CHAPTER 15

Monopoly

PRINCIPLES OF

Economics

N. Gregory Mankiw

Premium PowerPoint Slides
by Ron Cronovich

In this chapter, look for the answers to these questions:

- Why do monopolies arise?
- Why is *MR* < ***P*** for a monopolist?
- How do monopolies choose their ***P*** and ***Q***?
- How do monopolies affect society's well-being?
- What can the government do about monopolies?
- What is price discrimination?

Introduction

- A **monopoly** is a firm that is the sole seller of
- In this chapter, we study monopoly and contrast it with perfect competition.
- The key difference:
  A monopoly firm

Why Monopolies Arise

The main cause of monopolies is

Three sources of barriers to entry:

1.

E.g., DeBeers owns most of the world's diamond mines

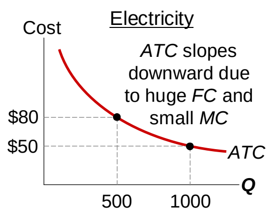
2.

E.g., patents, copyright laws

Why Monopolies Arise

3. Natural monopoly:

Example: 1000 homes need electricity

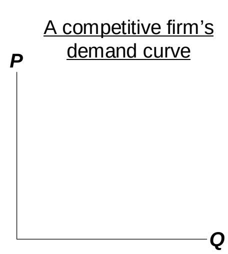


Monopoly vs. Competition: Demand Curves

In a competitive market, the market demand curve slopes downward.

But the demand curve for any individual firm's product is

The firm can increase ***Q*** without lowering ***P***,

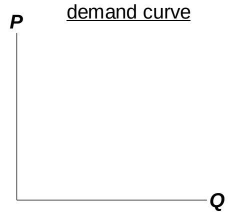


Monopoly vs. Competition: Demand Curves

A monopolist is the only seller, so

To sell a larger ***Q***,

A monopolist's demand curve



ACTIVE LEARNING ***1***

A monopoly's revenue

Common Grounds is the only seller of cappuccinos in town.

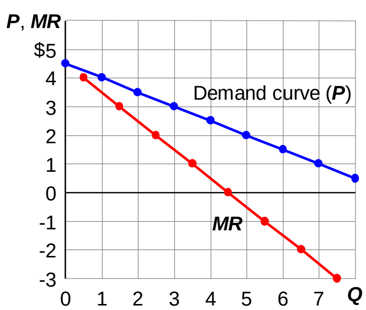
The table shows the market demand for cappuccinos.

Fill in the missing spaces of the table.

What is the relation between ***P*** and ***AR***? Between ***P*** and ***MR***?

Q	*P*	*TR*	*AR*	*MR*
0	$4.50		n.a.	
1	4.00			
2	3.50			
3	3.00			
4	2.50			
5	2.00			
6	1.50			

Common Grounds' *D* and *MR* Curves



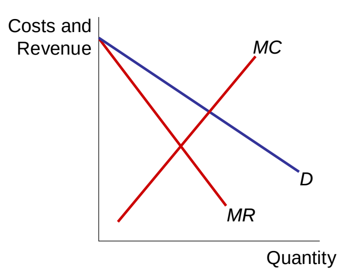
Understanding the Monopolist's MR

- Increasing ***Q*** has two effects on revenue:
  - ***Output effect***:
  - ***Price effect***:
- To sell a larger ***Q***, the monopolist must
- Hence,
- *MR* could even be negative if the price effect exceeds the output effect (*e.g.*, when Common Grounds increases ***Q*** from 5 to 6).

Profit-Maximization

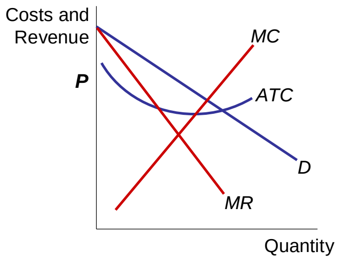
- Like a competitive firm, a monopolist maximizes profit by
- Once the monopolist identifies this quantity,

Profit-Maximization



The Monopolist's Profit

As with a competitive firm, the monopolist's profit equals



A Monopoly Does Not Have an S Curve

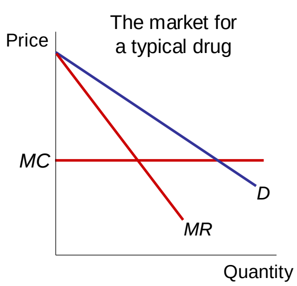
A competitive firm

A monopoly firm

So there is no supply curve for monopoly.

CASE STUDY: Monopoly vs. Generic Drugs

Patents on new drugs give a temporary monopoly to the seller.



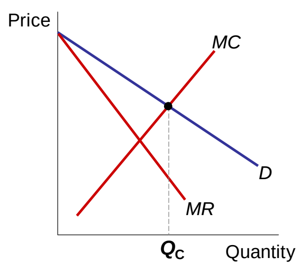
The Welfare Cost of Monopoly

- Recall: In a competitive market equilibrium,
- In the monopoly eq'm, ***P*** > *MR* = *MC*
  -
  - The monopoly ***Q*** is too low –
  - Thus, monopoly results in

The Welfare Cost of Monopoly

Competitive eq'm:
- quantity = $\boldsymbol{Q_C}$
- ***P*** = *MC*
- total surplus is maximized

Monopoly eq'm:

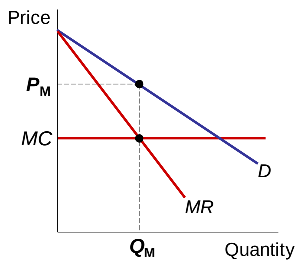


Price Discrimination

- Discrimination: treating people differently based on some characteristic, *e.g.* race or gender.
- **Price discrimination:**
- The characteristic used in price discrimination is

Perfect Price Discrimination vs. Single Price Monopoly

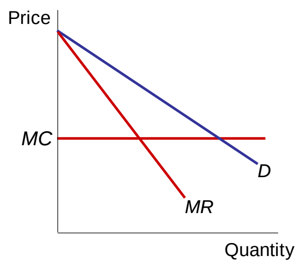
Here, the monopolist charges the same price (P_M) to all buyers.



Perfect Price Discrimination vs. Single Price Monopoly

Here, the monopolist

This is called **perfect price discrimination**.



Price Discrimination in the Real World

- In the real world, perfect price discrimination is not possible:
  -
  -
- So, firms divide customers into groups based on

Examples of Price Discrimination

Movie tickets

Airline prices

Examples of Price Discrimination

Discount coupons

Need-based financial aid

Examples of Price Discrimination

Quantity discounts

Public Policy Toward Monopolies

- Increasing competition with antitrust laws
  - Ban some anticompetitive practices, allow govt to break up monopolies.
  - *E.g.*,
- Regulation
  - Govt agencies set the monopolist's price.
  - For natural monopolies,
  - If so, regulators might subsidize the monopolist or set ***P*** = *ATC* for zero economic profit.

Public Policy Toward Monopolies

- Public ownership
  - Example: U.S. Postal Service
  - Problem:
- Doing nothing
  - The foregoing policies all have drawbacks, so the best policy may be no policy.

CONCLUSION: The Prevalence of Monopoly

- In the real world, *pure* monopoly is rare.
- Yet, many firms have market power, due to:
- In many such cases, most of the results from this chapter apply, including: