The Economics of Sports

FIFTH EDITION

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Chapter 4

MONOPOLY & ANTITRUST

Introduction

- For most of the twentieth century, professional leagues in this country operated on the following two principles:
  - Home teams can control their own territory
  - Players are bound to their teams as long as their teams want them
- The first principle reflects the monopolistic market structure
- The second principle reflects the monoposonistic market structure
- We will study the implications of these structures in this chapter
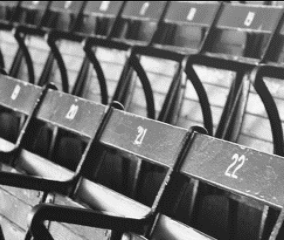
Learning Objectives

- Identify and illustrate the social costs of monopoly power
- Explain the effects of vertical integration
- Analyze how teams apply pricing strategies that result in increased profits and reduced consumer well-being
- Recognize the importance of entry barriers for monopoly sports teams and leagues
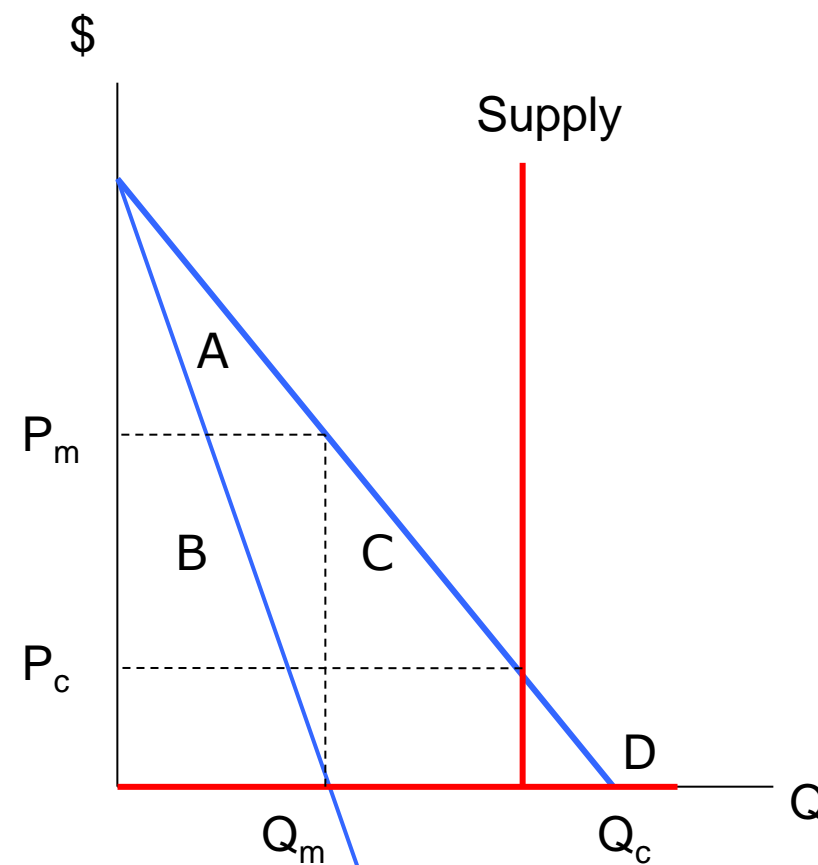
Consumer Surplus

- In general, markets have many consumers
- Area of triangle shows *consumer surplus:*
- This can be captured
- with monopoly power
- with price Discrimination
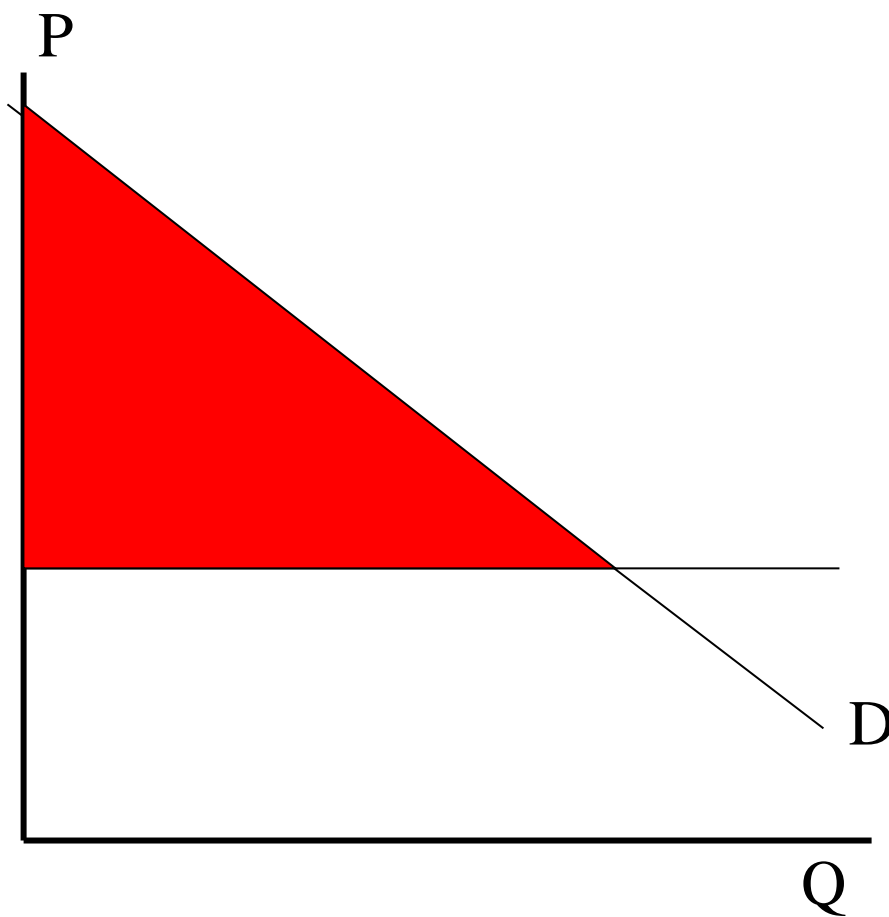
4.1 Measuring the Cost of Monopoly

- We know that monopolists
  - Charge more ($P_m > P_c$)
  - Produce less ($Q_m < Q_c$)
- Higher prices
  - Hurt consumers
  - Help producers
- Is the economy worse off?
- We need a concept to measure the harm to society

Where Did the Consumer Surplus Go?

- Some was captured by the producer
  - Producer has higher profits
    - Given by the area of the rectangle (Pm-Pc *Qm)
    - This is a *transfer* from consumers to producers
- Some is just lost
  - Less is produced and consumed Qm
  - A loss that no one gains is a deadweight loss or welfare loss C
- In general, fewer games are played than there would be in perfect competition

Do Monopolists Always Charge Monopoly Price?

- The profit maximizing output sets MR=MC
  - In our context that means MR=0
  - It is not hard to show that this sets price elasticity of demand = -1
- Studies have shown that teams produce too much
  - Operate where MR<0
  - Where demand is price inelastic
  - Do teams fail to maximize profit?
- Maybe profits do not just come from selling tickets
  - Some goods are complements to tickets
  - Teams might want more fans so they can sell more parking passes, concessions, and souvenirs
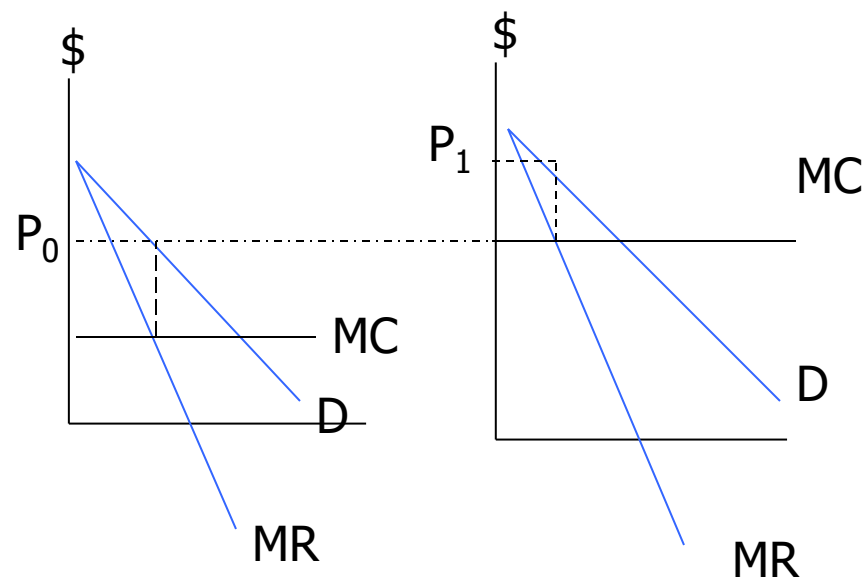
Vertical Integration

- 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 form integration: lower team income is "good"

# Upstream and Downstream pricing

- Figure
  - 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

$ $

P_0

MC

MR

D

$ $

P_1

MC

D

MR

Vertical Integration: Team and Station Combine

- Is 1 big monopoly worse than 2 small ones?
- Integration: Monopolist charges itself a lower price than it charges an outside firm
  - Revenue stays within firm
  - Charges $MC < P_0$
- Station has lower cost
  - Charges $P_2 < P_1$
  - Everyone is better off
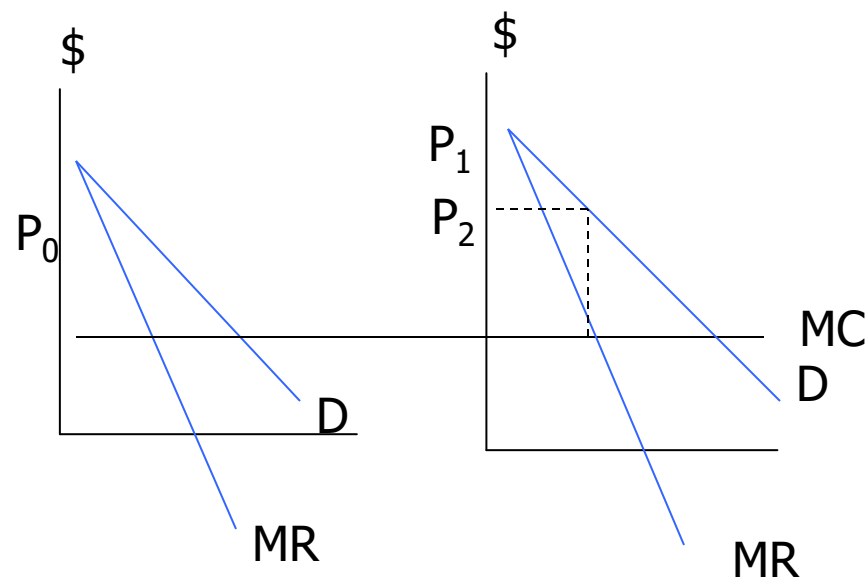
4.2 Strategic Pricing and Discrimination

- In the basic monopoly model, the monopolist chooses one price and charges it to all customers at all times

- In the real world, firms charge different prices for the same item
  - At different times
  - For different customers

- Such pricing enhances the monopolist's profits

- We now expand the basic model to explain these observations

- Third degree— different consumers

- Second degree—same consumer

- First degree—perfect P=Max WTP

Third Degree Price Discrimination

❖ <u>If:</u>

❖ Separate Market Can tell fans apart, somehow.

❖ Arbitrage Resale can be prevented.

❖ Enforcement is cheap enough.

❖ <u>Then:</u>

❖ Charge different fans different prices for the same game.

Price Discrimination Methods

Different prices to different fans:

- Student discounts.

- Faculty discounts.

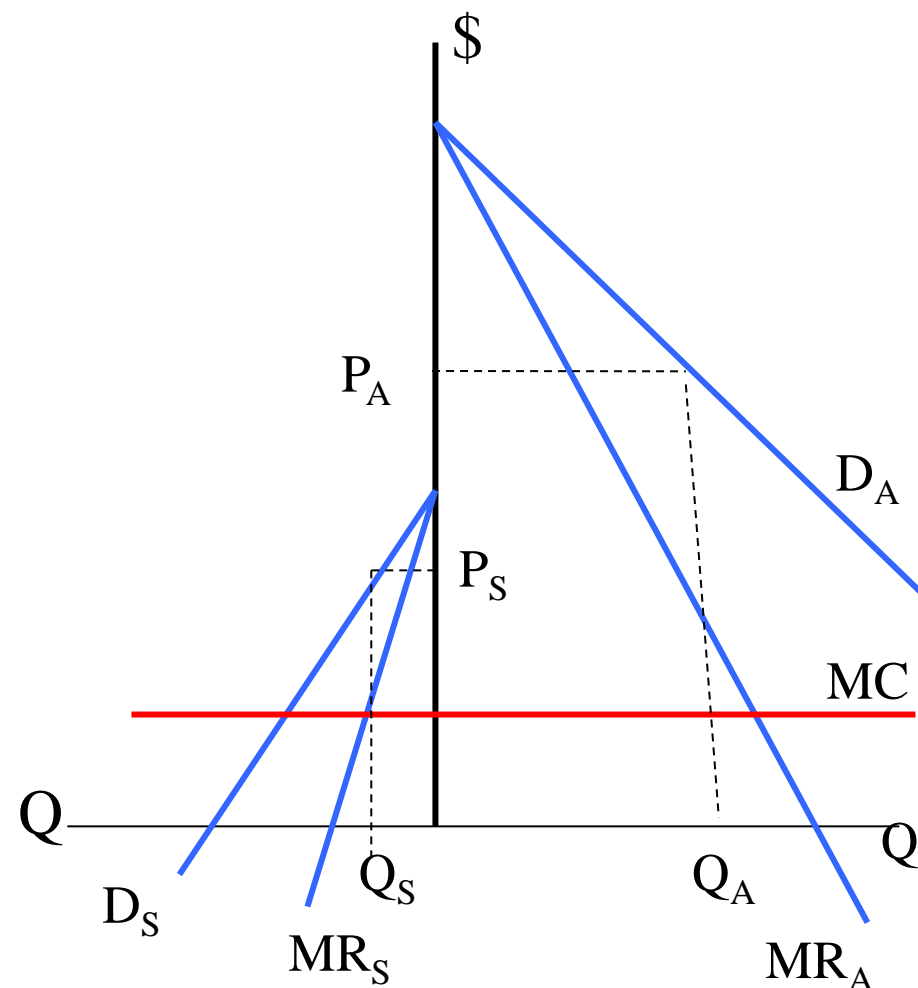What about different prices for different locations?

Or different times during the season?

Nope. The *quality* of the good has changed! Not selling the same product to different people.

Third degree price discrimination

- Students are willing and able to pay less
- Put students on the left
  - Their demand is lower
  - Assume MC is the same
- $Q_S < Q_A$ and $P_S < P_A$
  - Segmenting allows teams to sell more tickets
  - No students would buy tickets at PA

Price Differences

- Price Discrimination

Not Price Discrimination

Second degree Price Discrimination

- Quantity discounts
  - Buying multiple tickets at once.
  - Block of tickets for same game.
  - Bundling multiple goods (ticket, concession, hat)

Gate Pricing

- Price is $0
- Consumer surplus = ACE
- Gate Price = ACE
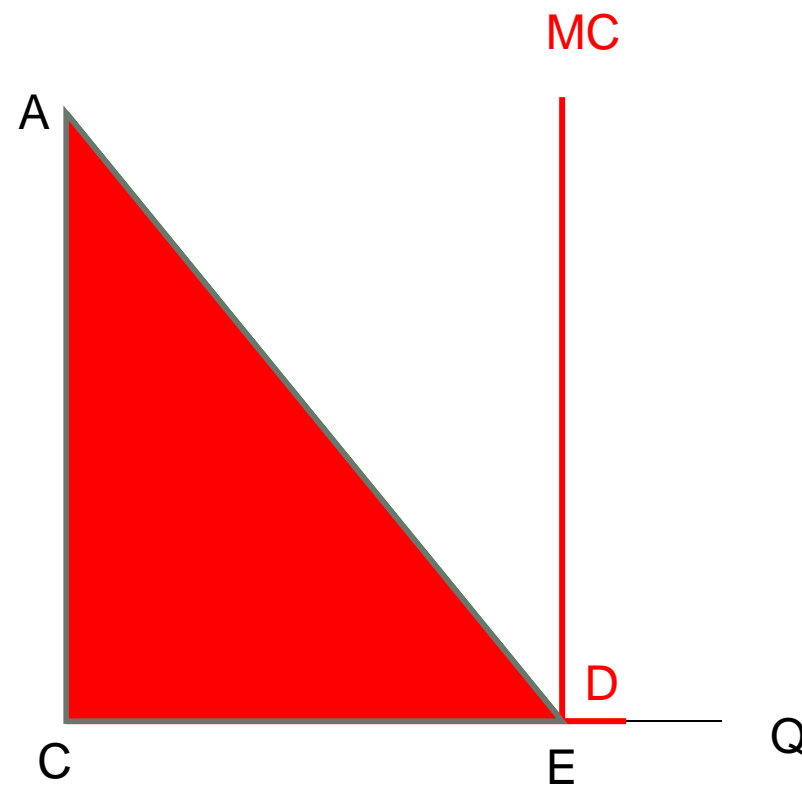
Price Discrimination: PSLs
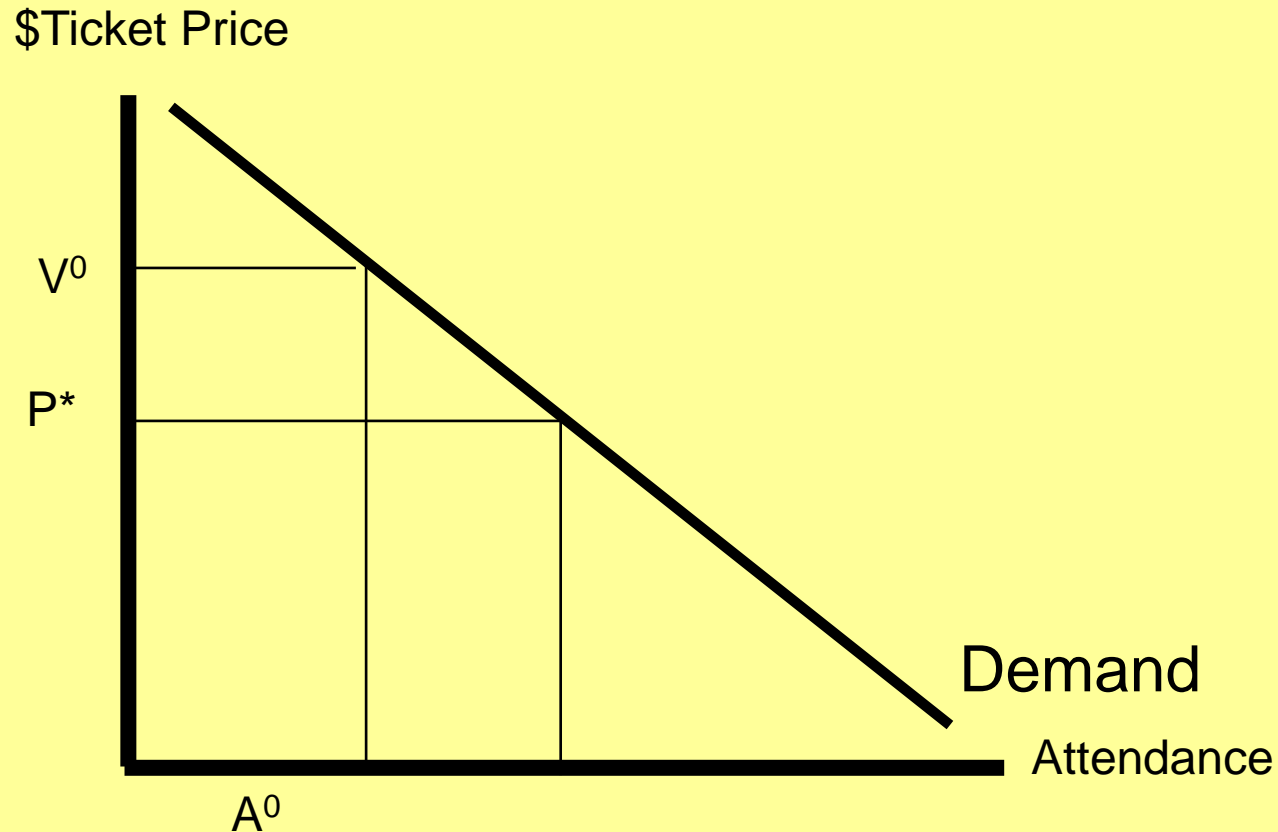
This isn't really differential seat pricing since it also is *by location*.

But it does get people to spend more for the same seat location!

Very related to price discrimination.

Price Discrimination: [Personal Seat License](#) (PSL)

❖ Each fan will pay more than P*, e.g., $V^0 > P^*$ for attendance A^0. How can sellers get it?

$Ticket Price

V^0

P^*

Demand

Attendance

A^0

PSLs, cont'd.

❖ <u>Need even more information:</u>

❖ What is the level of the surplus, $V^0 > P*$.

❖ Offer rights to a particular seat, for the entire season, but require payment equal to $V^0 > P*$; so-called "donation" seating or, in the pros, personal seat licenses.

❖ Charge P* for the tickets in addition to the donation.

Example   Example

Variable Ticket Pricing

- Some games are more attractive than others
  - Example: weekend effect
  - These factors are known before the season even begins
- **Variable ticket pricing** sets ticket prices in line with expected demand for a future game
- Teams charge more for more attractive games
  - Demand and MR are higher for more popular games
  - Firm sets MC equal to different MRs (See Fig. 4.3)
- This has become popular in NHL

Dynamic Ticket Pricing

- Some factors that influence demand are not known before the season opens
  - The demand for Mets tickets rises R.A. Dickey pitches
- **Dynamic Ticket Pricing** allows the team to capture additional revenue based on individual game characteristics that are unknown at the start of the season
- The teams adjust ticket prices during the season as events unfold
- This has become popular in MLB
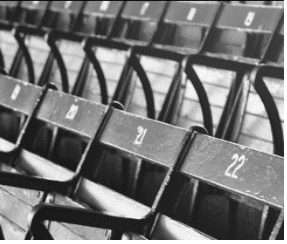
Bundling

- Some fans want to see specific games very badly
  - They are willing to see less attractive games to get the tickets they want
- Teams bundle less attractive tickets with more attractive tickets
  - To see the Cubs play the White Sox one must also buy a ticket for the Cubs game against the Pirates
  - The fan gets to see the team he wants at a (relatively) low price
  - The team sells tickets that it would not otherwise sell

The Other Key to Leagues: Monopsony

- Stands monopoly on its head
- One *buyer*
- Buyer pays more to buy more
  - *Upward* sloping *supply* curve
- If it cannot price discriminate
  - Pays more for all to buy 1 more
  - Marginal *Expenditure* Curve lies *above* Supply
- Monopsonist pays less & buys less
  - Again see deadweight loss
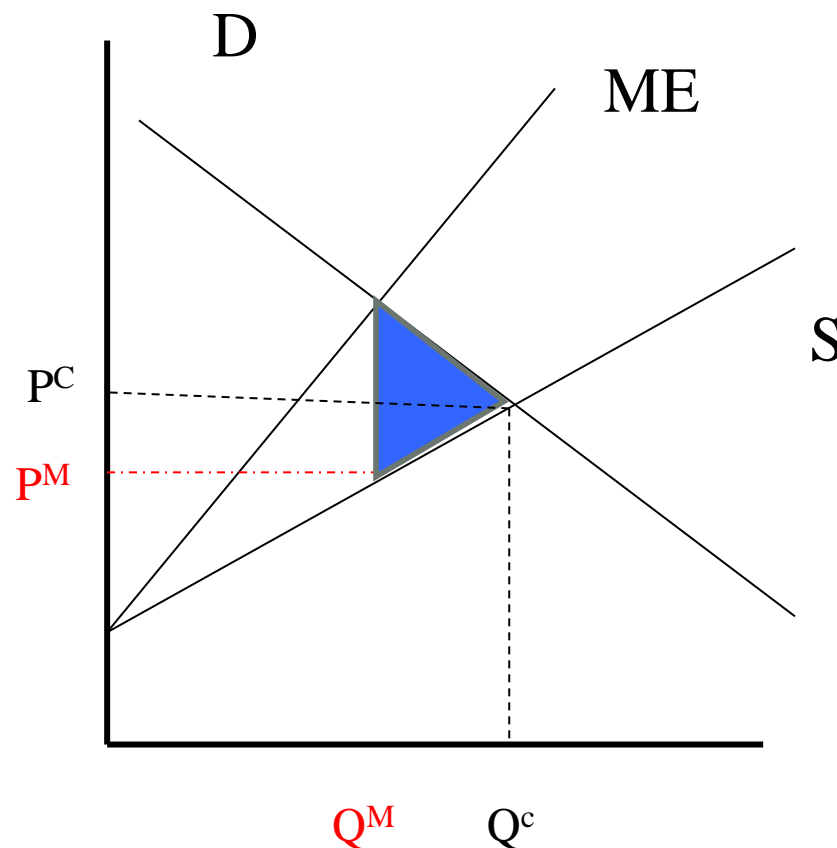
Monopsony and Sports

- Most commonly found in labor market
  - The reserve clause gave teams a lifetime claim to players
  - A player plays for the Cleveland Browns – or not at all
- Used to be present in European TV deals
  - Government TV stations were the only broadcasters
    - Could dictate terms to soccer leagues
  - Growth of private broadcasters undermined this power

Application to Leagues

- All leagues appear to violate antitrust legislation
- By their very nature, leagues coordinate the actions of their member teams
- The coordination can be relatively innocent
  - Establishing and enforcing a common set of playing rules
  - Arranging a commonly respected schedule
- The coordination can also result in collusion, in which teams collude and act like one big monopoly