

Elements of Microeconomics

Hank Behaeghel

Johns Hopkins University

Chapter 21

Where Are We Going?

- Last week we reviewed the costs of production. These vary depending on the structure of the market.
- This week we will be taking a look at our first market structure.
- Enter: **perfectly competitive markets**
- Also your exam is next week and will cover chapters: 6, 7, 8, 21, 13, 14.

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:
 - ① There are **many** buyers *and* sellers.

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:
 - ① There are **many** buyers *and* sellers.
 - ★ The reason that this helps characterize a perfectly competitive market is that, with tons of buyers and sellers no one buyer or seller has too much market power. Here buyers and sellers are referred to as **price takers**.

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:
 - 1 There are **many** buyers *and* sellers.
 - ★ The reason that this helps characterize a perfectly competitive market is that, with tons of buyers and sellers no one buyer or seller has too much market power. Here buyers and sellers are referred to as **price takers**.
 - ★ Think of you and I in the market for boxed mac and cheese. No company will notice if our section boycotts their boxed mac and cheese.

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:
 - ① There are **many** buyers *and* sellers.
 - ★ The reason that this helps characterize a perfectly competitive market is that, with tons of buyers and sellers no one buyer or seller has too much market power. Here buyers and sellers are referred to as **price takers**.
 - ★ Think of you and I in the market for boxed mac and cheese. No company will notice if our section boycotts their boxed mac and cheese.
 - ② The goods in the market are homogeneous. Essentially there are no meaningful differences between goods.

Actors and the Basics

- Throughout this course we have talked about consumers and suppliers. When discussing the perfectly competitive in this chapter the *firms* will be the suppliers.
- Criteria to be a perfectly competitive market:
 - ① There are **many** buyers *and* sellers.
 - ★ The reason that this helps characterize a perfectly competitive market is that, with tons of buyers and sellers no one buyer or seller has too much market power. Here buyers and sellers are referred to as **price takers**.
 - ★ Think of you and I in the market for boxed mac and cheese. No company will notice if our section boycotts their boxed mac and cheese.
 - ② The goods in the market are homogeneous. Essentially there are no meaningful differences between goods.
 - ③ There is free entry and exit.

The Relationship Between P and MR

- The fact that firms are price takers in perfectly competitive markets will guide the intuition for the following identity.
- This arguably the most important identity for solving the computational parts of perfectly competitive market questions.

The Relationship Between P and MR

- The fact that firms are price takers in perfectly competitive markets will guide the intuition for the following identity.

P and MR

In **perfectly competitive** markets. A firm's marginal revenue is equal to the market price.

$$P = MR$$

- This arguably the most important identity for solving the computational parts of perfectly competitive market questions.

Making Money

- Firms operate to *maximize profit*. Whether they are able to or not depends on many things: costs, prices, government regulation.
- For our purposes there are a few things that help us analyze whether a firm is maximizing its profit or not.

Making Money

- Firms operate to *maximize profit*. Whether they are able to or not depends on many things: costs, prices, government regulation.
- For our purposes there are a few things that help us analyze whether a firm is maximizing its profit or not.
- Is MC above or below MR?

Making Money

- Firms operate to *maximize profit*. Whether they are able to or not depends on many things: costs, prices, government regulation.
- For our purposes there are a few things that help us analyze whether a firm is maximizing its profit or not.
- Is MC above or below MR?
 - ▶ If MC is below MR the firm is leaving money on the table.

Making Money

- Firms operate to *maximize profit*. Whether they are able to or not depends on many things: costs, prices, government regulation.
- For our purposes there are a few things that help us analyze whether a firm is maximizing its profit or not.
- Is MC above or below MR?
 - ▶ If MC is below MR the firm is leaving money on the table.
 - ▶ Once MC is above MR then the firm loses money for each additional unit it produces.

The Question Within Ourselves

- Built into the goal of profit maximization is the decision to produce.
- This decision can be broken down into a few steps:

The Question Within Ourselves

- Built into the goal of profit maximization is the decision to produce.
- This decision can be broken down into a few steps:
 - 1 To produce or not to produce?

The Question Within Ourselves

- Built into the goal of profit maximization is the decision to produce.
- This decision can be broken down into a few steps:
 - 1 To produce or not to produce?
 - ★ If yes move to step 2, if no go on vacation.

The Question Within Ourselves

- Built into the goal of profit maximization is the decision to produce.
- This decision can be broken down into a few steps:
 - 1 To produce or not to produce?
 - ★ If yes move to step 2, if no go on vacation.
 - 2 How much do I produce?

The Question Within Ourselves

- Built into the goal of profit maximization is the decision to produce.
- This decision can be broken down into a few steps:
 - 1 To produce or not to produce?
 - ★ If yes move to step 2, if no go on vacation.
 - 2 How much do I produce?
- Both of these questions require some analysis on our part.

When to Produce

- Everyone's favorite microeconomics buzzwords are back: **time horizons**.
- How we go about our analysis of whether or not to produce (Question 1 from the prior slide) will depend on which time horizon we are considering.
- In the **short run** our production decision revolves around the **AVC**.
- In the **long run** our production decision revolves around the **ATC**.