Changes in Demand and Movements Along Demand Curve

by Sophia Tutorial

WHAT'S COVERED

This tutorial will compare what causes a movement along a demand curve versus what causes a shift of the demand curve itself.

Our discussion breaks down as follows:

1. Movement Along a Demand Curve

Movements along a demand curve occur when the price of the product changes and impacts the quantity demanded.

Here is an example of a demand schedule featuring Granny Smith apples.

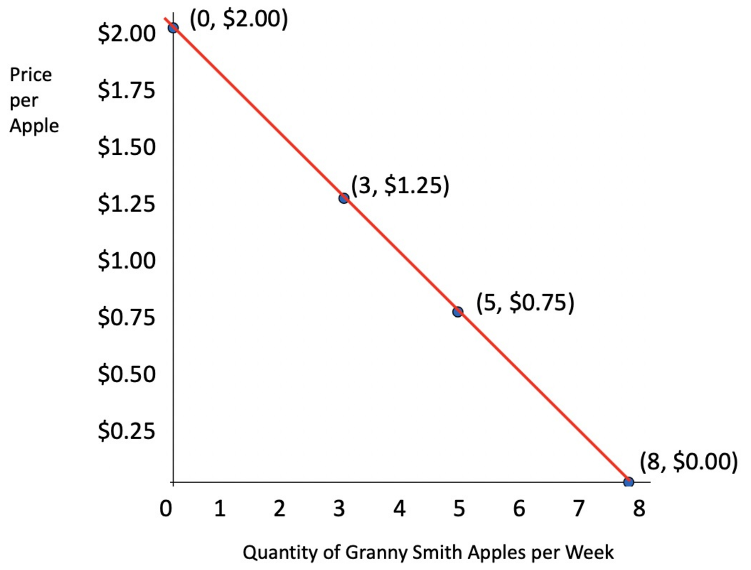
Price of Granny Smith Apples	Quantity of Granny Smith Apples Each Week
$2.00	0
$1.75	1
$1.50	2
$1.25	3

$1.00	4
$0.75	5
$0.50	6
$0.25	7
$0.00	8

Notice the price per apple. For this particular demand schedule, apparently $2.00 per apple is too expensive and the point at which a customer chooses not to buy any apples.

Also notice that as the price falls, the quantity purchased increases.

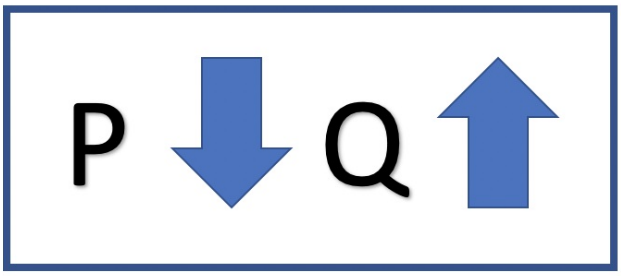
Here is the demand graph created by plotting the points on the demand schedule, putting price on the y-axis and the quantity purchased on the x-axis.



As you can see on the graph, at $2.00, no apples are purchased. At the other end of the spectrum, if the apples are free, this customer purchases eight, approximately one for every day of the week.

BIG IDEA

As the price falls, the quantity demanded rises, which corresponds to movement along the demand curve.



Now, this is a downward sloping demand curve, because as items become less expensive, we buy more, as demonstrated by movement along the demand curve. The only variable changing is price.

In economic terminology, as price goes up, the quantity demanded rises, and vice versa. Again, there is an inverse relationship between the two which can be shown by movement along the demand curve.

TERM TO KNOW

Movements Along Demand Curve
Demonstrated when the price of the product changes and impacts the quantity demanded

2. Ceteris Paribus

This movement along a demand curve assumes a concept known as**ceteris paribus**, which means holding all other variables constant.

So, as the price of Granny Smith apples rises, we can expect that people will buy fewer of them because they are more expensive, assuming that only the price of Granny Smith apples has changed.

The price of Gala apples didn't change, nor did the price of oranges or bananas, or any other fruit. Our income did not change. Ceteris paribus is telling us that nothing else other than the price changed.

TERM TO KNOW

Ceteris Paribus
Holding all other variables constant

3. Shifts in Demand

However, in the real world, we know that things are constantly changing other than the price of one good. Therefore, we need to address the result if something other variable changes.

THINK ABOUT IT

Suppose you had to take a significant pay cut, or you read an article stating that Granny Smith apples are the least healthy apple. Do you think you would still buy the same amount of Granny Smith apples? Probably not, even though the price was not impacted.

Here is a demand schedule with the same prices as before, but notice that now, we are purchasing a different quantity.

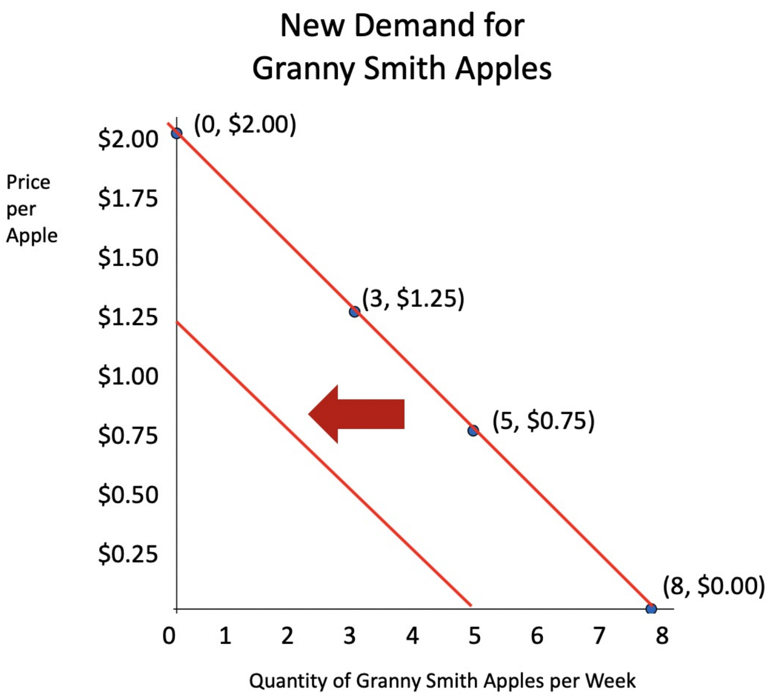
Price of Granny Smith Apples	Quantity of Granny Smith Apples Each Week
$2.00	0
$1.75	0
$1.50	0

$1.25	0
$1.00	1
$0.75	2
$0.50	3
$0.25	4
$0.00	5

In this scenario, either because we read that Granny Smith apples aren't as healthy or our income changed, we are now not buying any of them until they reach a price of $1.00. In fact, when they are $0.25, we are only buying four. When they're free, we are only buying five.

Because of this, there is a new relationship now between price and quantity, which requires a whole new demand curve like the one below.

This represents a **shift in demand**, which is a change in something other than price that affects purchasing behavior.

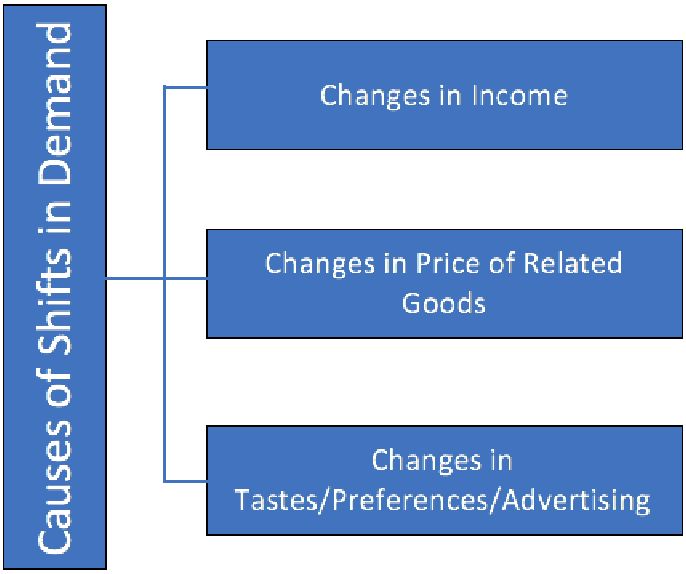


TERM TO KNOW

Shift in Demand
A change in something other than price affects purchasing behavior

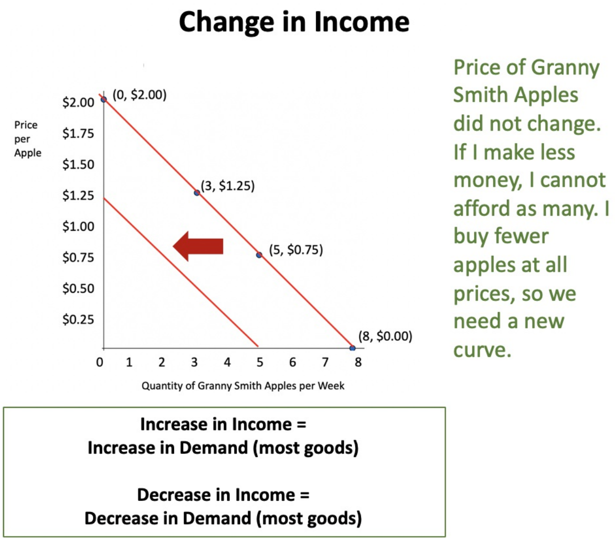
4. Causes of Shifts in Demand

Here is a summary of the factors that cause a shift in demand. We will cover each of these in further detail:



4a. Changes in Income

Changes in income can impact how much we buy of things. We can either decide to buy more of most goods as our income goes up-- these are known as normal goods--but there are some items like generic brands that we actually buy less of as our income increases.
Let's refer to the graph illustrating a decrease in demand. Remember, the price of Granny Smith apples didn't change, but if you make less money, you cannot afford as many and will buy fewer apples at all prices. Therefore, demand shifted to the left.



4b. Changes in Price of Related Goods

Changes in prices of related goods is another factor that will shift the demand curve. For instance, if something related to Granny Smith apples changes in price, this can affect how many Granny Smith apples you buy, even though the price of Granny Smith apples did not change.

- **Substitute goods** refer to the concept that as the price of one good increases, the demand for an alternative good meeting similar consumer needs increases.

EXAMPLE If Granny Smith apples are the only type of apple that becomes more expensive, the quantity demanded for them will decrease, which is expressed as movement along the Granny Smith apple demand curve. However, how do consumers respond?

Well, perhaps they buy more Gala apples, because they meet the same consumer need. Gala apples are a substitute. The demand for Gala apples has shifted to the right, because Gala apples did not change in price, yet now people are purchasing more of them.

- **Complement goods** exhibit a different behavior. A complement is a good for which the demand increases as the price of an associated good decreases.

EXAMPLE Suppose you eat apples and caramel apple dip together. If caramel apple dip goes on sale, you buy more, which is expressed as movement along the demand curve for caramel apple dip. However, even though the price of apples didn't change, you're also going to buy more apples to go with your caramel apple dip. This represents a change in demand for apples, or a shift of the demand curve to the right. The price of apples did not change, yet you are buying more of them, because the complement good changed in price.

TERMS TO KNOW

Substitute Goods
As the price of one good increases, the demand for an alternative good, meeting similar consumer needs, increases

Complement Goods
A good for which the demand increases as the price of an associated good decreases

4c. Changes in Tastes/Preferences/Advertising

Changes in tastes and preferences are impacted by things like positive or negative news reports. If there is a good news report about a product, or fads, or strong advertisements, this results in an increase in demand for that product.

EXAMPLE For example, the child's toy Tickle Me Elmo was featured on a popular television show, so every parent in the market wanted to purchase it for their child, resulting in a massive increase in demand.

Negative news reports or fads going out of style result in a decrease in demand.

EXAMPLE Suppose you hear on the news tonight that there was an E. coli outbreak in spinach in your local area. At all prices, people will be purchasing less spinach, which is a decrease in demand.

SUMMARY

Today we learned that **movement along a demand curve** is due to a change in the price of that good, assuming **ceteris paribus**, or holding all other variables constant. We learned that **shifts in demand**, or a shift of the demand curve, occurs when any other variable changes, like **changes in income**, **changes in price of related goods**, or **changes in tastes, preferences, or advertising**.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Ceteris Paribus
Holding all other variables constant.

Complement Goods
A good for which the demand increases as the price of an associated good decreases.

Movements Along Demand Curve
Demonstrated when the price of the product changes and impacts the quantity demanded.

Shift in Demand
A change in something other than price affects purchasing behavior.

Substitute Goods
As the price of one good increases, the demand for an alternative good, meeting similar consumer needs, increases.