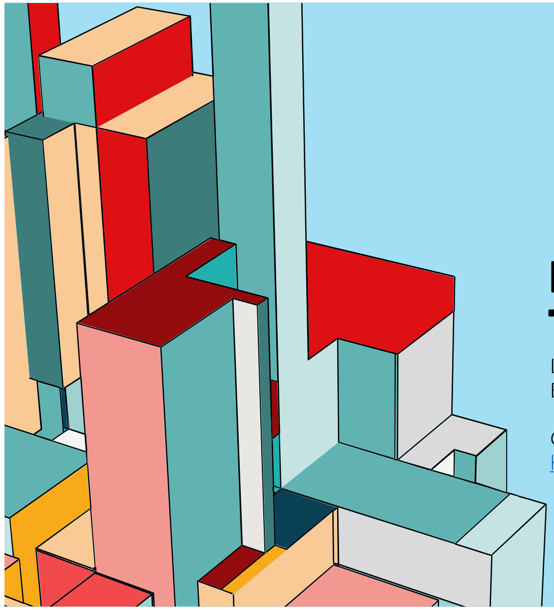

ECONOMICS TOPIC 2

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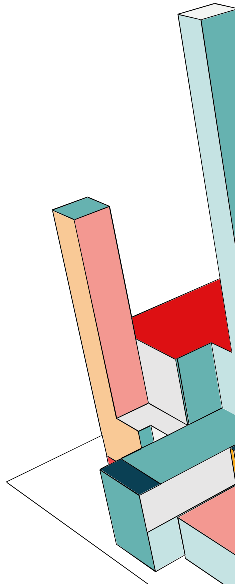
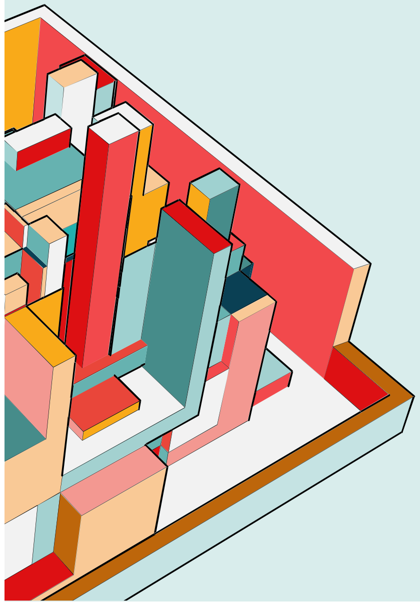
Course Materials and Announcements:
https://github.com/zamnolence/Economics-at-YSU

TOPIC 2: DEMAND AND SUPPLY





DEMAND AND SUPPLY

Syllabus objectives

1. Describe the law of demand
2. Describe factors that influence the market demand and supply and how market equilibrium quantity and price are achieved.
3. Discuss how markets react to changes in demand and supply.

1.1 RELATIONSHIP BETWEEN DEMAND AND PRICE

Law of demand

"When the price of a good rises, the quantity demanded will fall"*

Why?

Income effect People will feel poorer (not be able to buy considering their income).

Substitution effect People will switch to alternative or 'substitute' goods**.

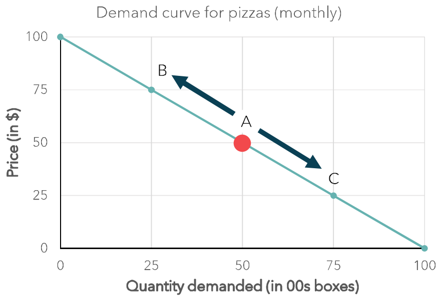
*Quantity demanded is the amount of a good that a consumer is willing and able to buy at a given price over a period of time.

**Substitute goods are goods that consumers consider to be alternatives to each other.

Template from Know Your Meme

Posted by u/LotsOfLogan49 on r/memes

1.2 THE DEMAND CURVE



The demand curve shows the relationship between the **price** and the **quantity** of the good **demanded** over a given period of time.

The law of demand suggests it slopes **downwards**.

Example: Consider the following function for the number of pizzas demanded monthly (QD) at a series of prices (P) where price is measured in $ and the quantity is measured in hundred boxes:

QD = 100 – P

The curve shows the demand function (D).

Change in quantity demanded is a *movement* along the demand curve, which occurs when **price change**

1.3 OTHER DETERMINANTS OF DEMAND

- Consumer **taste**

Brand name vs generic

- The number and price of **substitute goods**

  Substitute goods = alternative goods that could be used for the same purpose

Demand for coffee will depend on the price of tea

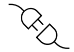
$3.5 per 50ml
demand increases

$4.5 per 50ml

- The number and price of **complementary goods**

  Complementary goods = goods that consume together

Demand for EV cars will depend on electricity prices



~30c/kWh

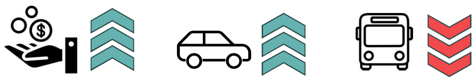
1.3 OTHER DETERMINANTS OF DEMAND

- Consumer **incomes**

  Normal goods = goods whose demand rises as incomes rise

  Inferior goods = goods whose demand falls as income rise

As income rises, the demand for ***normal goods*** will rise, though the demand for ***inferior goods*** will fall.



- The **distribution of income**

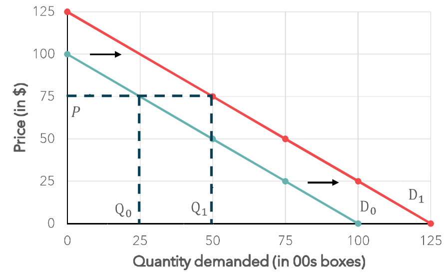
If the rich get richer, demand for **l**uxury goods will rise.

- **Expectations of future price changes**

If people think the price will rise, they will buy more.

1.3 OTHER DETERMINANTS OF DEMAND

Increase in demand for pizzas as income rises



Change in demand is a *shift* in demand curve, which occurs when a determinant of demand other than price change

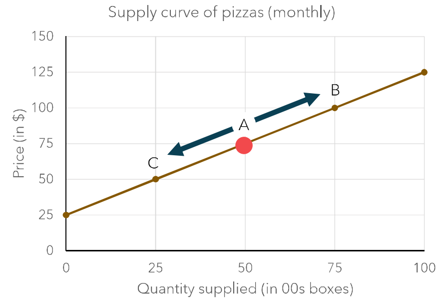
Note: do not confuse this with *change in quantity demanded*

2 RELATIONSHIP BETWEEN SUPPLY AND PRICE

Typically, when the **price of a good rises**, the **quantity supplied will also rise**. Because:

Short-run supply		Long-run supply
Beyond a certain output level, **costs are likely to rise** more and more rapidly as **firms supply more**.	The higher the price, the **more profitable** it becomes. Therefore, firms will switch production from less profitable goods.	Given time, if the price of a good remains high, **new firms** will set up production – so total market supply increases.

2.1 THE SUPPLY CURVE



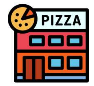
The supply shows the relationship between the **price** and the **quantity** of the good **supplied** over a given period of time.

It typically slopes **upwards**.

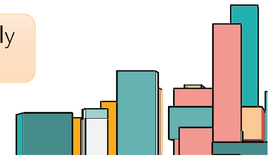
The number of pizzas supplied each month (QS) at a series of prices measured in $ (P) might be given by the following function:

QS = P - 25

This is the supply function (S).

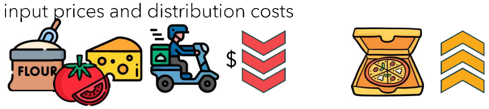


Change in quantity supplied is a *movement* along the supply curve, which occurs when **price change**



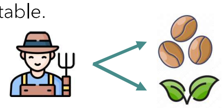
2.2 OTHER DETERMINANTS OF SUPPLY

- **Costs** of production — input prices and distribution costs



- The **profitability** of **substitutes in supply** — farmers will switch to planting coffee trees instead of tea, if it's more profitable.

  Substitutes in supply = Two goods where an increased production of one means diverting resources away from producing the other



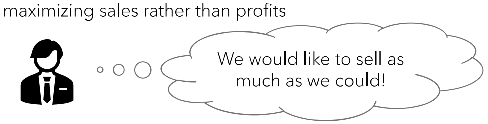
- The **profitability** of **goods in joint supply** — milk and butter are produced by the same process. If the demand of milk rise, the supply of butter will also increase.

  Goods in joint supply = Two goods where the production of one leads to the production of more of the other.

- Nature, random shocks, and **unpredictable events** — extreme weather: earthquakes, flood, storm

2.2 OTHER DETERMINANTS OF SUPPLY

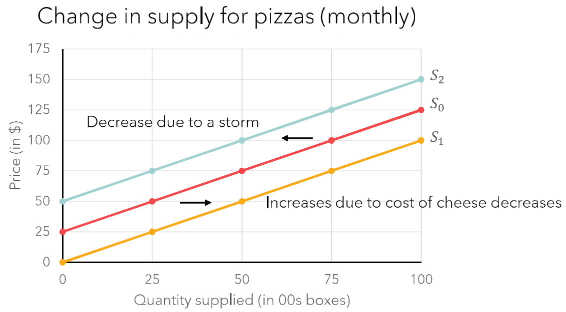
- **Aims** of producers — maximizing sales rather than profits



- **Expectations of future price** changes — if price is expected to rise, producers may build up their stocks and sell them when the price rises. They may also plan to produce more.

- The **number of suppliers** — new firms enter the market, e.g. new pizzeria in the area

2.2 OTHER DETERMINANTS OF SUPPLY

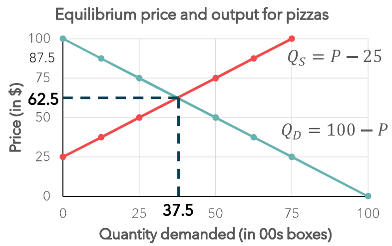


Change in supply is a *shift* in supply curve, which occurs when a determinant of supply other than price change

Note: do not confuse this with *change in quantity supplied*

3 EQUILIBRIUM PRICE AND OUTPUT

The market *clears* when **supply matches demand** leaving no shortage or surplus. The price and quantity at which demand equals supply are the **equilibrium price** and **equilibrium quantity**.



Using the pizzeria example, equating the demand and supply equation gives:

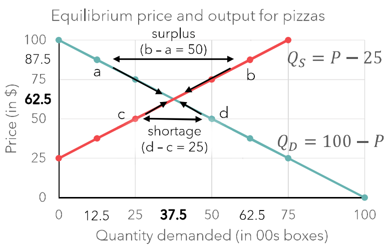
100 – P = P – 25

P = $62.50

Which gives a quantity supplied *and* quantity demanded of 3,750 boxes per month.

Equilibrium occurs where the demand and supply curves intersect.

3 EQUILIBRIUM PRICE AND OUTPUT



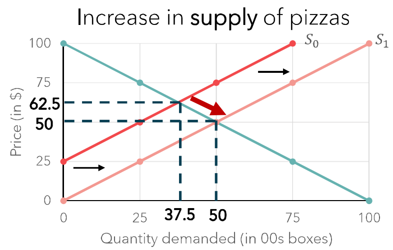
At any price **above** the equilibrium price, a **surplus** of supply over demand will arise.

To restore the equilibrium, a price will drop, which will increase the quantity demanded and reduce the quantity supplied.

At any price **below** the equilibrium price, a **shortage** will arise.

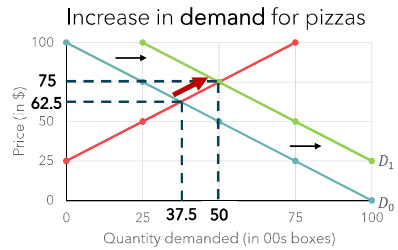
To restore the equilibrium, a price will rise, which will decrease the quantity demanded and increase the quantity supplied.

3.1 MOVEMENT TO A NEW EQUILIBRIUM



The increase in supply reduces the equilibrium price and increases the equilibrium quantity that is traded.

Notice that the increase in supply causes a movement along the demand curve.



An increase in demand increases both the equilibrium price and the equilibrium quantity traded.

Notice that the increase in demand causes an upward movement along the supply curve.