**Title:** **Elastic and Inelastic Demand**

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**Elastic and Inelastic Demand**

[Image Omitted: edfe\_0001\_0001\_0\_img0048.jpg ]  **Elastic and inelastic demand measures how much consumer desire for a product is affected by changes in price. As these graphs show, perfect elasticity occurs when even the slightest change in price affects the quantity purchased by consumers, while perfect inelasticity refers to a scenario where customers demand the same quantity of a good no matter how much the price changes. Illustration by GGS Information Services. Cengage Learning, Gale.**

**What It Means**

The law of demand, one of the most important economic principles, looks at the way consumers react to changes in prices. It indicates that, as the price of a good or service increases, the quantity demanded for that good or service (that is, the desire for or need of it) will usually decrease. In other words, when something becomes more expensive, people will be less willing to buy it. Likewise, as the price of a good or service decreases, consumer demand for that good or service will usually increase (when something becomes cheaper, people will be more willing to buy it).

Just how responsive buyers are to price changes, however, can vary greatly. For instance, if the price of salt were cut, consumers would not be likely to buy more salt, but if the price of airplane tickets were cut, consumers would probably buy more of them. The measurement of the level of responsiveness is called price elasticity of demand. When the consumer reaction to a price change is strong, the demand for that good or service is called elastic (flexible). When there is a smaller reaction, the demand is said to be more inelastic (fixed). In our example, then, the demand for plane tickets would be more elastic than the demand for salt.

**When Did It Begin**

As capitalist economies (in which private individuals, not the government, own most businesses) have evolved over the centuries, economists have attempted to understand the relationships between supply (the amount that producers want to sell at a given price) and demand (the amount that consumers want to buy at a given price). In 1776 the Scottish philosopher Adam Smith published *The Wealth of Nations,* which served as the basis for what came to be called classical economics. In the book Smith generally assumed that price was determined by the cost of production (the total cost of everything that went into making a certain good) and that the demand for a good would increase when its price decreased and decrease as the price increased.

The idea that the consumer’s needs and wants affected the prices of goods and services arose during the late nineteenth century with a new school of thought called marginalism. The marginalists theorized that price, in addition to being set by the cost of production (as classical economics had asserted), is also determined by the level of demand. They believed that the level of demand, in turn, depends upon the amount of consumer satisfaction provided by individual goods and services.

The concept of elasticity of demand was introduced by English economist Alfred Marshall (1842–1924) in his book *Principles of Economics* (1890). He expanded upon the marginalists’ ideas about demand, analyzing its varying degrees of responsiveness. Marshall also said that prices are determined by the interaction of supply and demand; he likened these two forces to the blades of a pair of scissors. Modern theories of supply and demand are still based upon this idea. Economists have created models that analyze the point where the amount that producers have available to sell (supply) matches up with the consumer desire for it (demand). This is known as the equilibrium point.

**More Detailed Information**

Various factors determine the elasticity of demand for goods or services. One such factor is available substitutes. If one good or service can be consumed or used in place of another (in at least some of its possible uses), it is called a substitute good. Generally, the more substitutes for a particular good or service, the more elastic the demand will be. For example, if the price of beef increased by $1.00 a pound, consumers could replace their beef purchase with poultry, lamb, or pork. This means that beef is an elastic good, because an increase in price will cause a decrease in demand as consumers start buying more poultry, lamb, or pork instead of beef. If the price of meat as a whole were to go up, however, consumers would have fewer products to choose from to replace it in their diets. They would therefore probably not significantly reduce their consumption of livestock. This makes meat a more inelastic product.

Another reason elasticity varies among different goods and services is that some are more essential to consumers. The demand for goods that are necessities, such as food and transportation, is less sensitive to price changes because consumers would continue buying them even if the price increased; these goods are considered inelastic. Goods such as perfume and meals at restaurants, on the other hand, are considered elastic because consumers would be deterred from purchasing them if the cost of buying the product became too high.

Also influential is the proportion of a person’s income spent on the good or service. Goods that make up a relatively small share of consumers’ budgets tend to be more inelastic than goods for which consumers spend a sizable portion of their incomes. For example, if the price of oranges increased 20 percent, it might not dissuade a consumer from buying oranges. But if the price of a certain model of car increased 20 percent, that same customer, faced with the prospect of spending thousands of extra dollars, would be more likely to reconsider the purchase.

Time can also affect the elasticity of demand. Generally, demand is more inelastic in the short term than it is in the long term. Consumers need time to react to price changes, and the more time they have to react, the more elastic the demand for the good or service. For instance, if the price of gas suddenly doubled, at first most people would continue to buy the same amount of gas because they consider it a necessity. In this case gasoline would be an inelastic commodity. If, however, the price for gas remained high, over the course of time people could reduce their gas consumption by seeking out other options, such as taking commuter trains or buying more fuel-efficient cars. The demand for gas, which started out as inelastic, will have then become more elastic in the long term.

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**Determining Elasticity**

To show the degree to which demand (consumers’ desire for a particular good or service) reacts to changes in price, economics uses a model called a demand curve. This tracks the quantity of a good or service that consumers want to buy at any given price. The demand curve can be represented on a graph as a line or a curve by plotting the quantity demanded (shown on the horizontal part of the chart) at each price (the vertical part of the chart).

The demand curve is always downward, or negatively, sloping, indicating that when the price of a good or service rises, consumer demand for it decreases. If a small increase in price results in a significant decrease in the quantity demanded, the demand curve will flatten and become more horizontal. The flatness of the curve indicates that the particular good or service is elastic. If the quantity of the good demanded changes little as the price changes significantly, the demand curve is more upright, and the good is considered inelastic.

Elasticity of demand can also be determined by a mathematical equation: elasticity equals percentage change in quantity divided by percentage change in price. If elasticity is greater than or equal to one, the curve is considered to be elastic. If it is less than one, the curve is said to be inelastic. This approach is useful when comparing the elasticity of different products.

**Recent Trends**

Beginning in the 1990s sales of personal computers and other electronic products rose dramatically, and competition between companies was intense. Because of the large availability of substitutes, or competing models, demand for electronic products tended to be elastic.

In the market for video game consoles, for example, demand was usually highly elastic when a product was first introduced. Manufacturers had to persuade buyers to choose their new product instead of their competitors’. As a result, some manufacturers resorted to “penetration pricing,” which meant that the new console was introduced at a relatively low price with the hope of attracting a large number of buyers. Often the price was set so low (compared to how much each console cost to produce) that the manufacturer did not actually profit from the console sales. For instance, when Sony released its Playstation 3 in 2006, it charged $600, but each console actually cost an estimated $900 or more to manufacture. Like every company in the industry, Sony was counting on making its profits from sales of Playstation 3 software once it had gotten consumers to commit to the system.

Whereas manufacturers tended to underprice their consoles, they typically inflated the prices of the games themselves. This was possible because most gaming software was designed for a specific system; an Xbox owner, for instance, would have no use for a Playstation game. The console owner thus had fewer available substitutes when shopping for games, making the demand for the software more inelastic (less sensitive to price changes).

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