.com/lists/2011/30/nfl-valuations-11\\_land.html](http://www.forbes.com/lists/2011/30/nfl-valuations-11_land.html); "NBA Team Values," *Forbes*, at [http://www.forbes.com/lists/2011/32/basketball-valuations-11\\_land.html](http://www.forbes.com/lists/2011/32/basketball-valuations-11_land.html); "MLB team Values," at <http://www.forbes.com/mlb-valuations/list/>; "NHL Team Values," *Forbes*, at <http://www.forbes.com/nhl-valuations/>, viewed March 21, 2012; Salary data are from "USA Today Salary Databases," *USA Today*, at <http://content.usatoday.com/sportsdata/basketball/nba/salaries/team>; <http://content.usatoday.com/sportsdata/football/nfl/salaries/team>; <http://content.usatoday.com/sportsdata/hockey/nhl/salaries/team>; <http://content.usatoday.com/sportsdata/baseball/mlb/salaries/team>, viewed March 21, 2012.



# Broadcast Revenue: MLB

- Local TV revenue is still very important
  - The Yankees make about four times as much locally as nationally
  - “Small market” in MLB refers to a small *media* market
- Cable is the source of the disparity
  - Teams often own the cable network
    - Owners sell broadcast rights to themselves cheaply
    - This is a way to get around local revenue sharing



# Regional Sports Networks

- All MLB teams are now part of some RSN
  - RSNs feature numerous sports on one cable station
  - Again, many are owned by MLB teams
- An impending RSN contract made the Dodgers worth \$2 billion in 2012
- It is expected to add about \$50 million per year to their revenue stream



# Broadcast Revenue: NBA and NHL

- Teams get much of their revenue from the national broadcast contract
- Local revenue has become more important
  - It has led to large disparities in income because it is not shared
  - LA Lakers got \$150 Million per year – Charlotte Bobcats only \$9 Million
  - It will be under the new collective bargaining agreement
- The NHL does not share local TV revenue
  - This is serious because league-wide TV revenue is low
  - Small markets like Winnipeg are at a severe disadvantage



# Watch or Attend?

- TV broadcasts are a two-edged sword
  - They are a major source of revenue
  - They can discourage stadium attendance
- Network demand for broadcasts is a derived demand
  - It is driven by sponsors' demand for commercial time
  - Some networks have sponsored sports even when the broadcast loses money on them
    - Sports lend credibility to new networks
    - Sports attract local affiliates to networks





# Luxury Boxes

- Cowboy Stadium has 300 luxury boxes
  - Far more than any other team
  - That is why the Cowboys are so valuable
- Boxes are a huge source of revenue
  - Rent for \$10s or \$100s of thousands per season
- Teams do not share most box revenue
  - They count only admission in revenue sharing
  - Most box revenue counts as concessions



# Naming Rights

- Team sells the right to name its facility
- This practice originated in 1973
  - Rich Foods paid Buffalo Bills \$1.5 M over 25 years
  - Citigroup pays the Mets \$400 M over 20 years
- Rights have extended beyond pro stadiums
  - Soccer and WNBA uniforms bear corporate logos
  - Colleges now sell naming rights as well
    - High Point Solutions Stadium (Rutgers football)
    - Comcast Center (Maryland basketball)



# Do Naming Rights Pay?

- Marketers cite name recognition and “branding”
- Economic studies show no impact on the sponsor’s profitability
  - Citigroup was latest sponsor to fall victim to the “naming rights curse”
  - It received a \$45 billion bailout from government soon after announcing the deal with the Mets



# Revenue Sharing Effects

- Sharing varies among leagues
  - NFL shares the most
    - MLB and NHL have recently increased sharing
    - NBA will start to share more in new agreement
- Some perverse results of revenue sharing
  - Weak teams might have higher profits
    - If revenues are shared – just hold down costs
    - The 5 most profitable NFL teams in 2011-12: Cowboys, Redskins, Cardinals, Buccaneers, and Bengals
    - They had a combined record of 31-49 and did not make the playoffs
  - Some call revenue sharing a “tax on quality”



# Costs

- Largest part is player salaries
- Others include travel, venue costs, marketing, and player development (minor leagues)
- Opportunity costs are a major reason why teams have moved
  - Dodgers were profitable in Brooklyn but were even more profitable in Los Angeles in 1957
  - Midnight flight of the Baltimore Colts to Indianapolis in 1984



# Using Teams to Make Money Elsewhere

- Chris von der Ahe used the St. Louis Browns to boost his beer sales in the 1880s
- We have seen that teams can increase cable revenues for RSNs
- In Japan, baseball teams are used by firms as marketing entities
  - The Seibu Lions advertise Seibu Department Stores
  - The Yomiuri Giants help the Yomiuri media empire



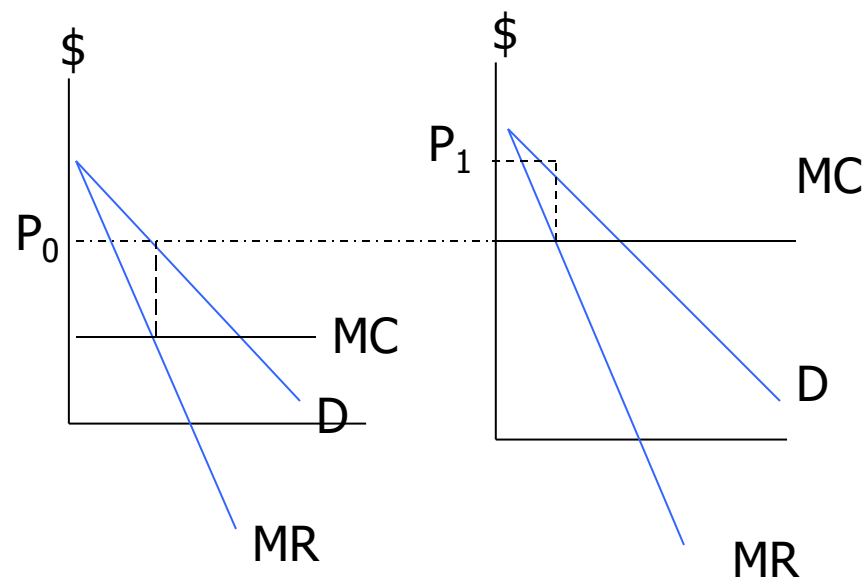
# Vertical Integration

- Vertical integration explains two paradoxes
- Ted Turner once owned both the Atlanta Braves and TBS, which showed the games
  - But the Braves made very little TV revenue
- Augustus Busch once owned the St. Louis Cardinals and Anheuser-Busch
  - But the Cardinals earned very little from “pouring rights”
- Owners and consumers gain from integration: lower team income is “good”



# Separate Monopolies

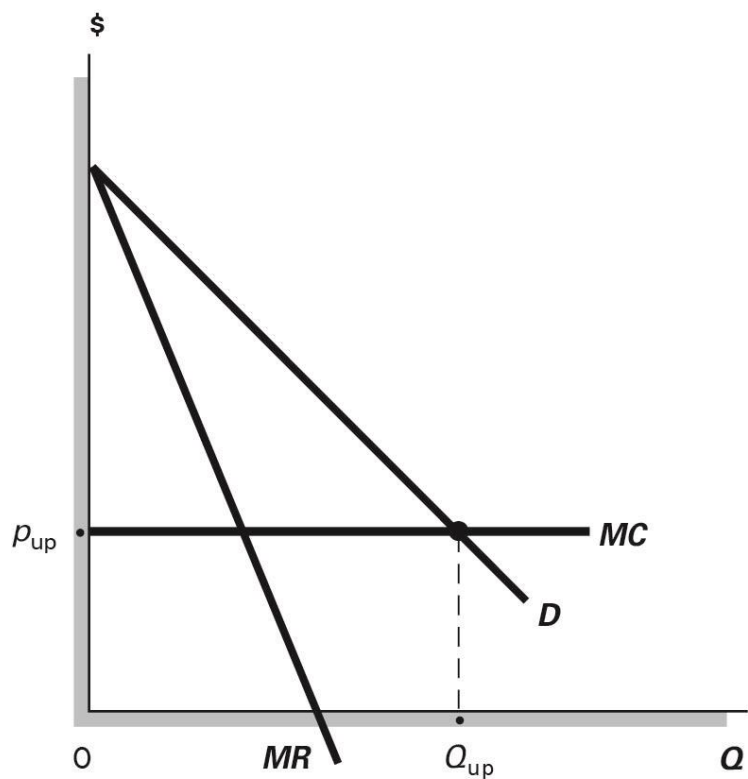
- Figure 3.5
  - IO model
- Two monopolists
  - Team provides game: upstream
  - Station broadcasts game: downstream
- If MC is constant
  - Price charged by team becomes MC of station
  - Consumer pays  $P_1$



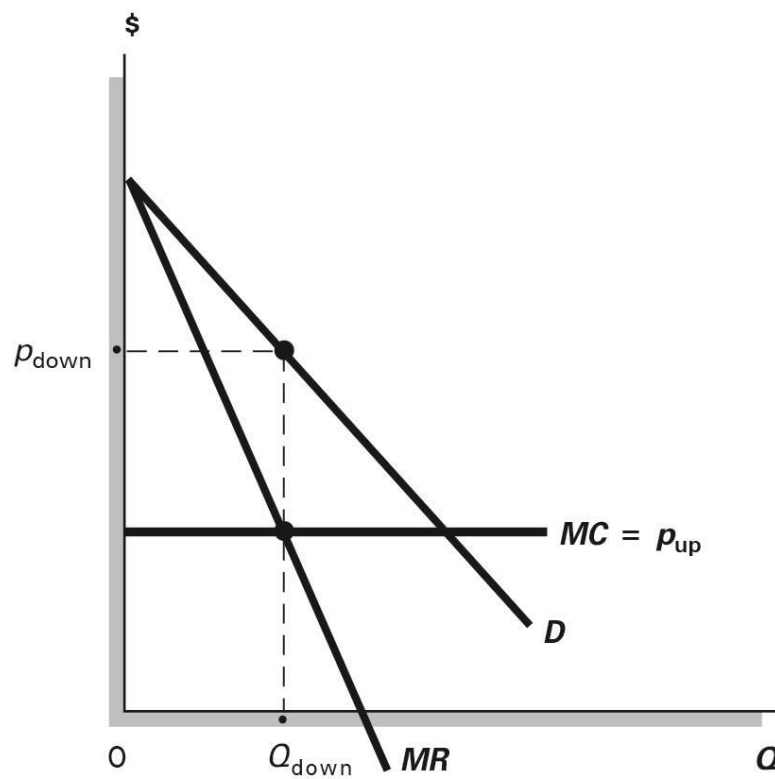




# Vertical intergration



(a) Upstream firm



(b) Downstream firm

# League Primary Sources

- ◎ NBA Revenues Sources
- ◎ NFL Revenues Sources
- ◎ MLB Revenue Sources
- ◎ NHL Revenue Sources
- ◎ WNBA Revenue Sources