

# Introduction to Economics

## *What is Economics?*

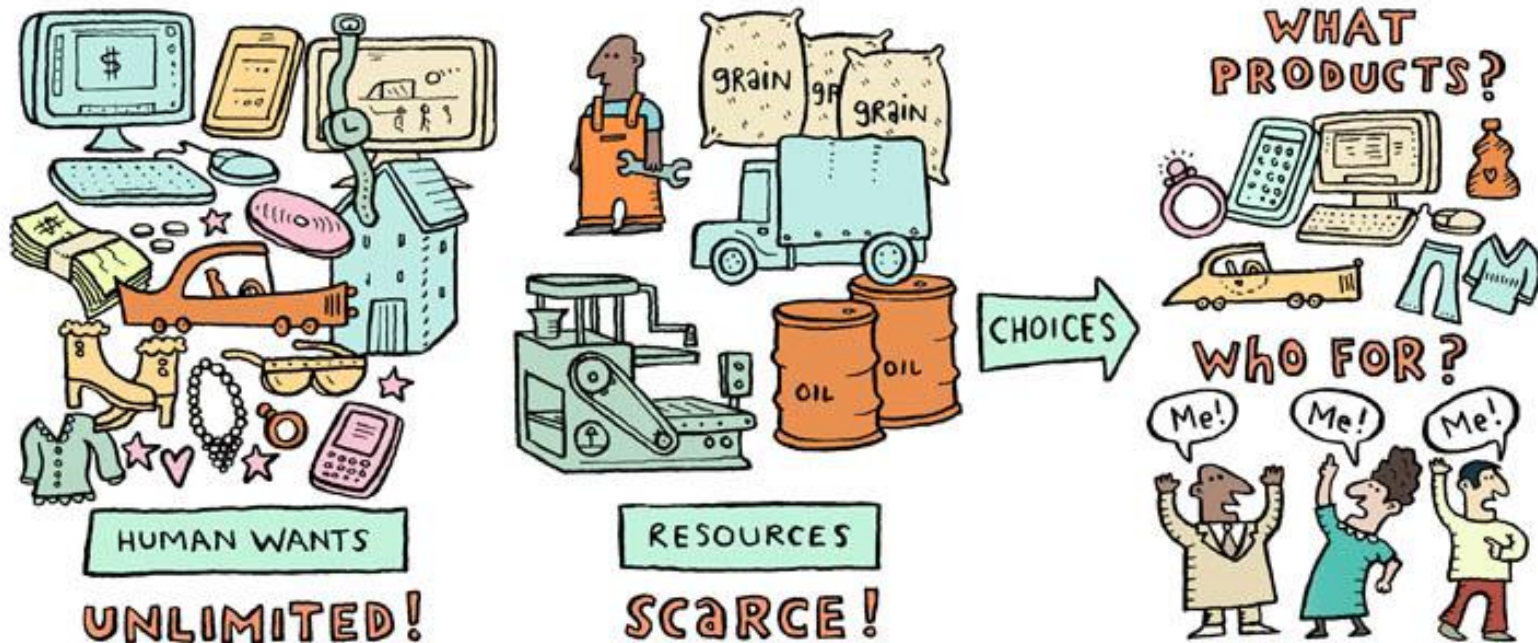
- What do you think we will cover in this course?
  - What will happen when natural minerals and ores such as oil, zinc, copper and aluminum eventually run out?
  - Why do famous footballers such as David Beckham earn more than most doctors?
  - Why do food and energy prices keep rising but the prices of large-screen T.V's keep falling?

# Introduction to Economics

*What is Economics?*

## The basic economic problem

Human wants are unlimited but resources are scarce



# Introduction to Economics

## What is Economics?

**Scarcity** - definition: *something is scarce when it is both desirable and limited.*

Not all goods are scarce. Some goods that humans consume are infinite... Place the following words under the correct category, **Scarce or Not Scarce**

Scarce

or

not scarce?

Murderers  
Computers  
Swiss francs  
factory workers  
Water  
HIV  
Oxygen  
Mosquitos  
British Pounds  
Doctors  
Creativity  
Nitrogen

Sewing machines  
Diamonds  
Worms  
Happiness  
Apartments in Zurich  
Love  
Clouds  
Teachers  
Dirt  
Football players  
Air

# Introduction to Economics

*What is Economics?*

## Your first economics riddle: The Diamond/Water Paradox

Something to think about:

- Nobody needs diamonds, yet they are EXTREMELY EXPENSIVE
- Everybody needs water, yet it is EXTREMELY CHEAP



Why are diamonds so expensive?



Why is water so cheap?

# Introduction to Economics

## *What is Economics?*

### Free goods and economics goods

What is meant by "goods" in economics?

- Goods are...

**the stuff people WANT because it make us feel GOOD!**

- *Haircuts, cars, toothbrushes, TVs, movies, happiness, shoes, vacations, friendship, hamburgers, love, jewelry, education, air (to breathe, duh!), fresh water, public transportation, sunshine, etc...*

Some goods are **ECONOMIC goods**: Scarce resources are used in the production of economic goods.

Some goods are **FREE goods**: The resources used in the production of free goods are NOT scarce. Usually, free goods are those things you enjoy that you don't have to pay for!

*From the list above, identify which are FREE and which are ECONOMICS goods*

Free goods

or

Economic goods

# Introduction to Economics

## *What is Economics?*

### Economics is about...

**Scarcity:** Economics is about the allocation of scarce resources among society's various needs and wants.

**Resources:** Economics is about the allocation of resources among society's various needs and wants.

**Tradeoffs:** individuals and society as whole are constantly making choices involving tradeoff between alternatives. Whether it's what goods to consume, what goods to produce, how to produce them, and so on.

**Opportunity Cost:** *"the opportunity cost is the opportunity lost"*. In other words, every economic decision involves giving up *something*. NOTHING IS FREE!!

### The Basic Economic Problem:

*Humans' wants are unlimited, while the resources needed to meet those wants are limited and scarce*

# Introduction to Economics

## *What is Economics?*

### Economics is about...

**Producers (firms) and consumers (households):** The economy is made up of these two major groups (there's also government, but that comes later). Most interactions in the marketplace are between households (that's us) and firms (that's the companies who make the stuff we demand)

**Supply and Demand:** Economics is about supply and demand. We (households) are the demanders and they (firms) are the suppliers. The price we pay is determined by the level of demand and the level of supply of any particular good.

**Trade and exchange:** Without trade, none of us would be here right now. Economics will help you understand how trade makes everyone better off

**Markets:** Markets are where all economic transactions take place. There are many different kinds of markets, some more competitive than others

Your first lesson in Economics - **SCARCITY EXISTS**

*All resources are limited, yet human wants are unlimited.*

Economics is the science devoted to dealing with the problem of scarcity.

# Opportunity cost

Opportunity cost is the cost of choice

- What would you buy with US\$10?
- How should the government spend US\$250 million?  
(Or, should the government cut taxes by US\$250 million?)
- What occupation will you choose when you finish your studies?
- How should a new business invest US\$20 million?
- Should we conserve more natural resources?

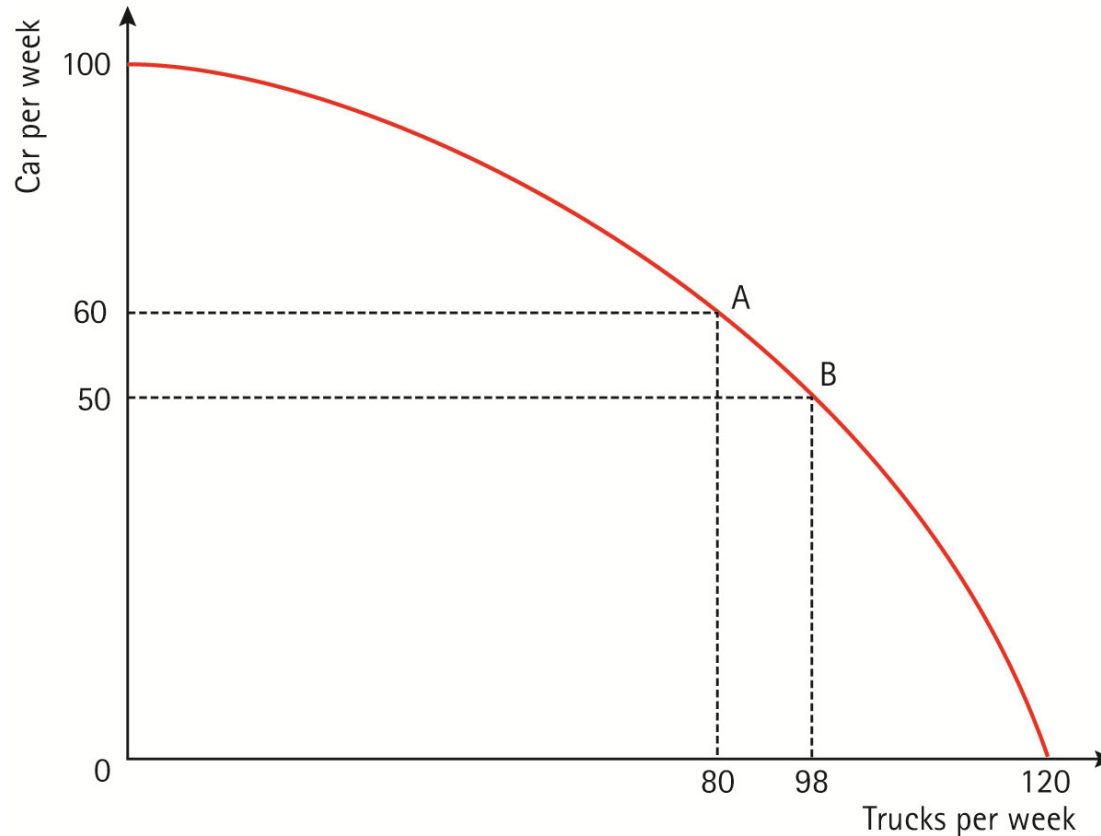
*... and what are the next best alternatives foregone?*



# Production possibility curves

A firm producing cars and trucks

What is the opportunity cost of producing 20 more trucks?



# Production possibility curves

- Production possibility curves (PPCs) show the maximum combined output of two or more products a firm or an entire economy can produce with its available resources
- Resources are being used **efficiently** if they are producing their maximum output
- But, because resources are limited, producing more of one product means producing less of another
- PPCs are therefore a useful way of showing the opportunity cost of producing more of one product in terms of how much of another must be given up

# Introduction to Economics

## *The Production Possibilities Curve*

### What is the PPC?

The PPC illustrates the possible combinations of goods or services that can be produced by a single nation, firm, or individual using resources efficiently

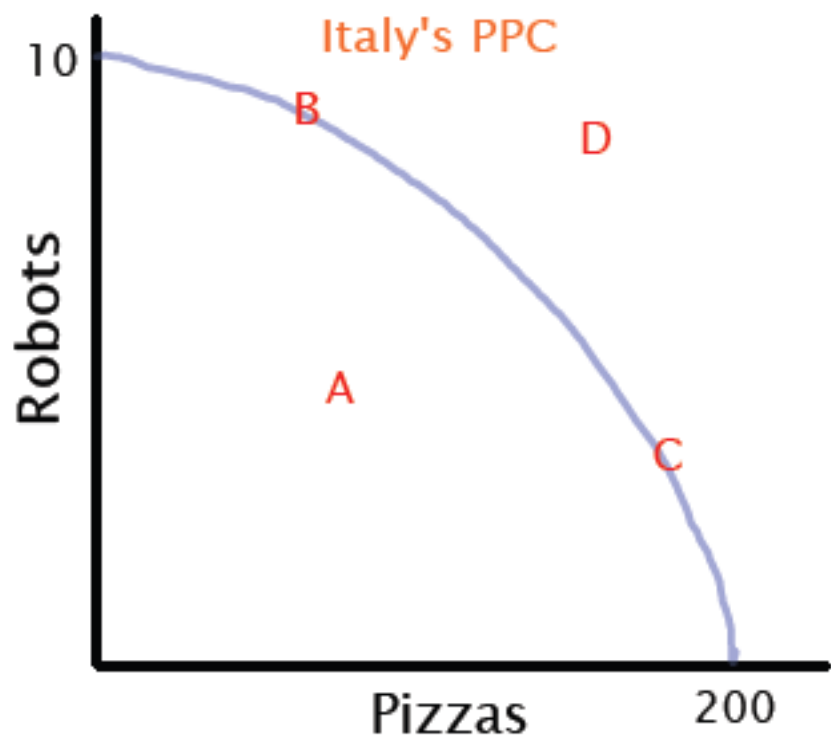
### What does it show?

That nothing is free and that everything has an opportunity cost. If society wants more pizzas, it must give up robots.

### What basic economic concepts can it be used to model?

- Scarcity, tradeoffs, opportunity cost, economic growth, efficiency, unemployment.

**Understanding the PPC:** The graph above shows that Italy can produce EITHER 10 robots OR 200 pizzas, or some combination of the two products, as long as it remains on or within its PPC. A point inside the PPC is attainable but not desirable. A point outside the PPC is desirable but unattainable.

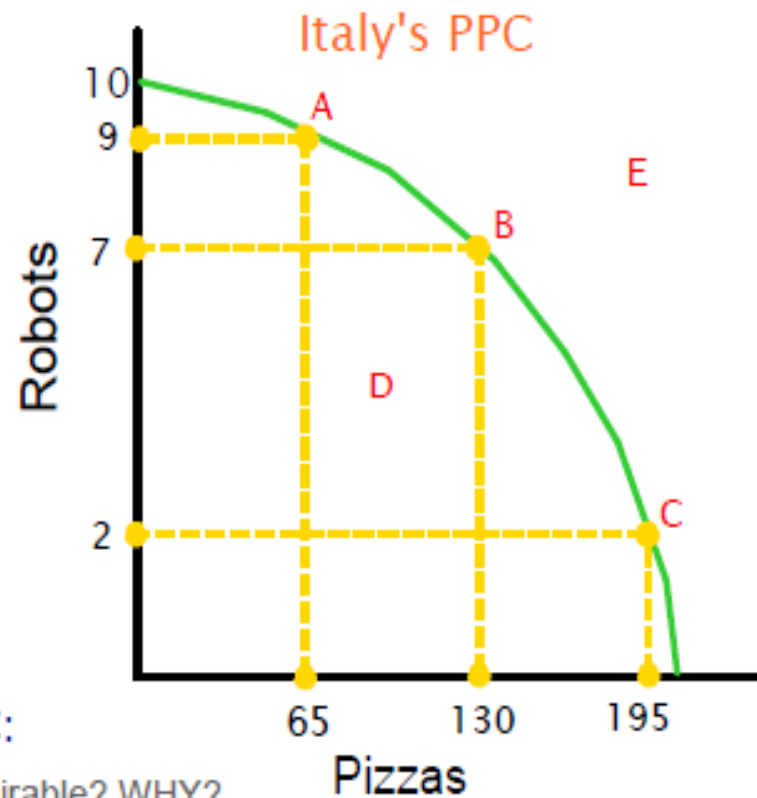


# Introduction to Economics

## The Production Possibilities Curve

### Assumptions about the PPC:

- The PPC is attainable only if a nation achieves full-employment of its productive resources
- The nation's resources are fixed in quantity
- Assumes the nation must choose between only two goods
- The economy is closed, i.e. does not trade with other countries
- Represents only one country's economy



### Questions to consider about the PPC:

- 1) Which point(s) are attainable and desirable? WHY?
- 2) Which point(s) are attainable but not desirable? WHY?
- 3) Which point(s) are unattainable? Is this point desirable? Explain.
- 4) Which point will mean more consumption in the future? Explain.
- 5) Which point means more consumption now? Explain.
- 6) Why is the PPC bowed outwards?
- 7) How does the PPC illustrate opportunity cost? Tradeoff? Scarcity?

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## The Production Possibilities Curve

### 1) Which point(s) are attainable and desirable?

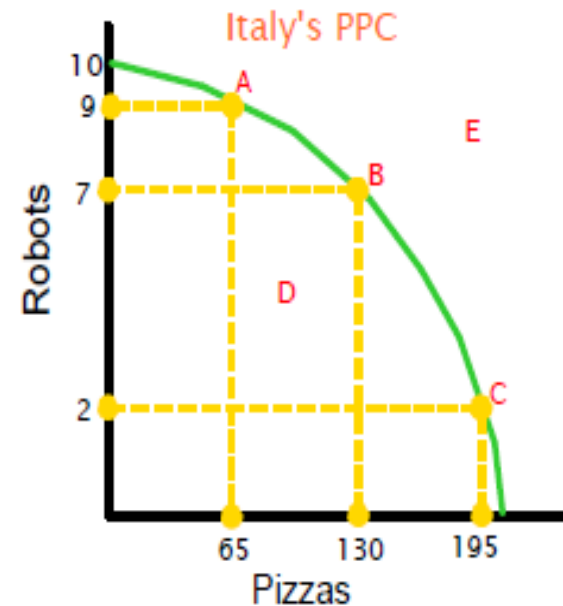
- Points on the PPC (A, B and C) are attainable through full employment, and thus desirable because they represent efficient use of Italy's resources.

### 2) Which point(s) are attainable but not desirable?

- Point D is inside the PPC, thus represents inefficient use of resources, and most likely high unemployment, and is thus undesirable.

### 3) Which point(s) are unattainable? Is this point desirable?

- Point E is beyond Italy's production possibilities and is thus unattainable. It is desirable because it represents greater consumption of both pizzas and robots.



### 4) Which point will mean more consumption in the future?

- Point A represents more consumption in the future, because Robots are a capital good, used to make other products for consumption. If Italy produces more robots now, it may mean more consumer goods in the future.

### 5) Which point means more consumption now?

- Point C because pizza is a consumer good. Households don't buy and use robots, but they do like to eat pizzas.

### 6) Why is the PPC bowed outwards?

- The Law of Increasing Opportunity Cost

# Introduction to Economics

## The Production Possibilities Curve

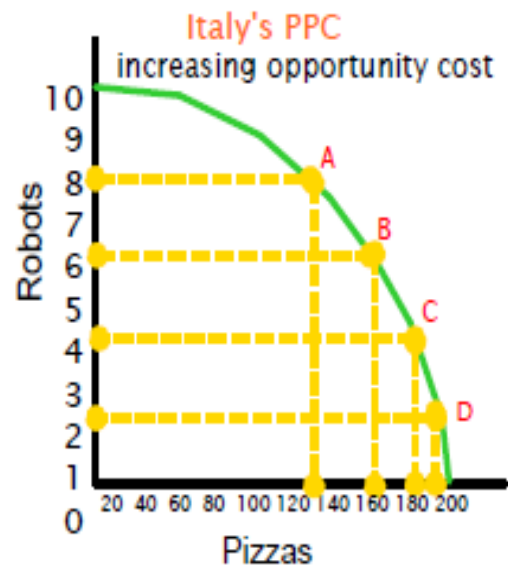
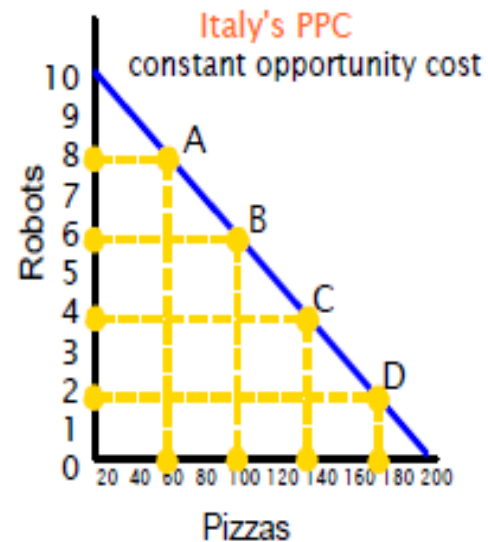
### Law of increasing opportunity cost:

*As the production of a particular good increases, the opportunity cost of producing an additional unit rises.*

**Rationale:** *Economic resources are not completely adaptable to alternative uses. Many resources are better at producing one type of good than at producing others.*

### Pizzas and Robots:

Assume Italy was producing 200 pizzas and 0 robots. Surely, many of the resources (land, labor and capital) being used to make pizzas would be better suited to making robots. As Italy starts making its first two robots it has to give up very few pizzas, since only those resources that are suited for robot production will be used. **At first, 2 robots "cost" Italy only 5 pizzas.** But as the country makes more and more robots, the opportunity cost increases, because at some point pizza makers will have to build robots. **As Italy approaches 10 robots, the opportunity cost of the last two robots is 130 pizzas,** as resources better suited for pizza production are employed in robot factories.



# Resource allocation

Because productive resources are scarce relative to human wants we must decide:

What to produce?	How to produce?	Who to produce for?
Should we use resources to produce as many consumer goods as possible or allocate some resources, for example, to build new roads or to provide better health care?	What tools and machinery will be needed? How many workers will be required and what skills will they need? Is it cheaper to employ more labour or more machinery?	Should people in the greatest need get the goods and services they require? Or should they be produced for people who can pay the most for them? What price should they pay?

# Problem Solving

- Remember the groups of problems you faced as survivors on a desert island
- Copy out the table and write down your solutions posed in each column. The first is completed for you

<b>What to produce?</b>	<b>How to produce?</b>	<b>For whom to produce?</b>
<b>Build shelter</b>	<b>Everyone helps using large palm leaves</b>	<b>Everyone shares a shelter</b>

Who decides and how they decide the 'answers' to these questions in an economy is referred to as the economic system



# Economic systems

Who in an economy decides what goods and services to produce, how to produce them and who to produce them for, and how are these decisions are made?

<b>A Pure Market economy</b>	<b>Mixed economy</b>	<b>Planned / Command economy</b>
<i>Who?</i> Private sector firms and consumers  <i>How?</i> The price mechanism	<i>Who?</i> Private sector firms and consumers, and a government  <i>How?</i> The price mechanism and government planning	<i>Who?</i> Government  <i>How?</i> Government planning

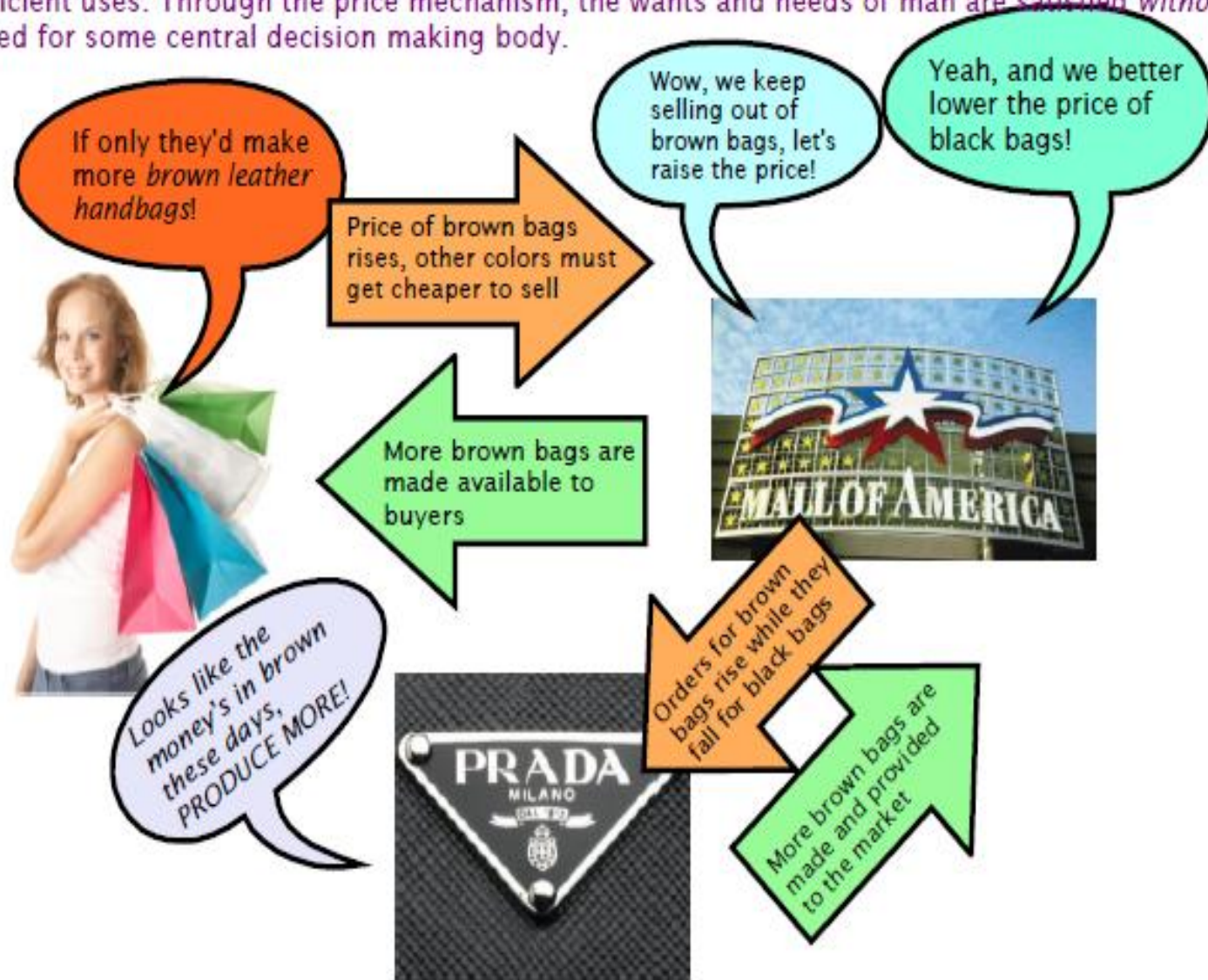
All countries have a government therefore most countries have a mixed economy

**Price mechanism** is an economic term that refers to the manner in which the prices of commodities affect the demand and supply of goods and services

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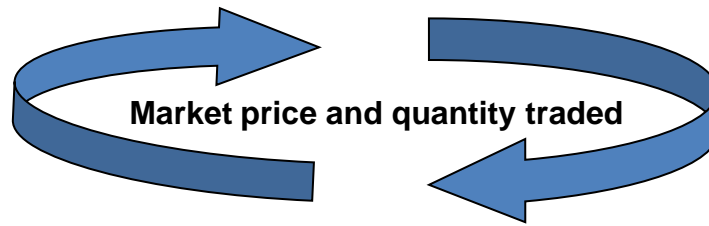
## *the Price Mechanism*

Prices: Prices are *signals* from buyers to sellers. Prices help allocate resources towards their most efficient uses. Through the price mechanism, the wants and needs of man are satisfied *without* the need for some central decision making body.



# The price mechanism

A **market** is any set of arrangements that brings together all the producers and consumers of a good or service so that they can engage in exchange.



**Consumers consume goods and services to maximize their utility (satisfaction)**

**Private firms produce goods and services to maximize their profits**

As consumer demand for a product rises

**MARKET PRICE RISES**

Production becomes more profitable, so producers increase output

As consumer demand for a product falls

**MARKET PRICE FALLS**

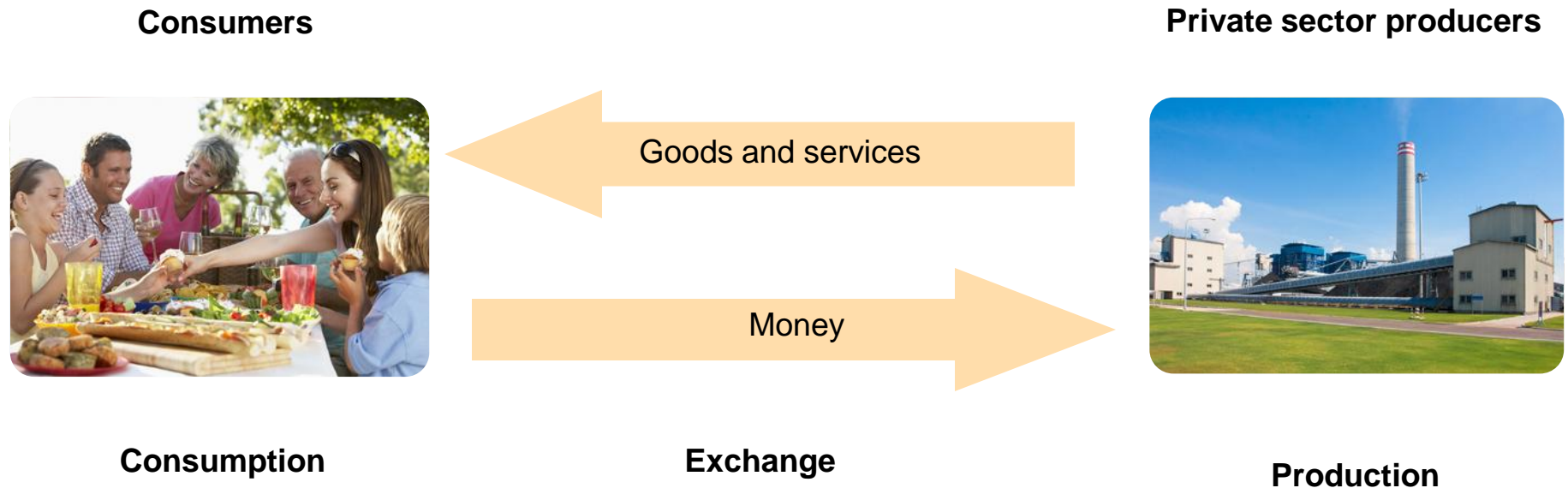
Production becomes less profitable, so producers reduce output

# The price mechanism

- In a market economy, high or rising prices provide firms with important signals about what consumers want and are willing to pay for, and therefore which products will be profitable to make and sell. Likewise if the market price and profitability is falling because consumer demand is falling because is consumer demand shrinking.
- Therefore in the market system it is this price mechanism that guides the many decisions taken by producers and consumers about how scarce resources should be allocated.
- The desire by private firms to make profits and the preferences and spending patterns of consumers will determine what goods and services are produced, how they are produced, and who they are produced for.



# The market economic system



In a **free market economic system** all decisions are taken by **private sector** organizations and individuals. There is little or no role for government or a **public sector** and therefore little or no taxation or public spending.

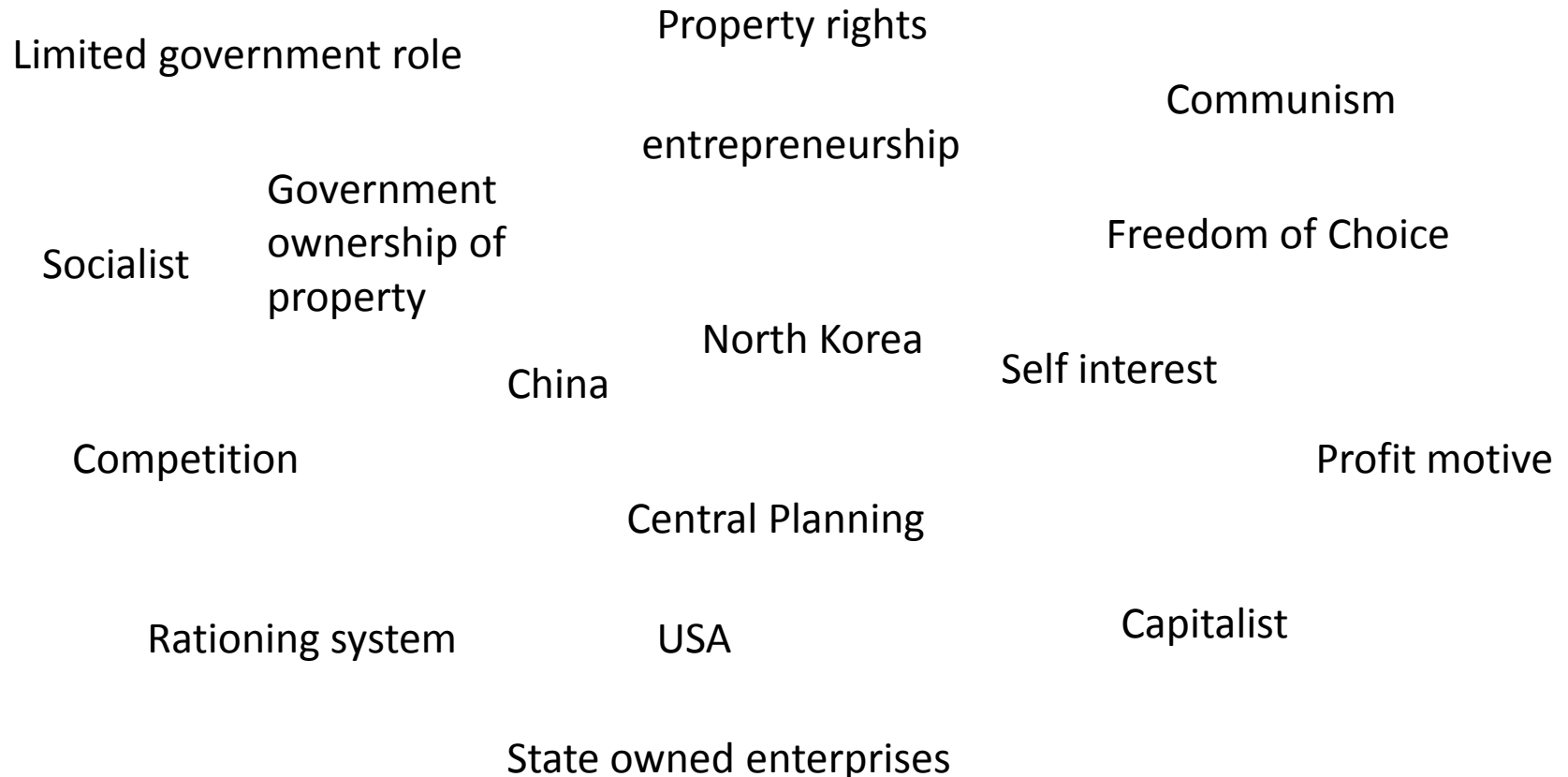
# Economic systems

0% ← less government involvement      more government involvement → 100%

MARKET  
ECONOMY

MIXED  
ECONOMY

PLANNED  
ECONOMY



# Economic systems

0% ← less government involvement      more government involvement → 100%

MARKET  
ECONOMY

MIXED  
ECONOMY

PLANNED  
ECONOMY

Self interest

USA

Limited government role

Communism

entrepreneurship

Socialist

Profit motive

Central Planning

North Korea

Competition

Freedom of Choice

China

Government  
ownership of  
property

Property rights

State owned enterprises

Capitalist

Rationing system



# What's good about the market system?

- A wide variety of goods and services will be produced to satisfy consumer wants
- Firms respond quickly to changes in consumer wants and spending patterns
- The profit motive of firms encourages them to develop new products and use the most efficient methods of production
- There are no taxes

If consumer demand is rising, prices will rise and production becomes more profitable. Entrepreneurs will allocate resources to their most profitable uses

Profits can be increased by increasing sales and/or reducing costs of production

There is no public sector in a totally free market economic system

# How the market system can fail

**Market failure:** when free markets fail to produce goods and services that are worthwhile or when the decisions of producers or consumers result in wasteful or harmful activities



**Firms will only produce goods and services if they are profitable**

**Firms will only supply products to consumers who are able to pay for them**

**Resources will only be employed if it is profitable to do so**

# How the market system can fail

**Market failure:** when free markets fail to produce goods and services that are worthwhile or when the decisions of producers or consumers result in wasteful or harmful activities



**Harmful goods may be produced if it is profitable to do so**



**Some producers and consumers may ignore the harmful effects of their activities on others and the environment**



**Some firms may restrict competition, mislead consumers and charge them very high prices**

~~NATIONAL PARK~~



**Firms will only produce goods and services if they are profitable**

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**Resources will only be employed if it is profitable to do so**



**Harmful goods may be produced if it is profitable to do so**

**Some producers and consumers may ignore the harmful effects of their activities on others and the environment**

**Some firms may restrict competition, mislead consumers and charge them very high prices**

# How the market system can fail

- Using the handout “How can market system fail” describe or demonstrate market failures consistent with those shown in the slide presentation from last class
- Use the market failures from the handout and identify some ways a government might be able to solve them.

# Activity: Market Failure

Headline	Type of Market Failure	How govt. intervention might solve the problem
World's top firms.....	Some producers and consumers may ignore the harmful effects of their activities on others and the environment	Introduce regulations and organizations to monitor pollution output.

# The mixed economic system

In a **mixed economy** a **government** can intervene in different markets in an attempt to correct the worst market failures:

- ✓ It can provide useful and essential goods and services
- ✓ It can provide goods and services for people in the greatest need
- ✓ It can employ people in **public sector organizations** and provide financial support to private sector firms to boost output and employment
- ✓ It can outlaw the production of harmful goods and dangerous activities
- ✓ It can outlaw business practices that restrict competition or mislead consumers

# The mixed economic system

A mixed economy therefore combines the advantages of a market economic system with:

- government ownership and control of some scarce resources
- government interventions to regulate the actions of private sector firms and consumers in some markets





# Government intervention: some problems

By correcting failures in some markets, a government may distort the allocation of resources and cause problems in others:

- X High taxes on people and firms can distort market price signals and reduce work incentives
- X Land regulations can increase production costs and therefore reduce the profitability and supply of some goods and services
- X Public sector organizations may be inefficient and produce poor-quality goods and services because they do not have to make a profit
- X Some government spending may be for political or even personal gain

# Key point summary

- The market for a particular good or service consists of all those producers willing and able to supply it and all those consumers willing and able to buy it.
- Producers use market price signals to determine what is profitable. Rising consumer demand for a product will tend to increase its price and profitability.
- Most private sector firms aim to maximize their profits. Consumers aim to maximize their satisfaction or utility.
- A market economy will profit a wide variety of goods and services IF it is profitable to do so, but only for those with the ability to pay.
- Market failures may cause scarce resources to be allocated to uses that are wasteful or even harmful to people or the environment.
- A government can intervene to provide employment and subsidies to allocate scarce resources and services for those in need.
- But government intervention can create its own problems: taxes can reduce incentive to work, regulations can impose costs on firms which reduce output, etc. Plus public sector organizations may be inefficient as they do not have to make a profit.

# What is a market?

The **market** for a good or service consists of all those producers willing and able to supply it and all those consumers willing and able to demand it



demand goods and services to satisfy their needs and wants

supply goods and services to earn profits

# How many fizzy drinks?

If cans were \$5 each



If cans were 10 cents each



Many producers

Few consumers



Few producers

Many consumers

# Demand

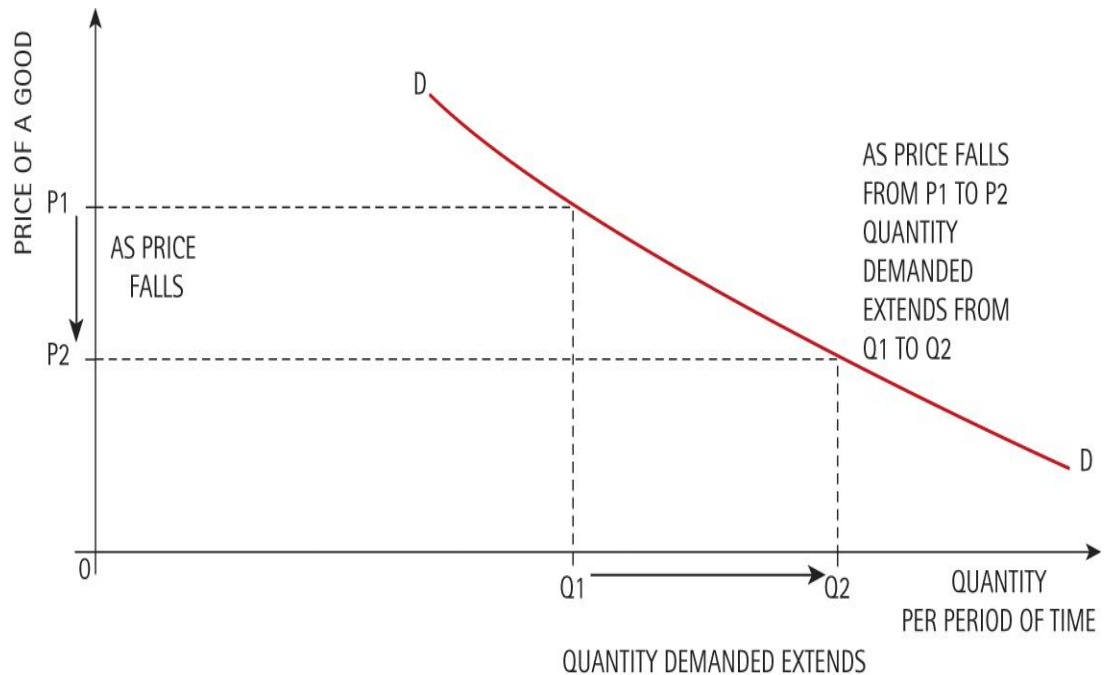
The want or willingness of consumers to buy a product

To be an **effective demand** a consumer must have enough money to buy the product

As **price rises**, the **quantity demanded** by consumers **contracts**

As **price falls**, the **quantity demanded** by consumers **extends**

A **demand** curve slopes downwards



# Substitutes and complements

**Substitutes** can satisfy the same want



or



or



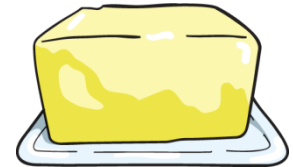
or



**Complements** are in joint demand



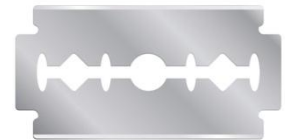
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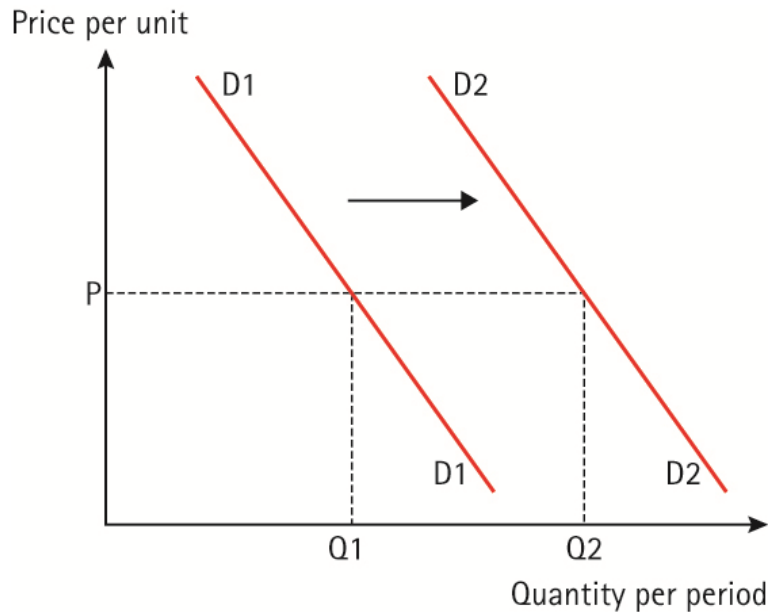


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# Market demand

The sum of all individual consumer demands for a particular product



## A rise in demand

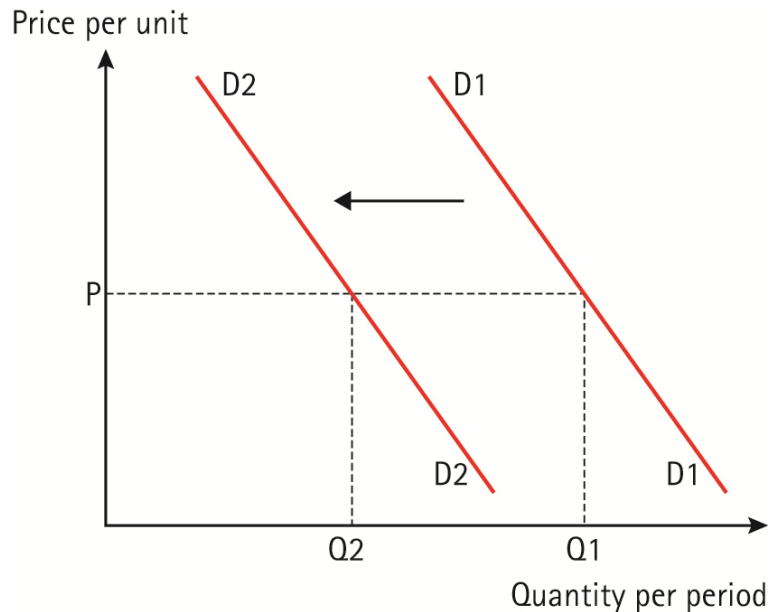
The market demand curve shifts outwards

Possible causes are:

- an increase in disposable incomes after tax
- a rise in the price of substitutes
- a fall in the price of a complement
- tastes and fashion favour the product
- an increase in advertising
- a rise in the population
- other factors, e.g. hot weather increases demand for cold drinks and sun creams

# Market demand

The sum of all individual consumer demands for a particular product



## A fall in demand

The market demand curve shifts inwards

Possible causes are:

- a fall in disposable incomes after tax
- a fall in the price of substitutes
- a rise in the price of a complement
- tastes and fashion favour other products
- a reduction in advertising
- a fall in the population
- other factors, e.g. hot weather reduces the demand for winter coats







