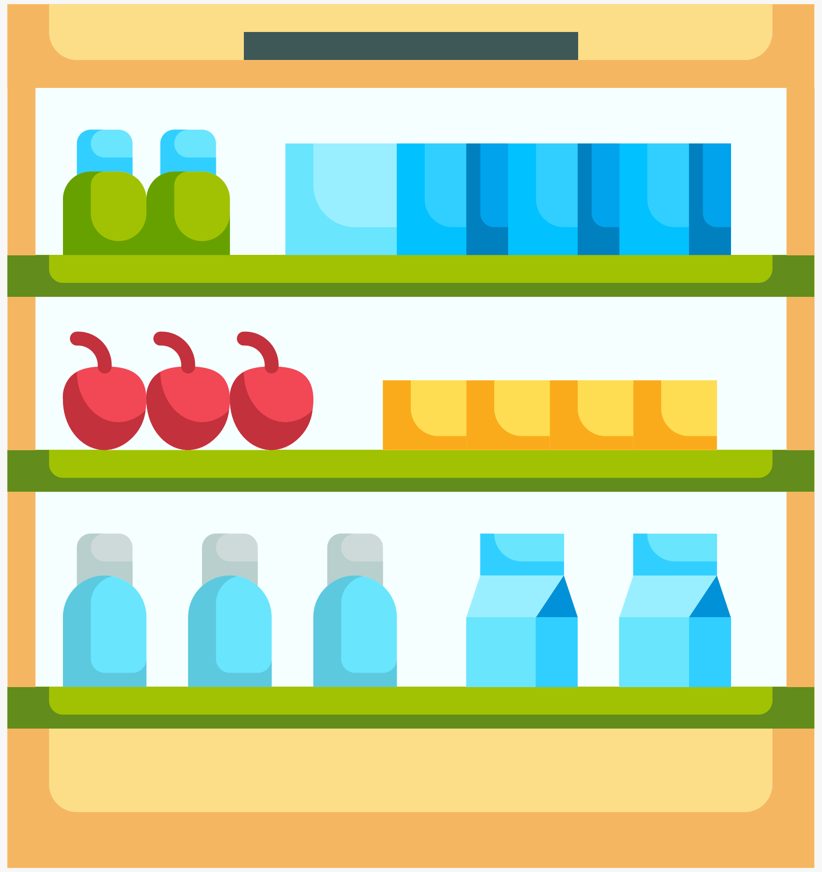
Supply

2.2

Definition

Supply

- Supply is defined as the quantity of a good or service that producers are willing and able to offer at various prices during a specific time period, ceteris paribus



Types of Supply

Individual

The individual supply is the supply of one product from one firm at every price.

Market

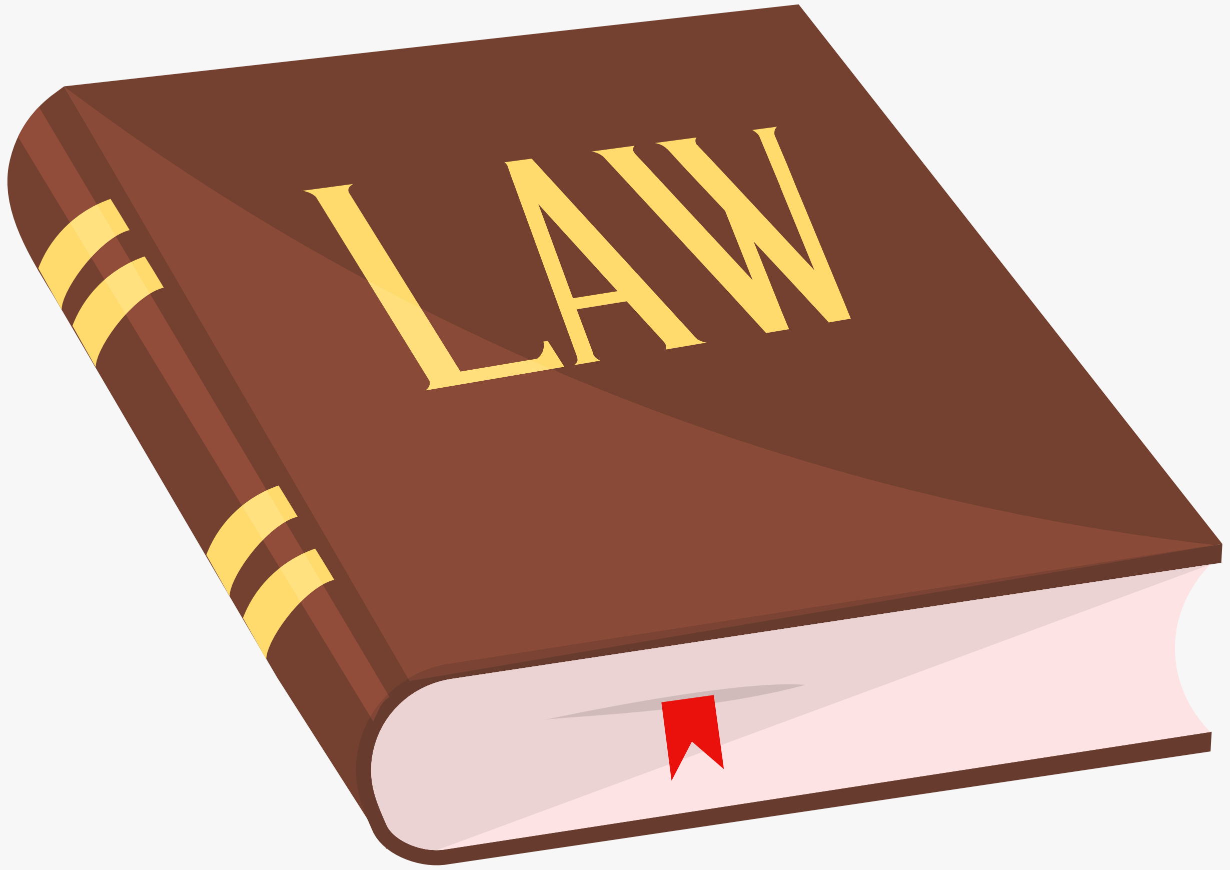
The market supply is the sum of all the individual supplies of a product at every price.

Law of Supply

There is a DIRECT (or positive) relationship between price and quantity supplied

As the price of a good rises, the quantity supplied will usually rise, ceteris paribus. (& vise versa)

Example: Higher price = Higher QuantitySupplied. WHY? Opportunity of Profit

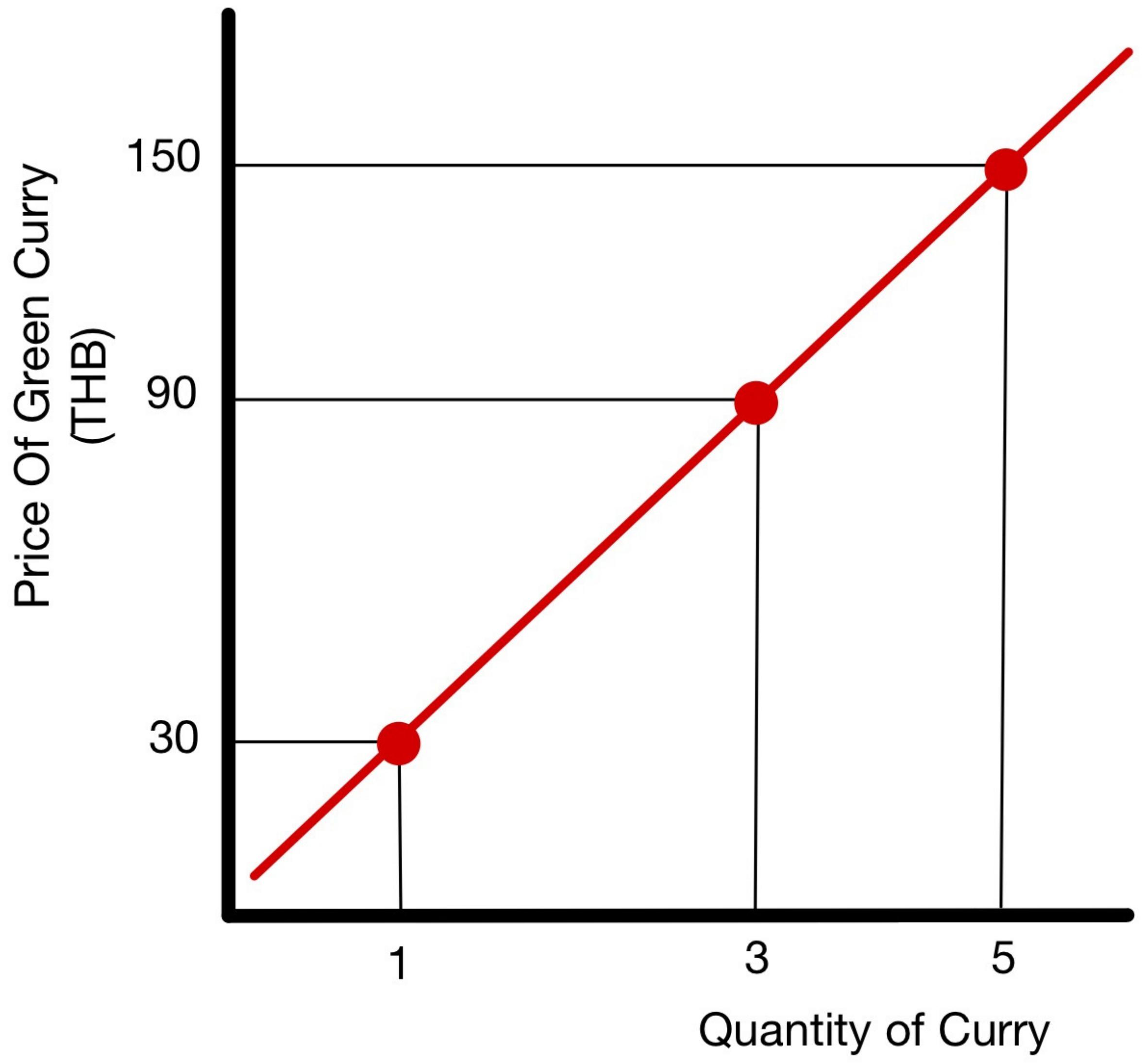


Video

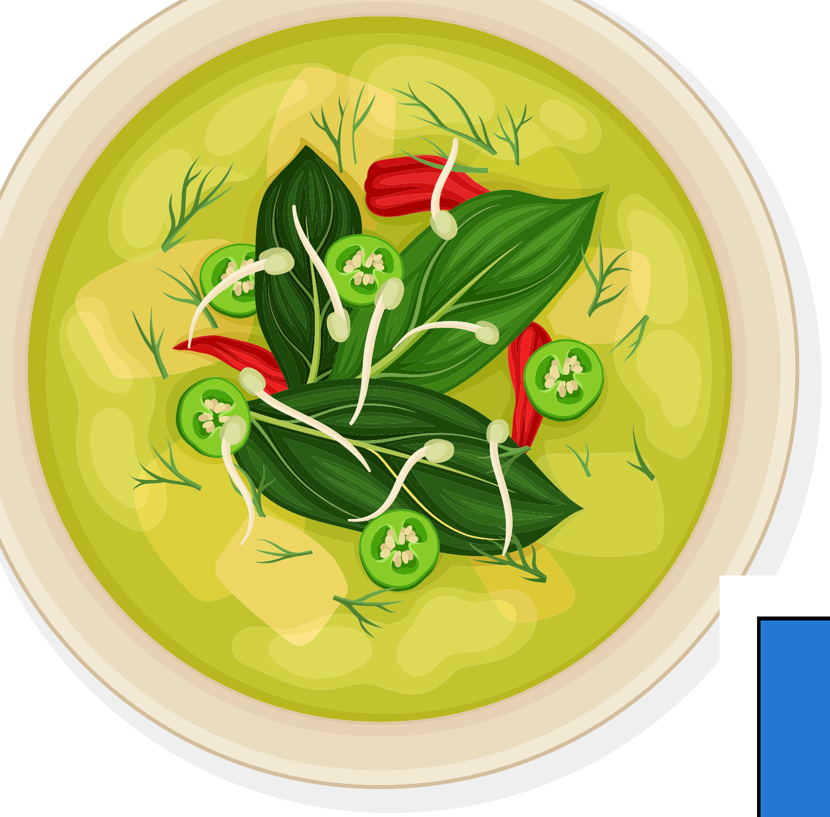
ACDC ECON - DEMAND AND
SUPPLY EXPLAINED

Supply Schedule

Individual



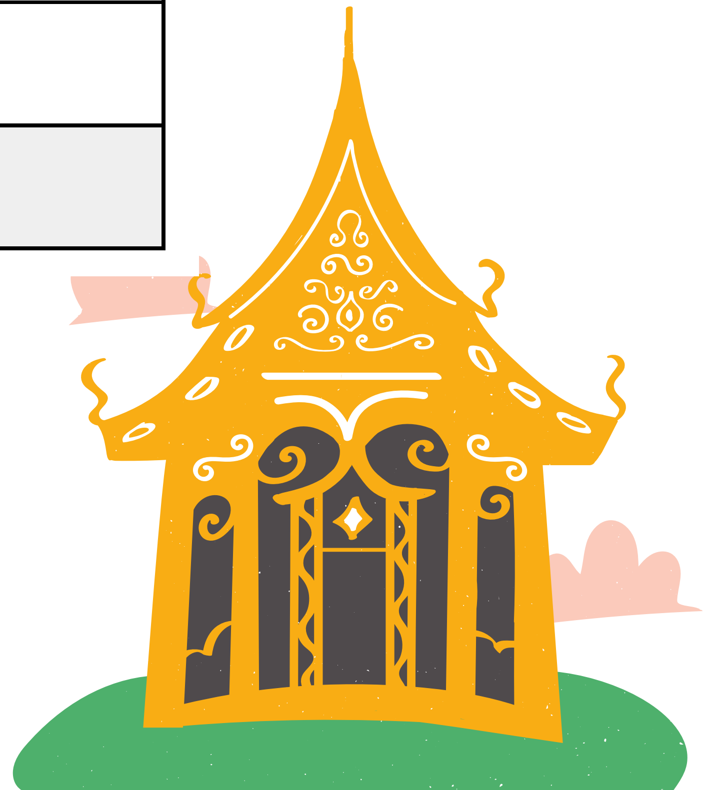
Price (THB)	Quantity of Curry
150	5
120	4
90	3
60	2
30	1
0	0



Supply Schedule

Market

Price (THB)	Quantity of Curry Supplied by Company A	Quantity of Curry Supplied by Company B	Market Supply of Green Curry
150	5	4	9
120	4	3	7
90	3	2	5
60	2	2	4
30	1	1	2
0	0	0	0



Why?

HL ONLY

The Law of Supply occurs for two main reasons.

1. **Law of Diminishing Marginal Returns**
    - **Marginal returns** refers to the additional output gained from adding an additional unit of input to a production process.
    - **The law of diminishing marginal returns** states that adding more of one factor of production, while holding at least one other factor of production constant, will at some point yield lower marginal returns (output/product).
    - Too many cooks in the kitchen! Must charge more because returns decrease.

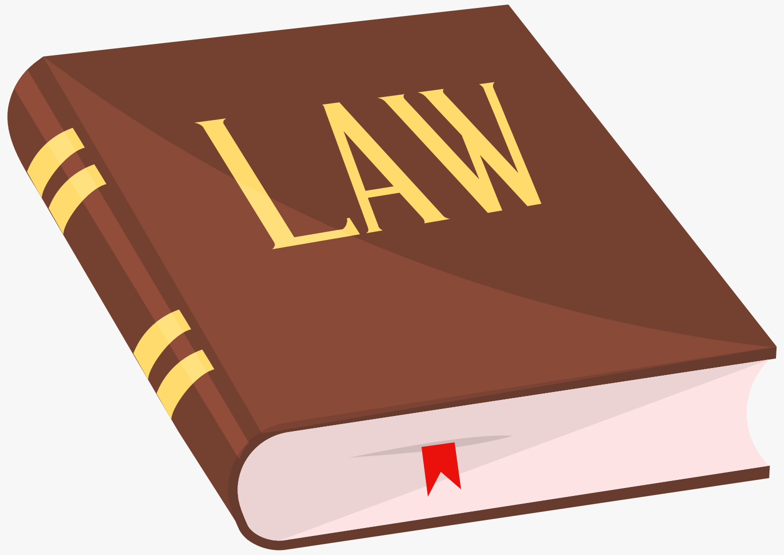
1. **Increasing Marginal Cost of Production**
    - **Marginal cost** refers to the cost of producing one more unit of a good.
    - A producer will only want to increase the quantity supplied if she can receive a higher price in the market for selling the product.
    - Therefore, to make more they must charge a higher price.

HL ONLY

Law of Diminishing Marginal Returns

ACTIVITY

With some legos/blocks, you will be building houses. Each round, you will have 1 minute to build as many as possible. Each round, 1 additional worker will be added. Students not participating in the activity, take notes on the production tally for each round and the quantity of workers.



Video

MARGINAL REVOLUTION UNIVERSITY - THE SUPPLY CURVE

Movements and Shifts on the Supply Curve

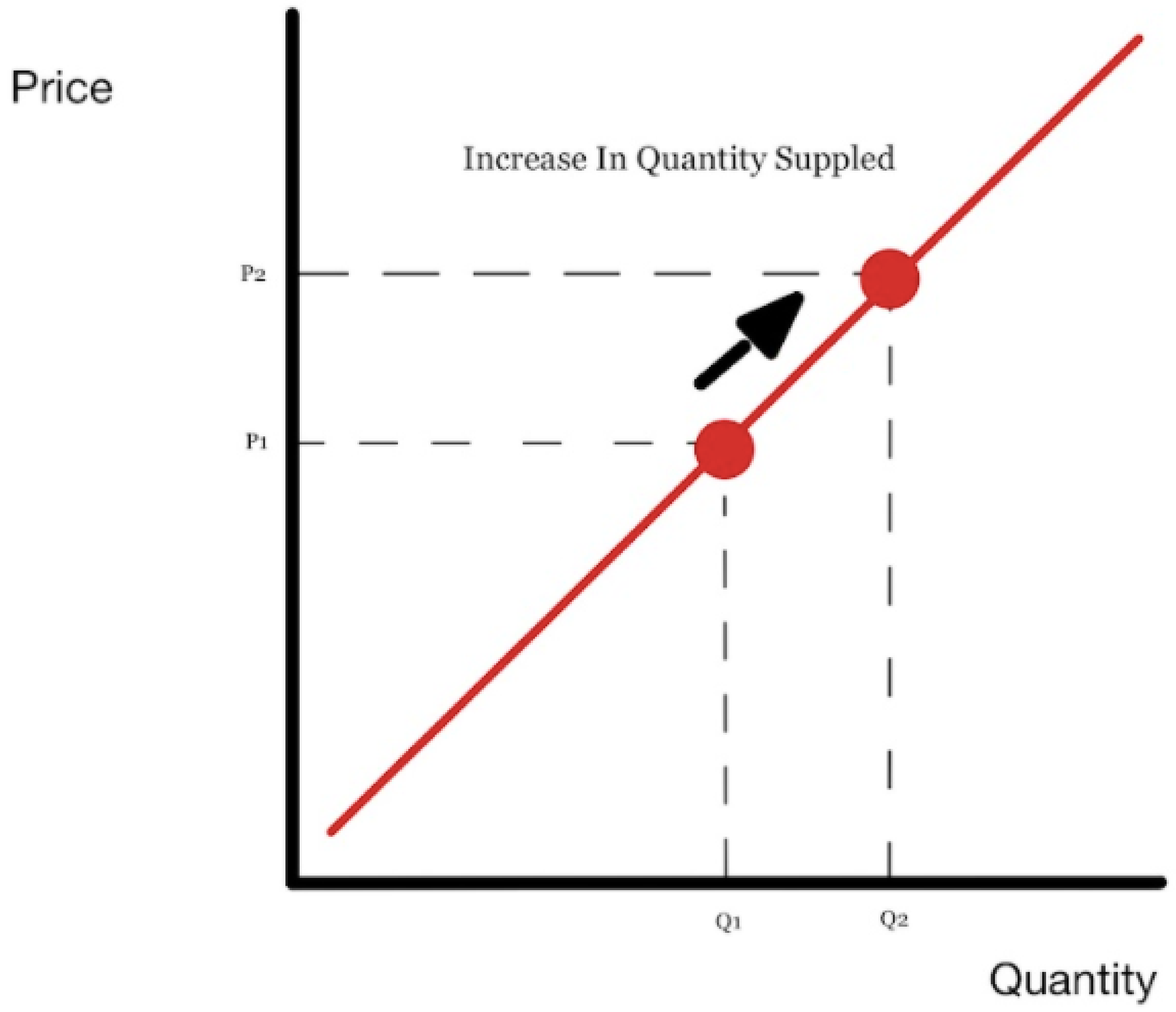
Changes to the Supply Curve

1. **"Change in Quantity Supplied"**
   - Any change in price of a product simply moves ALONG the supply curve

2. "**Change in Supply"**
   - The entire supply curve shifts.
   - Something other than price has caused a change to the supply curve
     - **Technical Term:** Non-Price Determinant of Supply
     - **Example:** Costs of Production

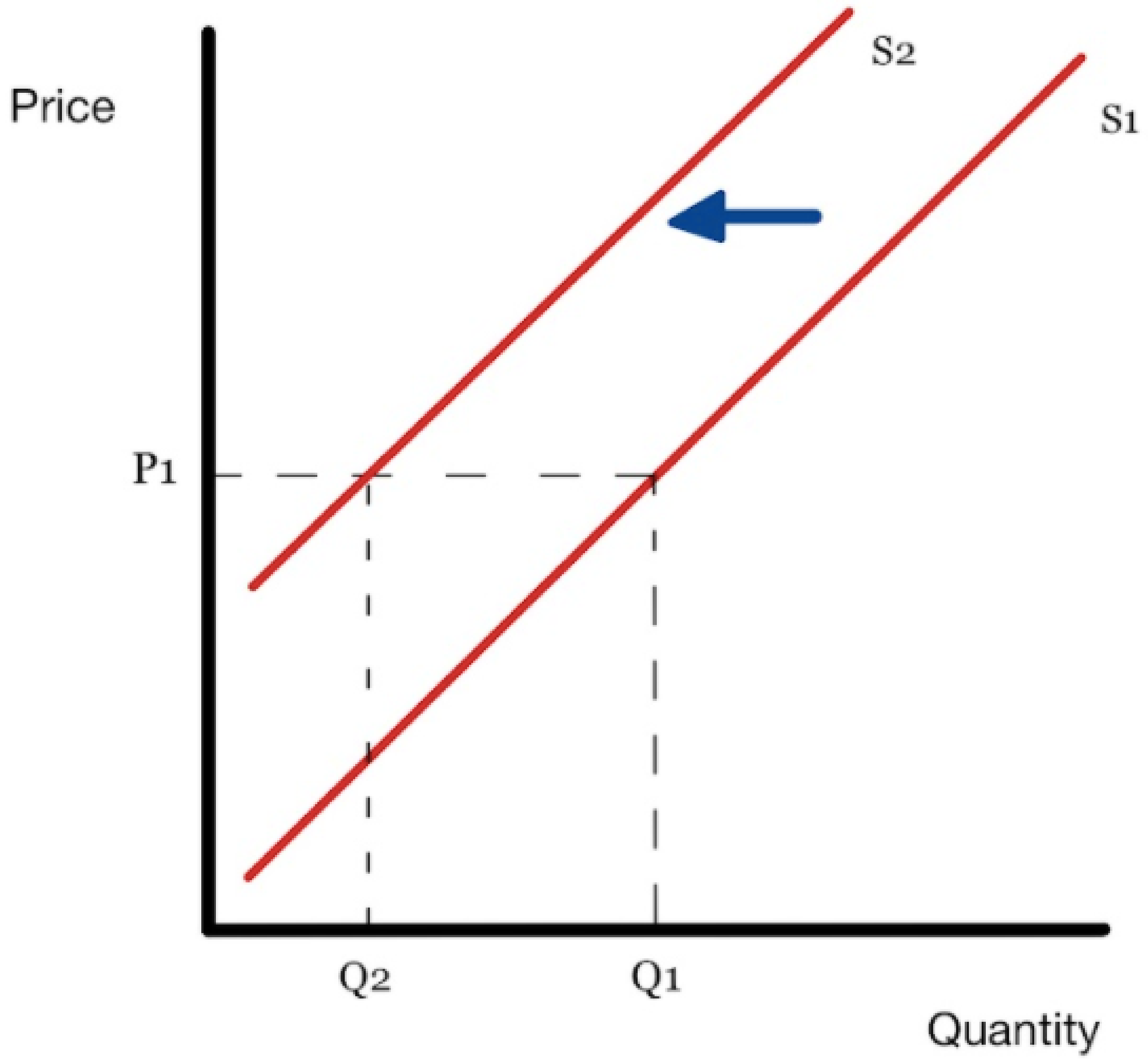
Change in Quantity Supplied

Change in Price of a Product

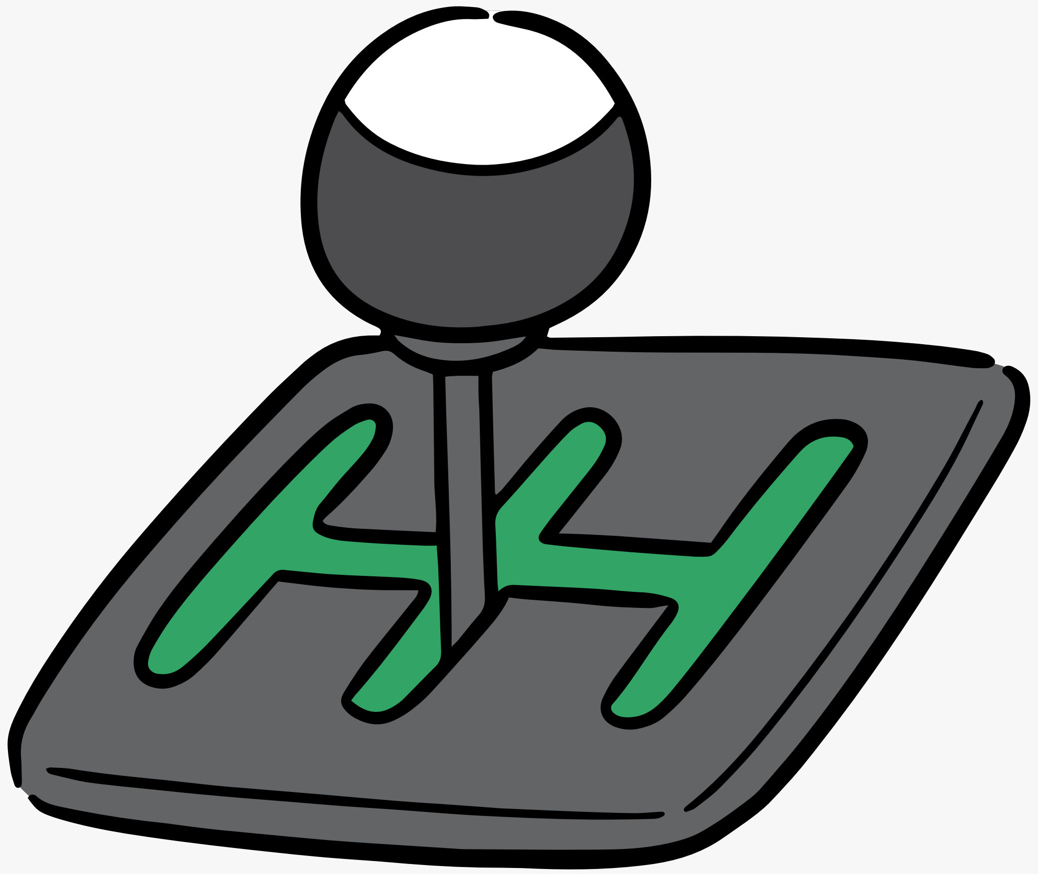


Change in Supply

Change in NON-PRICE determinant



6 Supply Shifters



6 Shifters of Demand

1 Costs of Production

Cost of Production

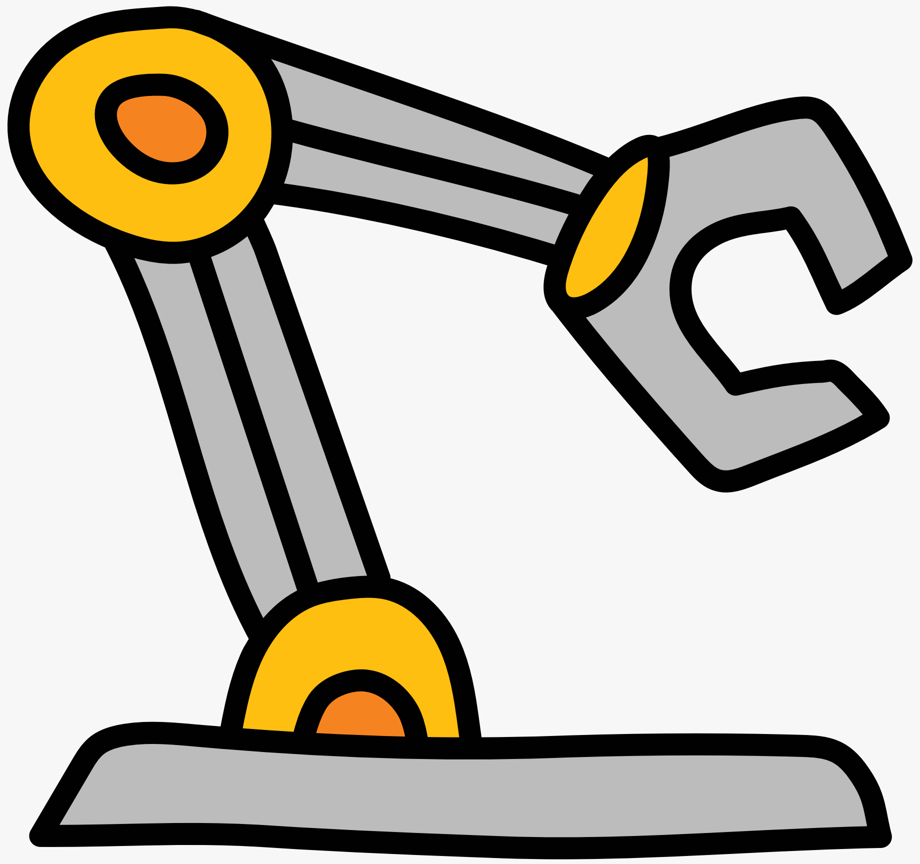
Change in the cost of factors of production (FOPs) of the goods or services that firms produce is a very important factor influencing the supply.

Example: An increase in the price of flour or wheat, will likely decrease the supply of pizza

6 Shifters of Supply

1 Cost of Resources/Inputs

2 Technology



Technology

Improvements in a firm or industry's technology can increase the supply of a good or service by increasing productivity – the quantity of output per unit of input.

Example: The implementation of a tractor drastically increases the productivity on farms.

6 Shifters of Supply

1. Cost of Resources/Inputs
2. Technology
3. Number of Firms/Sellers

Number of Firms/Sellers

As the market supply is the sum of all the individual supplies of a product, when the number of firms that offer the same good increases, the market supply also increases, shifting the supply curve of that good outwards (to the right).

Example: If there are 100 coffee shops in Daegu, Korea, each making 100 coffee's per day, what happens to the supply if another 50 coffee shops open?

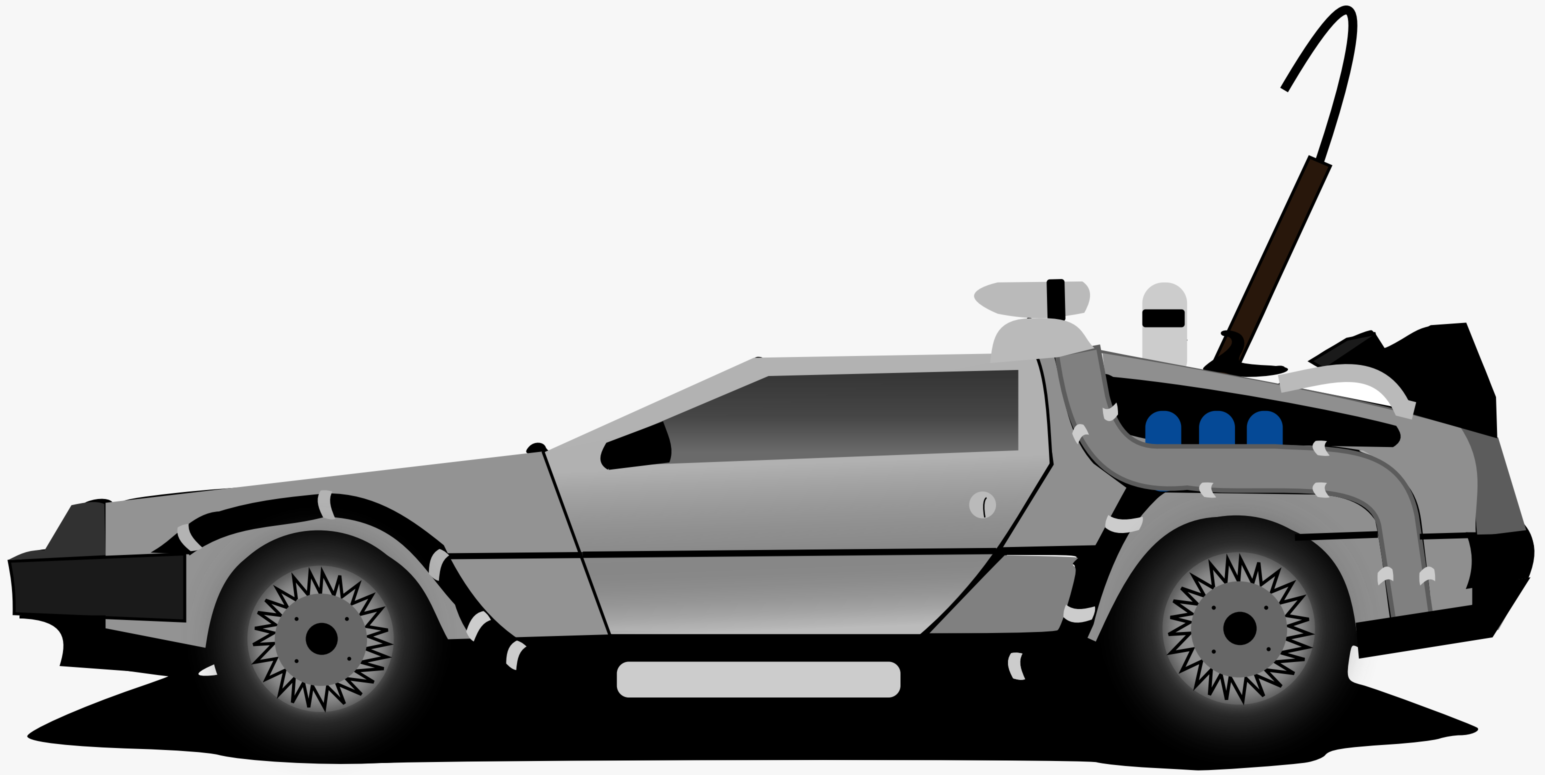
6 Shifters of Supply

1 Cost of Resources/Inputs

2 Technology

3 Number of Firms/Sellers

4 Future Expectations



Future Expectations

Expectations about the future can also affect the supply for goods and services.

Future Price

If firms expect prices of the products they sell to increase in the near future, they might withhold part of their current production from the market (by not offering it for sale and storing it, also called hoarding) in the hope of being able to sell more at a higher price in the future .

Future Economy

If producers expect the economy to do well, they will expect that people will have more money to spend and that the consumption of goods and services will increase.

6 Shifters of Supply

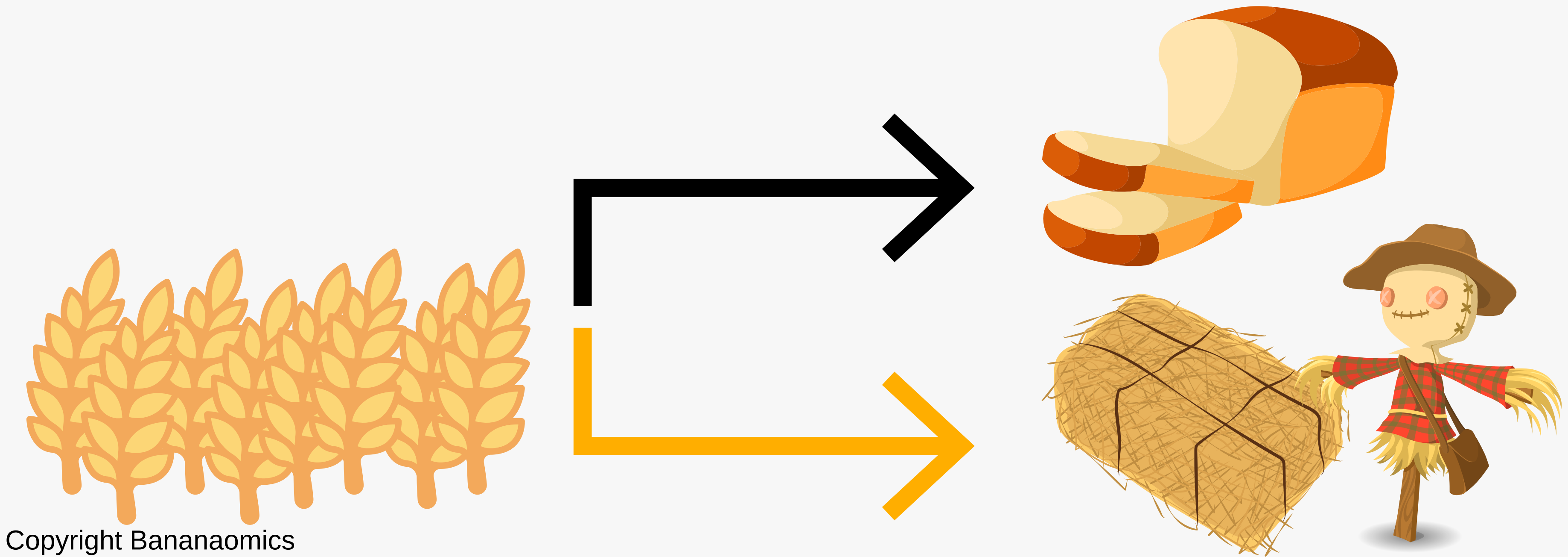
1. Cost of Resources/Inputs
2. Technology
3. Number of Firms/Sellers
4. Future Expectations
5. Price of Related Goods

Related Goods

Just as consumers have the choice of what alternative good to purchase when the price of one changes, producers have a choice as to what good to produce.

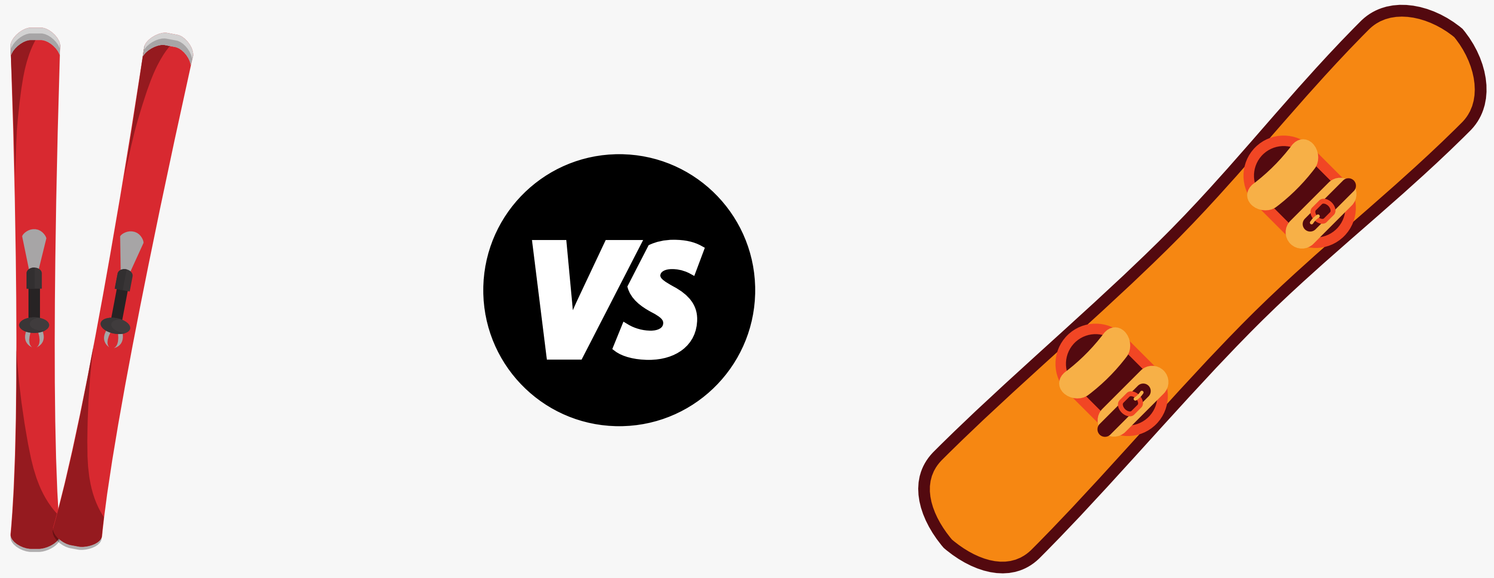
Joint Supply

when two or more goods are derived from the same product, so that it is not possible to produce more of one without producing more of the other. The second good is often called a **by-product**



Competitive supply

when the production of two goods uses similar resources and processes. When a supplier produces more of one good, it means producing less of the other.



6 Shifters of Supply

1. Cost of Resources/Inputs
2. Technology
3. Number of Firms/Sellers
4. Future Expectations
5. Price of Related Goods
6. Government Intervention

Government Intervention

Governments intervene in markets to change supply in order to achieve goals associated with the price or quantity of goods in markets. The most common methods of government intervention are regulations, indirect taxes and subsidies.

Taxes (Indirect)

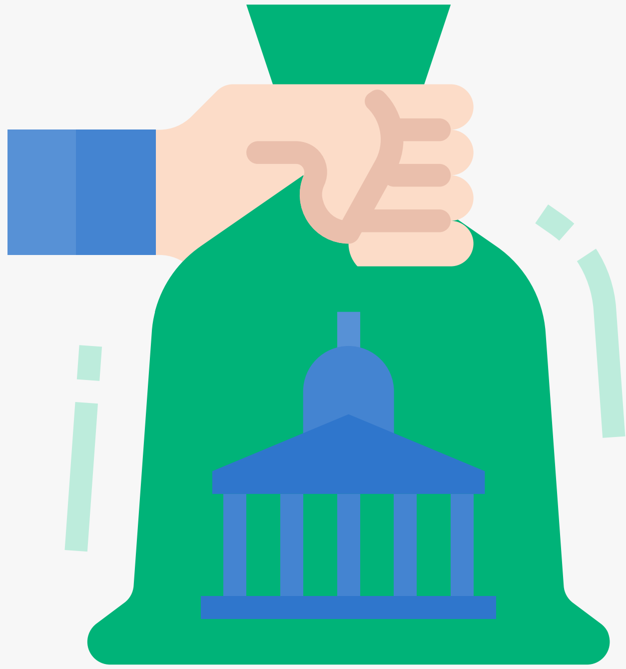
a tax imposed on a good or service. When indirect taxes are imposed or increased, the costs of production for firms increase, causing supply to decline

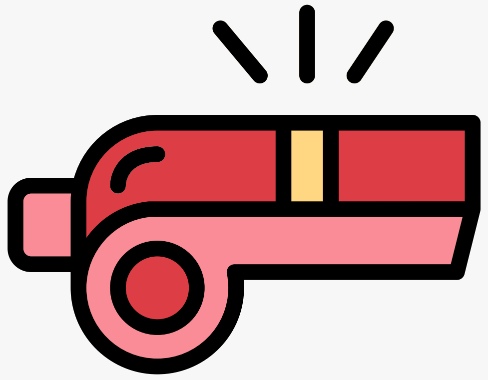
Subsidies

An amount of money granted by the government to a firm or industry. Subsidies have the opposite effect of a tax. When the government gives a subsidy to a firm it reduces the firm's costs of production, increasing the supply

Regulation

A regulation is a rule made by the government that requires certain behavior of individuals, firms or other groups. These rules and requirements usually increase the costs of production for firms.





Practice

Identify the determinant (shifter) then decide if supply will increase or decrease

Tacos (a normal good)

1. Strange virus kills 20% of cows
2. Price of tacos increase 30%
3. Government taxes taco producers
4. New tortilla baking technology cuts production time in half
5. The government subsidizes salsa producers
6. Minimum wage increases to $20

Shifter	Increase or Decrease
Cost and Availability of Inputs	Decrease
No Shift Occurs	Increase Qd
Government (Tax)	Decrease
Tech	Increase
Government (Subsidies)	Increase
Cost and Availability of Inputs	Decrease

Recap and Review

- **Explain the law of supply.**
- **Draw and explain the diagram of the supply curve.**
- **Explain the SHIFTERS (non-price determinants) of supply**
- **Distinguish between movements along the supply curve and shifts in the supply curve.**

Practice Question

Paper 1 Part A

M14/3/ECONO/HP1/ENG/TZ1/XX

(a) Using diagrams, explain how a change in one of the determinants of demand might increase the price of rice and how a change in one of the determinants of supply might decrease the price of rice. *[10 marks]*

Check Answers

Using diagrams, explain how a change in one of the determinants of demand might increase the price of rice and how a change in one of the determinants of supply might decrease the price of rice.

Answers **may** include:

- definitions of demand and supply
- diagrams to show the impact of changes in the determinants of demand and supply on the price of rice
- an explanation of how a new price of rice would result from an increase in supply and increase in demand, with reference to the specific determinants
- examples of situations where such changes have taken place.

Paper 1 (SL/HL)

Part (a) 10-mark question

Marks 0–10	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	• The response indicates little understanding of the specific demands of the question. • Economic theory is stated but it is not relevant. • Economic terms are stated but they are not relevant.
3–4	• The response indicates some understanding of the specific demands of the question. • Relevant economic theory is described. • Some relevant economic terms are included.
5–6	• The response indicates understanding of the specific demands of the question, but these demands are only partially addressed. • Relevant economic theory is partly explained. • Some relevant economic terms are used appropriately. • Where appropriate, relevant diagram(s) are included.
7–8	• The specific demands of the question are understood and addressed. • Relevant economic theory is explained. • Relevant economic terms are used mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained.
9–10	• The specific demands of the question are understood and addressed • Relevant economic theory is fully explained. • Relevant economic terms are used appropriately throughout the response. • Where appropriate, relevant diagram(s) are included and fully explained