

*Autumn 2018*

# 23115 Economics

University of Technology Sydney

**Topics:**

- Demand and supply with applications;
- Equilibrium and Elasticity;
- Effects of Government policies on market outcomes;
- Markets and market failure: efficiency and equity;
- Measuring GDP, Price Indices and Unemployment;
- Introduction to Aggregate Supply and Demand Analysis;
- Introduction to Money, Money Markets and Interest Rates;
- Exchange Rates and the Balance of Payments.

## WEEK ONE

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- **Course Description**
- **Introduction to Economics**
- **Readings: *Principles of Economics*, Chapter 1 (pp 4-11)**

## WEEK TWO

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- **Tutorial 1 - 4 Lessons from Economics; Case Study #1**
  - Preparatory activities: Download and attempt tutorial questions & Case Study #1
- **Lecture 2 - Demand and Supply**
  - Readings: Chapter 4 (until page 84 included)

### Markets and competition:

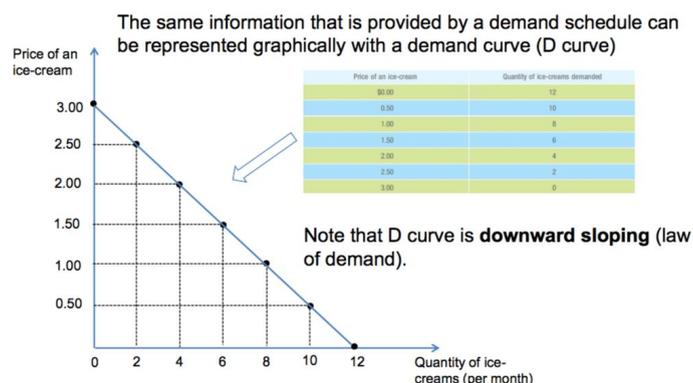
- Many buyer and sellers, which means there is not really any market power
  - No power to manipulate price
  - Little to no differentiation between products

### Demand:

- Demand is solely determined by buyer or potential buyer of the product
- Quantity demanded:
  - The amount of a good that buyers are *willing* and *able* to purchase.
- Relationship between price and quantity demand can be expressed in two ways:
  - Demand schedule

Price of an ice-cream	Quantity of ice-creams demanded
\$0.00	12
0.50	10
1.00	8
1.50	6
2.00	4
2.50	2
3.00	0

- Demand Curve



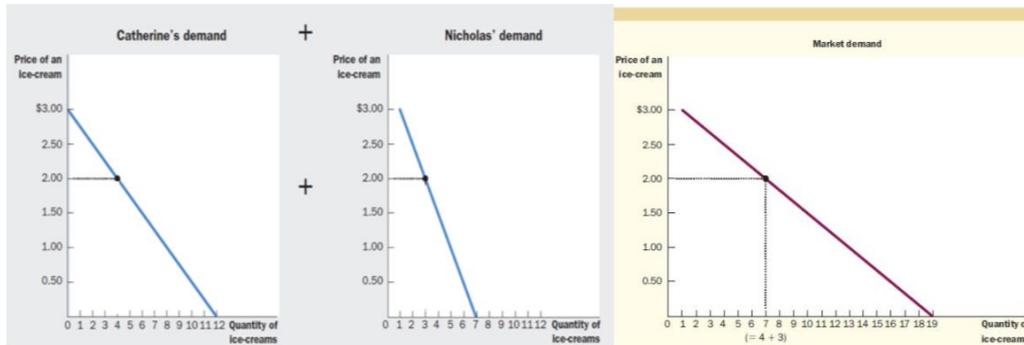
- The quantity demanded of any good is the amount of the good that buyers are willing and able to purchase. The price of the good is the central determinant of the quantity demanded.

- Only includes price, and quantity demanded
- Does not include income or anything else
- Price is always going to be on the vertical axis

### Market demand vs individual demand:

In almost all markets there are many buyers, and we cannot study markets effectively until we understand the total demand for a given product in a given market.

- The market demand is the sum of each individual demand
- For example if there are two buyers in the market, the market demand is the sum of these two demands
- This is represented in the graph below:



Changes in prices of goods generates a movement along the demand curve, and is a change in quantity demanded.

### Shifts in the demand curve:

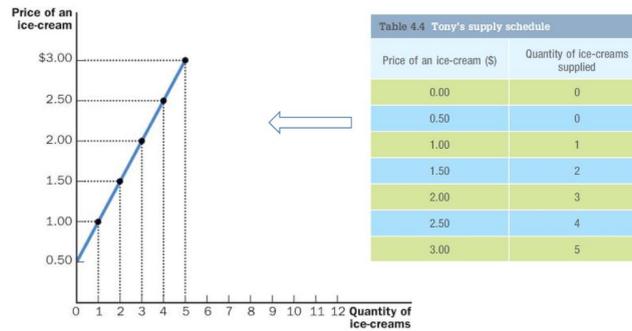
If the price stays constant, for example, and another factor changes, this is called a shift in the demand curve, either to the left or right. Here, we say there is a change in demand rather than referring to the movement as quantity demanded as we did above.

### Factors influencing shifts in the demand curve

- *Income* can also affect the demand of a good, and the relationship between income and demand depends of what type the good is.
  - Normal goods are ones where an increased income leads to an increased demand
  - Inferior goods are ones where an increased income leads to a decreased demand
- *Price* of related goods can also affect demand, as consumers will be likely to switch to a cheaper product if the two products are similar.
  - Substitutes are goods which could be replaced by another, for example some people view frozen yogurt as a substitute for ice-cream, meaning if a froyo store and an ice-cream store were next door, a consumer may decide which they eat based on other factors, such as price.
  - Complements are two goods where the decrease of the price of one good leads to the increase in price of another
- *Tastes* - people look at the results of changes in taste
- *Expectations* - there are expectations regarding future incomes and future prices
- *Number of buyers* - the amount of demand for a product should naturally increase with the population of the area surrounding that product.

### Behaviour or producers / sellers:

- The quality supplied is the amount of a good that sellers are *willing* and *able* to sell
- As the price increases of a product, the amount of products the seller is willing to provide goes up as well. This is because the seller has to make it worth their while to be providing the goods. The S curve in the below diagram is sloping upward so to reflect this law of supply.

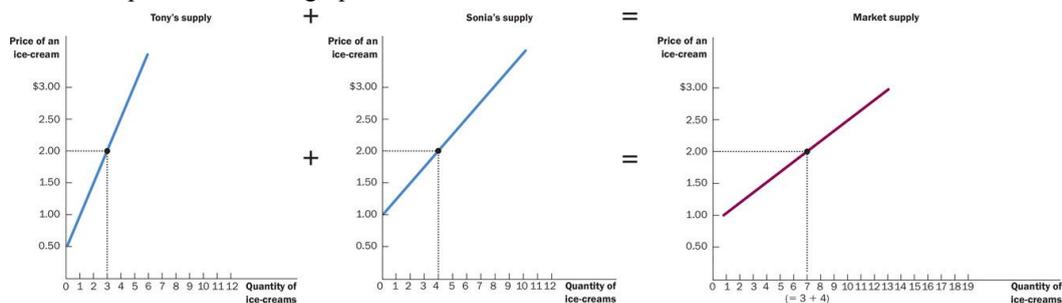


### The supply curve:

- The quantity supplied of any good or service is the amount sellers are willing and able to sell. Price again is a large determinant of the quantity supplied. If the price of ice-cream, for example, is high, selling it is more profitable and you can afford more supply.
- The law of supply is: *other things being equal, when the price of a good rises, the quantity supplied of the good also rises, and when the price falls, the quantity supplied also falls.*

### Market supply versus individual supply:

- The market supply is the sum of all the supplies of all sellers.
- This is represented in the graph below:



### Shifts in the supply curve:

The market supply curve is drawn with all other things held constant. This means that when one factor change, the whole supply curve will shift. For example, if the price of sugar falls, selling ice-cream will be more profitable, thus raising the supply of ice-cream. In this higher supply, the curve will shift to the right.

### Factors influencing shifts in the supply curve:

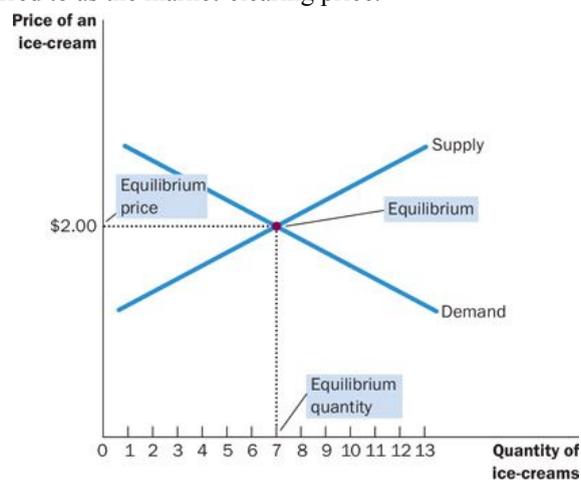
- *Input prices* - the cost of the inputs needed to produce a good will determine how much of it is bought, and thus how much of the final product can be created.
- *Technology* - more advanced technology may be able to produce a higher quantity of goods at a lower cost, meaning more supplies are created.
- *Expectations* - Sellers may have expectations about the rising and falling cost of products in the future. For example, in winter an ice-cream seller may choose to put more ice-cream in storage, as they can expect to make more profits off the ice-cream if they save it until summer to sell more of it.
- *Number of sellers*

## WEEK THREE

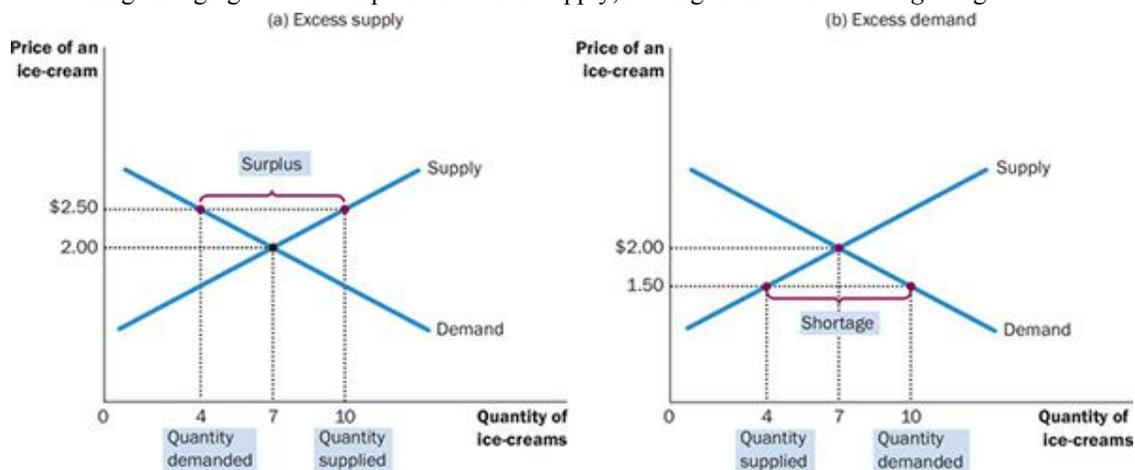
- **Tutorial 2 - Problems on Demand and Supply**
  - Preparatory activities: Download and attempt tutorial questions
- **Lecture 3 - Equilibrium; Elasticity**
  - Readings: *Principles of Economics*, Chapters 4 and 5
- **Assessments:**
  - Online problem set "Assessed 1" is released at 11:45pm on Friday, 30 Mar (due 11:45pm Thursday, 5 Apr).

### Supply and demand together:

- If the demand and supply curve are drawn up on the same graph, there is one point where the curve will intersect. This point is called the *Equilibrium*.
- This point is generally defined as a balanced force, and at the equilibrium price, the quantity of the goods that buyers are willing and able to buy balances the quantity that sellers are willing and able to sell.
- It is sometimes referred to as the market-clearing price.



- Points where the business is not at equilibrium price are shown below.
- The first shows a business where the price is above the equilibrium price, and the business is selling too many goods in comparison to their supply, leaving them with a *surplus* of goods.
- The second shows a business where the price is below the equilibrium price, and the business is not selling enough goods in comparison to their supply, leaving them with a *shortage* of goods.



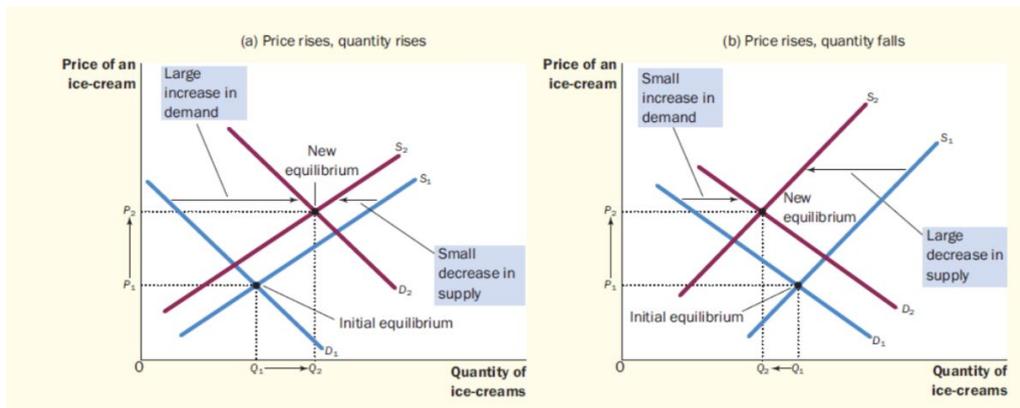
### Analysing changes in equilibrium:

- Supply and demand both change a market's equilibrium, which in turn determine the price of the good and the amount of the good that buyers purchase and sellers produce.
- When an event shifts one of these curves, the market gets a new equilibrium price.
- The analysis of this change is called *comparative statics* as it involves both an old and new equilibrium
- When analyzing how some events affect a market, we proceed in three steps:
  - First deciding whether the event shifts the supply curve, demand curve, or both curves.
  - Second, whether the curve shifts to the left or right
  - Thirds, using a supply-and-demand diagram to compare the initial equilibrium with the new one, showing how the shift affects equilibrium price and quantity.

**Shifts in curves versus movement along curves:**

- 'Supply' refers to the position of the supply curve
- 'Quantity supplied' refers to the amount suppliers wish to sell
- When hot weather drives ice-cream sales up, the amount that company's supply rises, but the supply curve remains the same. Here, supply does not change because the weather does not change company's desire to sell at a given price. When the price rises, the quantity supplied rises, causing an increase in quantity supplied represented by a movement along the supply curve.
  - The shift *in* the supply curve is called 'change in supply'
  - The shift *in* the demand curve is called 'change in the quantity supplied'
  - The movement *along* a fixed demand curve is called 'change in the quantity demanded'.

**Changes in both supply and demand:**



	No change in supply	An increase in supply	A decrease in supply
No change in demand	P same Q same	P down Q up	P up Q down
An increase in demand	P up Q up	P ambiguous Q up	P up Q ambiguous
A decrease in demand	P down Q down	P down Q ambiguous	P ambiguous Q down

**The elasticity of demand:**

- How much buyers and sellers respond to changing market conditions
- When a market condition changes, we can analyse how this affects not only the direction of the effects, but their intensity.
- When discussing demand, the direction of quantity demanded was observed, however not the size of the change. Elasticity measures *how much* demand responds to its determinants.