Chapter 3. Monopoly and Market Power

3.1 Market Power Introduction

This chapter will explore firms that have market power, or the ability to set a price for their good.

**Market Power** = Ability of a firm to set a price for a good.

A monopoly is defined as a single firm in an industry with no close substitutes.

**Monopoly** = A single firm in an industry with no close substitutes.

The phrase, “no close substitutes” is important, since there are many firms that are the sole producer of a good. Consider McDonalds Big Mac hamburgers. McDonalds is the only provider of Big Macs, yet it is not a monopoly because there are many close substitutes available: Burger King Whoppers, for example.

Market power is also called monopoly power. A competitive firm is a “price taker,” so has no ability to change the price of a good. Each competitive firm is small relative to the market, so has no influence on price. Firms with market power are also called “price makers.”

**Price Taker** = A competitive firm with no ability to set the price of a good.

**Price Maker** = A noncompetitive firm with the ability to set the price of a good.

A monopolist is considered to be a price maker, and can set the price of the product that it sells. However, the monopolist is constrained by consumer willingness and ability to purchase the good, also called demand. For example, suppose that an agricultural chemical firm has a patent for an agricultural chemical used to kill weeds, a herbicide. The patent is a legal restriction that permits the patent holder to be the only seller of the herbicide, as it was invented by the company through their research program. In Figure 3.1, an agricultural chemical firm faces an inverse demand curve equal to: \( P = 100 - Q^d \),
where $P$ is the price of the agricultural chemical in dollars per ounce, and $Q^d$ is the quantity demanded of the chemical in million ounces.

Figure 3.1 Demand facing a Monopolist: Agricultural Chemical

The monopolist can set a price, but the resulting quantity is determined by the consumers’ willingness to pay, or the demand curve. If the price is set at $P_0$, consumers will purchase $Q_0$. The monopolist could set quantity at $Q_0$, but consumers would be willing to pay $P_0$ for the chemical. Thus, a monopolist has the ability to set any price that it would like to, but with important consequences: the monopolist is constrained by consumer willingness to pay for the product.