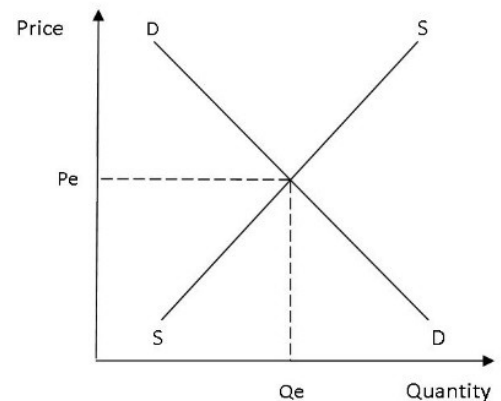


# Economics Theme 1

## Introduction to Markets and Market Failure

### Course companion 3

Applications of elasticity  
Functions of price mechanism  
Price mechanism in context  
Rational decision making  
Utility  
Alternative views of consumer behaviour – behavioural economics



**Name:**

**Teacher:**

**Tutor group:**

**PLEASE BRING YOUR COURSE COMPANION ALONG TO ALL LESSONS**

## Key Terms

Rational consumer	A person who weighs up the costs and benefits to him or her of each additional unit of a good purchased.
Rational decision making	Where consumers allocate their expenditure on goods and services to maximise utility and producers allocate their resources to maximise profits
Total utility	The total satisfaction a consumer gets from the consumption of all the units of a good consumed within a given time period
Marginal utility	The utility or extra satisfaction gained from consuming one extra unit of a good within a given time period
Diminishing marginal utility	As more units of a good are consumed, additional units will provide less additional satisfaction than previous units
Price mechanism	The mechanism through which price is determined in a free market system
Government failure	Government intervention leads to an inefficient or misallocation of resources / welfare loss

## The price mechanism in the context of different types of markets, including local, national and global markets

## HOUSING MARKET

The housing market includes the market for owner-occupied housing and the market for rented accommodation.



a) What is the current rate of interest and how does this affect the affordability of housing?

b) How might interest rate changes affect the demand and therefore, price of housing?

Demand for housing is affected by:	Supply of housing is affected by:

<https://www.gov.uk/affordable-home-ownership-schemes>

**Read the article below adapted from the Guardian:**

**Why younger people can't afford a house:  
money became too cheap**

Dominic Frisby, Guardian, 12/4/16

House prices have risen by 10% in the last year, the Halifax announced last week. What that means is that the intergenerational wealth divide just rose by another 10% – and anyone born after 1985 is going to find it 10% harder to ever buy a home. There is perhaps no greater manifestation of the wealth gap in this country than who owns a house and who doesn't.



The standard solution is: “we need to build more”, but this is not a simple supply-and-demand issue. Between 1997 and 2007 the housing stock grew by 10%, but the population only grew by 5%. If house prices were a function of supply and demand, they should have fallen slightly over this period. They didn't. They rose by more than 300%.

The cause of house price rises is the unrestrained supply of something else: money. Mortgage lending over the same period went up by 370%, thinktank was newly created debt that pushed up prices in a lending, which gave birth to a national obsession. but financial assets. Property owners became immensely anything. And this great, unearned wealth saw the rise of landlord.

Positive Money's research shows. It decade of extraordinarily loose Houses were no longer places to live, wealthy without actually doing a new rentier class: the buy-to-let

When you have runaway inflation such as this, the Bank of England has a responsibility to quash it, usually by putting up interest rates. But – and here is the great sleight of hand – the Bank has seen fit not to include house prices in its measures of inflation. So, throughout the 90s and 00s, they could then “prove” inflation was low or moderate and interest rates meandered lower. Meanwhile, more and more mortgages were issued, and so more and more money was created, and it pushed up prices. The government didn't mind.

Homeowners vote and homeowners were happy – they were getting rich. The fraud persists today. The Bank of England says inflation is 0.3%. Really? With house prices up by 10% last year?



When you make money this cheap, you create bubbles. Combining a money system that requires ever-expanding debt to function with a national policy of ignoring where that money goes is asking for trouble. And trouble is what we have. 2008 gave us the crisis we needed to address the problems inherent in our money system – how is money created? Who gains and who suffers by this system? – but our leaders chose not to. Instead interest rates were slashed, so mortgages and other debts became incredibly cheap to service (great if you already had a mortgage). We got the great obfuscation that is quantitative easing; £375bn of newly printed money flowed into the financial sector and on into the London property in which it mostly lives. Asset-owners were bailed out and the next generation was made to pay the price.

Then we got help-to-buy, which is just another way to get new money into the market. And where lending has tightened in the UK, it hasn't abroad, and so we have vast sums of money created overseas now entering our housing market and further driving up prices. Today in London everywhere you look there is a crane. There is no shortage of newbuild, yet we still have a crisis, because prices are so high. People associate debt with the poor. But large, cheap debt is, in fact, a luxury of large corporations, of the rich and of governments. It has created this unholy alliance between the three and with it an international culture of keeping debt costs low and asset prices high, whatever the consequences.



Planning laws are the second part of the problem. All this money is pouring into a market that is restricted in how it can expand. Just 1.1% of rural and urban land in England and Wales has domestic property on it, according to the 2011 National Ecosystem Assessment. 1.1%! Another 1% has commercial property and 2% is roads. The rest is not built on. You could almost double the housing stock of England and Wales, using little more than 1% of available land. But planning laws prevent that. An acre of rural land worth £10,000 becomes an acre of land worth as much as £1m once it has planning permission. That is an expensive and needless cost of government. The 1947 planning act was founded on the laudable aim "that all the land of the country is used in the best interests of the whole people". The opposite has happened. The act reinforced the monopoly of the landowner and we now have a situation where more than 70% of UK land is owned by just 6,000 or so landowners (the Crown, large institutions and a few rich families). The act has led to huge concentrations of capital and people in areas that are already built up – especially London – bringing vast unearned wealth to those who own at the expense of those who don't. It has actually caused the wealth gap to grow.

With reference to the article and using a demand and supply diagram, explain why house prices increased

**Draw demand and supply diagrams and explain the impact on the price of owner-occupied housing of the following:**


1. A rise in mortgage interest rates	2. More land available for the building of new homes
3. Wages of construction workers rise	4. increase in the availability of mortgages
5. increase in availability of cheap rented accommodation	6. An increase in the cost of renting

### Extract 1 Rising house prices

Average house prices in the UK increased from £100,000 in the year 2000 to £250,000 by 2013. They are set to increase further in 2014, leading to fears of a 'property bubble'. Both demand-side and supply-side factors are to blame. Until the recession in 2008–10, real incomes rose strongly, supported by an increase in immigration from eastern Europe. Record low mortgage interest rates have played an important part in stimulating recovery in the housing market. There are also severe constraints from house building regulations and a shortage of skilled building workers. Delivery times for bricks and other building materials have also increased, forcing firms

to look to imports. However, the government has responded by increasing training programmes in the building industry.

Rising house prices should be bad news for first-time buyers. However, the government launched a 'Help to buy' scheme, enabling first-time buyers to obtain mortgages of up to 95% of the value of the property. This means only a 5% cash deposit is required compared to the usual 40%. Banks are more willing to provide mortgages under the scheme, since the government guarantees the house loan. Some £12 billion of house loans are guaranteed by the government.

- a) With reference to Extract 1, explain how 'demand-side' factors contributed to the rise in UK house prices between 2000 and 2013. Illustrate your answer with a supply and demand diagram. (5 marks)
- b) With reference to Extract 1, explain the likely impact of the government 'Help to buy' scheme on first-time buyers. (4 marks)
-  c) With reference to Extract 1, discuss whether the supply of new-build housing is likely to be price elastic or price inelastic. (10 marks)

**Plan:**

**Application of elasticities to the housing market**



## *The market for housing*

Extract 1: The Price elasticity of supply of new housing in selected countries

Country	Price elasticity of supply
Netherlands	+0.3
UK	+0.5
Denmark	+0.7
France	+1.1
USA	+1.4
Germany	+2.1

Extract 2: Housing market elasticities in the UK

UK households have an income elasticity of demand for housing that exceeds +1. However, the demand for housing is price inelastic. These demand elasticities, combined with a low price elasticity of supply for housing, push the UK's housing market towards long-term rising prices. New housing would need to have a price elasticity of supply of +10 for supply to equal demand in the long term. But if the price elasticity of supply for new housing remains low, as Extract 1 shows, house prices will never be stable in the UK when the demand for housing is increasing.

### Questions

- Define price elasticity of supply (2)
  - Compare the price elasticities of supply for new housing in the countries shown in Extract 1. (2)
- With the help of a supply and demand diagram and the information on elasticities in Extracts 1 and 2, assess how an increase in household income affects the price of housing in the UK. (6)



**Plan:**

<https://www.independent.co.uk/life-style/flat-pack-house-six-hours-build-three-rooms-price-microhousing-affordable-a8069731.html>

**The price mechanism in the context of different types of markets, including local, national and global markets:**

### ***The Market for Shares***

There are various legal types of business and not all have shares, for example, sole traders and partnerships do not have shares. However, private limited and public limited companies do.

### **Public Limited Companies (PLCs)**

These are companies which are owned by shareholders. Unlike Private Limited Companies (LTD) shares for PLCs can be bought and sold on the stock exchange. Shareholders have **limited liability**. This means that if the company goes bankrupt, the shareholders can only lose the amount of money they invested in shares and cannot be forced to sell their house, etc to pay off debts.

### **Dividends**

A dividend is a share of the profits of a business. Dividends are paid to shareholders to give them an incentive to buy shares in the company.

### **FTSE 100 index**

This is an index of the share prices of the biggest 100 companies listed on the London Stock Exchange. The acronym FTSE comes from Financial Times and Stock Exchange as these are the two organisations that create the index. The biggest companies are measured in terms of **market capitalisation** which is the total value of all the shares issued.



### **The importance of company profits**

If company profits rise then companies may pay higher dividends to shareholders. This is likely to cause share prices to rise as it is more lucrative to own the shares if the return is higher. This is also the case if investors expect the company to make higher profits as they will anticipate higher dividends in the future.

### **The determination of the share price**

The share price is determined by the demand and supply of shares. If investors in the stock market believe the company will make less profit in the future they are less likely to buy shares in that company and more likely to sell shares in that company. So the demand for the shares will fall and the supply of the shares will rise causing the share price to fall. (vertical S curve if NOSH fixed)

**Draw a diagram to show the effect on the share price if investors believe company profits are likely to rise in the future:**



Using diagrams, explain the effect on the demand, supply and price of shares in each of the following situations:

1. A copper mining company experiences rapidly rising copper prices due to rapid economic growth in China
2. A luxury car maker at a time of world recession
3. A successful car manufacturer has launched a takeover bid for a perfume manufacturer, but investors in the market are not convinced the takeover will be successful as they believe there are no marketing benefits or cost efficiency savings to be made from the merger.

**The price mechanism in the context of different types of markets, including local, national and global markets:**

## ***The Commodity market***

(Links to theme 4 – volatile commodity prices as a factor influencing economic growth and development; primary product dependency; buffer stocks and minimum price schemes).

Demand for agricultural goods (**soft commodities**), e.g. corn, barley and wheat tend to be price inelastic because they are necessities for most people. Supply also tends to be inelastic, as supply cannot easily be altered once crops are sown. In periods of bad weather, supply can be severely affected (supply curve shifts to the left) this forces prices up. Commodity markets also include various **hard commodities** such as raw materials used in the production process of many manufacturing industries. E.g. tin, gold, copper aluminium. Supply of hard commodities can be relatively inelastic due to the **time taken** to find and extract deposits from mines

The prices in these markets can tend to be **volatile** (fluctuate). This is also due to the actions of speculators, who buy and sell commodities in order to make a profit and exchange rate changes. Also, demand changes such as, in a recession, firms may produce less and the demand for raw materials fall.

1. Why does the demand and supply of commodities tend to be price inelastic in the short run?

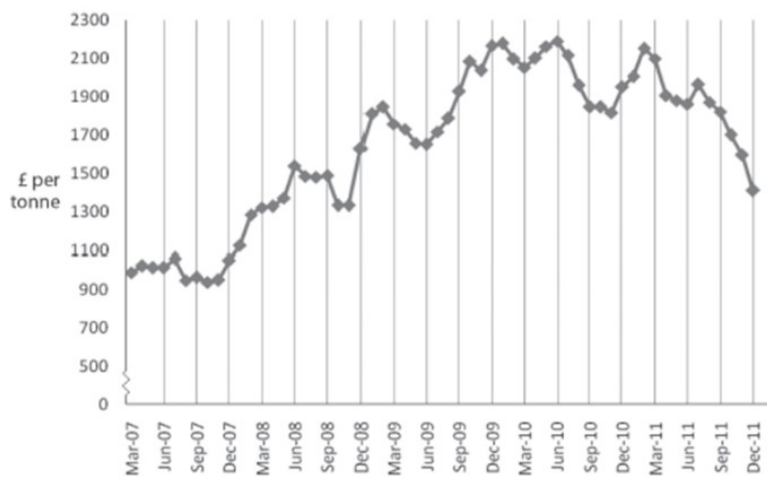
2. Draw a demand/supply diagram to show the effects of bad weather on crops.



## Exam practice for section B:

### The price of cocoa

Figure 1 Cocoa prices, March 2007 – December 2011



(Source: © U.S. Department of Agriculture)

### Extract 1 Unstable cocoa prices

The price of cocoa fell sharply from £2 153 to £1 410 per tonne between February and December 2011. This follows a decrease in consumption from Europe - the world's largest consumer of the commodity - amid fears that it was entering a recession. At the same time there was a very good cocoa harvest in the Ivory Coast, the world's biggest producer, which supplies around 40% of global output. 5

The supply of cocoa in 2012 is set to exceed demand by a record 400 000 tonnes, adding to producer stockpiles. There are fears that farmers will abandon looking after their cocoa trees, which take five years to grow to maturity, and switch to growing rubber. However, rubber prices have also decreased in recent years.

Cocoa is subject to enormous price fluctuations: in June 2010 its price reached £2 190 a tonne. This was the highest price for 33 years, resulting from a disappointing crop caused by poor weather, ageing trees and a temporary export ban imposed by the newly elected President of the Ivory Coast. Price fluctuations create instability in income, employment and investment among cocoa farmers. 10

To reduce the damaging effects of fluctuating cocoa prices, the Ivory Coast government has introduced a guaranteed minimum price scheme to support farmers. The success of this scheme will depend partly on the response of international cocoa buyers and whether or not they will seek to purchase from other major producers such as Ghana and Nigeria. 15

In the long term, as the emerging markets continue to grow, demand for cocoa from China and India is likely to increase. Consumers in these countries are developing a strong taste for chocolate. Cocoa is a key ingredient in making chocolate products such as Cadbury's Dairy Milk bar and Nestlé's Kit Kat bar. However, it only forms around 6% of the price of a bar of chocolate. 20

(Source: adapted from 'Euro debt crisis bites into cocoa' by Emiko Terazono, © The Financial Times Ltd, 5th December 2011 and <http://www.traidcraft.co.uk>)


- a) With reference to the first paragraph of Extract 1, explain the causes of the decrease in cocoa prices between February and December 2011. Illustrate your answer with a supply and demand diagram. (5 marks)
- b) With reference to the information provided and your own knowledge, examine whether the supply of cocoa is likely to be price elastic or price inelastic. (8 marks)
- c) Assess the likely effects of a fall in the price of cocoa on the producers of chocolate products such as Cadbury's Dairy Milk bar and Nestle's Kit Kat bar. (10 marks)
- d) Discuss the likely consequences of fluctuating prices for cocoa producers. (12 marks)

**SIR**

E.g. if prices increase, this signals to producers that demand is probably high and that they should increase production.

Rationing device, e.g. when demand > supply, prices are bid up so that the good/service is rationed out to those who can afford to pay.

Prices have a signalling function. Prices adjust to demonstrate where resources are required and where they are not. Prices rise and fall to reflect scarcities and surpluses. If market prices are rising because of stronger demand from consumers, this is a signal to suppliers to expand output to meet the higher demand. If the demand for computer games increases, producers stand to earn higher revenues and profits from selling more games at a higher average price. So an outward shift of demand leads to an expansion along the market supply curve (*ceteris paribus*).



## 2. The incentive function

When the price of a good rises it creates an incentive for firms to shift production towards those products that help generate higher profits. Likewise, falling prices may create an incentive for firms to move away from the production of a particular good.

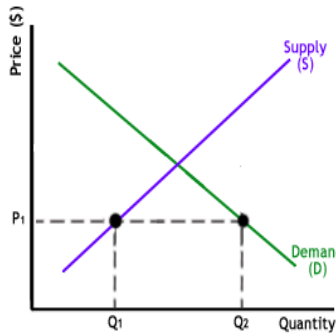
Prices show consumer preference, for example, an increase in demand for mobile phones causes the demand curve to shift to the right. This is a **signal** to producers that consumers are prepared to demand more at any given price. This acts as an **incentive** for producers to increase supply.

**Draw a diagram to show an increase in demand for mobile phones and explain how this acts as a signal and incentive to producers:**

<b>Diagram:</b>	<b>Signal:</b>
	<b>Incentive:</b>

### 3. The rationing function

Price is a rationing device because resources are scarce, not everyone is able to buy everything they want. Prices serve to ration scarce resources in situations when demand in a market outstrips supply. When there is a shortage of a product, the price is bid up – leaving only those with sufficient willingness and ability to buy with the effective demand necessary to purchase the product. When demand is greater than supply, prices will rise so that the good or service is rationed out only to those who can afford to pay for them.



Explain the rationing function of the price mechanism:

Exam practice for section A:

a)

With reference to the functions of the price mechanism in a free market economy, which of the following statements is true?

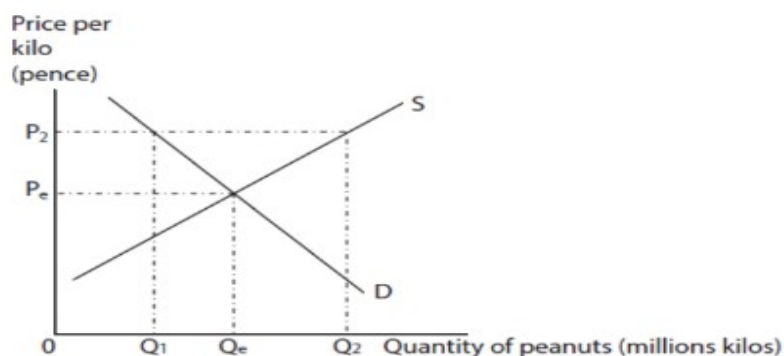
(1)

- A Falling prices will encourage businesses to enter a market
- B The price mechanism is used by a government to create production targets
- C Excess supply of a good can be eliminated by allowing its price to rise
- D The price mechanism acts as a rationing device

Answer

☐

b)



The diagram shows a competitive market for peanuts. Assuming the current price is  $P_2$ , the most likely outcome is the

- A price will fall
- B supply curve will shift to the left
- C quantity demanded will fall
- D quantities supplied and demanded will remain unchanged

**Rational decision making - The rational consumer** is a person



who attempts to get the best value for money from purchases, given a limited income, i.e. try to ensure that the benefits of a purchase are worth the expense. Underlying assumptions: consumers aim to maximise utility; firms aim to maximise profit

## Diminishing marginal utility and the shape of the demand curve

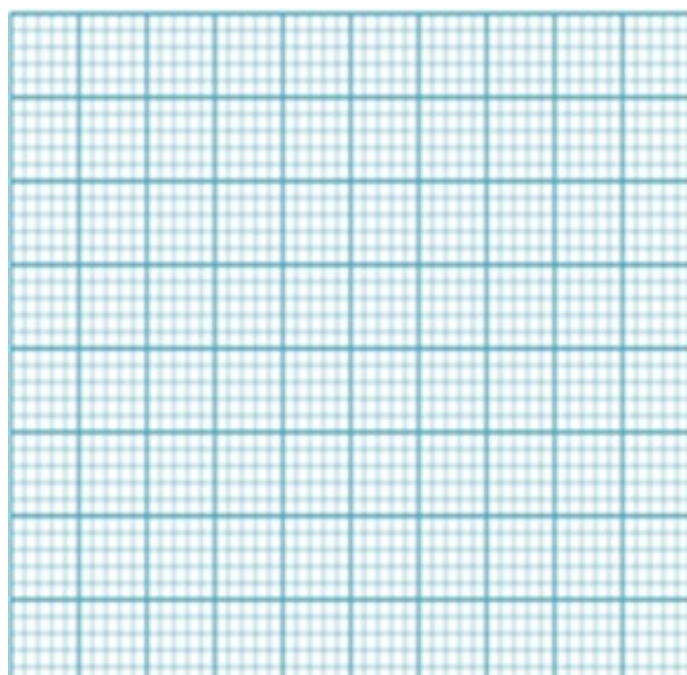
The downward-sloping demand curve can also be explained by the concept of **diminishing marginal utility**. Marginal Utility (**MU**) is the additional utility (satisfaction) gained from each additional unit of consumption. Total utility will normally rise as additional units of a product are consumed. Marginal utility will tend to diminish with each extra unit. E.g. the first jam doughnut might give a high level of utility if the individual is hungry. However, a second jam doughnut will not provide as much utility as the first, because the individual is not as hungry. A third jam doughnut will provide even less utility than the second jam doughnut as the individual becomes full. This decrease in marginal utility demonstrates the law of diminishing marginal utility, which helps economists to understand the negative sloping demand curve.



## Total Utility (**TU**)

Total utility from consuming the jam doughnuts will increase as more are consumed but this occurs at a diminishing rate. Eventually an individual might feel sick from eating too many jam doughnuts and so marginal utility could fall dramatically.

Ollie's utility from consuming crisps (daily)		
Packets of crisps consumed	Total Utility (TU)	Marginal Utility (MU)
0	0	
1	7	
2	11	
3	13	
4	14	
5	14	
6	13	



### Task:

1. Calculate Marginal Utility in table above
2. Plot both Total Utility and Marginal Utility on the Y axis and packets of crisps on the X axis
3. Explain the relationship between Total Utility and Marginal Utility:

## How does marginal utility influence the shape of the demand curve?

As marginal utility falls from each extra good consumed, it means consumers will only buy more of the good if the price falls – hence the downward-sloping demand curve.

### Exam practice for section A:

A restaurant in London offers an "all you can eat buffet for £8.99". At this price you can refill your plate as many times as you like.

(a) With reference to the statement above explain what is meant by 'diminishing marginal utility'.

(3)

---

---

---

---

---

---

---

---

---

---

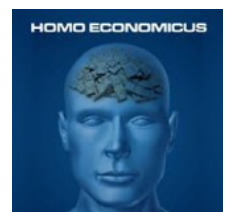
**Extension:** A difficulty arising from the utility approach to explaining demand, is how to measure utility. Utility is a subjective concept. For example, Lucy's satisfaction from eating one jam doughnut will be different to the level of satisfaction James gains from eating one jam doughnut. Economists use an imaginary measure called utils, where a util is one unit of satisfaction.

### Rational decision making

When building supply and demand models we assume that consumers aim to maximise the utility they derive from purchasing goods and services and firms aim to maximise their utility by selling goods and services for the maximum possible profit. This involves producing at the level of output where total revenue exceeds total cost by the largest amount.

Rational consumers will aim to maximise their 'utility' (which means happiness or satisfaction). Neoclassical economics assumes consumers are '**rational**'. This means they have fixed preferences e.g. prefer beans to peas, and will buy more of goods that become cheaper. Behavioural economics looks at why consumers sometimes make 'irrational' decisions).

[Questions on video – Horizon 'How you really make decisions'](#)



As an introduction to **behavioural economics**, this video looks at decision-making, revealing that the intuitive part of your mind is a lot more powerful than you may realise.

1. Why does Daniel Kahneman think New York cab drivers work in an illogical way?
2. What award did Daniel Kahneman receive for his work?
3. Explain Kahneman's 2 types of thinking:

System 1

System 2

4. Which of this type of thinking do we use most of the time according to Kahneman?
5. Give an example of how our biases can lead to us making irrational decisions
6. What is confirmation bias?
7. What is loss aversion?
8. What new branch of Economics has this research led to?

**Alternative views of consumer behaviour – Behavioural economics**

In recent years, there has been a growth in books, blogs and articles about behavioural economics. **Behavioural economics draws on psychology, neuroscience and economics.** Old classical economic models assumed individuals were rational decision makers who make predictable decisions with fixed preferences, e.g. prefers apples to pears or will buy more goods if the price falls. Thaler and Sunstein in their book 'Nudge' referred to these as an 'Econ' and instead, look at economic problems through the eye of a 'human,' i.e. not always rational.

'Econ' is the consumer in our economics textbooks. 'Humans' on the other hand, do make mistakes and can act irrationally or inconsistently.

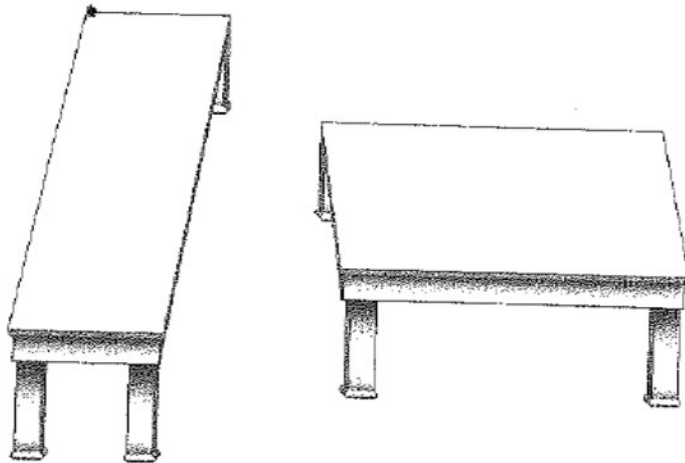


Figure 1.1. *Two tables (Adapted from Shepard [1990])*

(Image from 'Nudge')

### **Task:**

Look at the tables - which is the longest?

Now take out a ruler and measure each table

### **Conclusion:**

### **Types of thinking:**

In Nudge, Thaler & Sunstein talked about different types of thinking. The Automatic System is your gut reaction and the Reflective (rational) system is your conscious thought. Gut feelings can be quite accurate but we often make mistakes because we rely too much on our Automatic System.

To see how automatic (or intuitive) thinking works, answer the following questions. Write down the first answer that comes to mind and then pause to reflect:

## An introduction to Behavioural Economics



Answer these questions as quickly as you can:

A bat and ball cost £1.10 in total. The bat costs £1 more than the ball. How much does the ball cost?

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?

In a lake, there is a patch of lily pads. Every day the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?

### Intuitive/automatic e.g. Homer Simpson

From an older part of our brain  
(lizards have it)  
Habit  
Routine  
Unconscious



### Reflective (rational) thinking e.g. Mr Spock

Deliberate  
Logical  
Critical  
Creative



Sometimes, we may act 'irrationally.' We may buy impulsively or out of habit.

### Purchasing decisions may be affected by such things as:

- Habit, inertia or the need to feel valued.
- What we feel is the 'right thing to do' (social norms)
- What other people are doing (herd mentality)

In other words, we need to consider a wide range of factors that affect consumer behaviour. Behavioural economists have used psychology and conducted experiments to suggest that consumers *do not always make rational choices* and that economic theory *should not assume rationality*. It looks at how we **actually** behave when faced with decisions and choices.



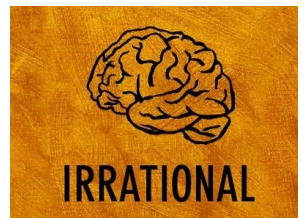
Watch the Open University video clip – '60 seconds adventure in economics' – to illustrate Rational Choice Theory:

<http://www.open.edu/openlearn/society/politics-policy-people/economics/60-second-adventures-economics-rational-choice-theory>



## The reasons why consumers may not behave rationally:

- Consideration of the influence of other people's behaviour
- The importance of habitual behaviour
- Consumer weakness at computation



### 1. Consideration of the influence of other people's behaviour

Behavioural economists have identified a range of consumer behaviour which suggests that we are subject to psychological biases when we make decisions about what to consume.

One key behavioural bias observed in individuals is **herding behaviour**. According to Thaler & Sunstein in *Nudge*: 'we are greatly influenced by *consumption norms* within the relevant group'. In other words, we seem to be particularly influenced by what other people do when making our consumption decisions. Humans are social beings whose behaviour is often strongly influenced and shaped by the behaviour of others especially in close-knit social networks/ smaller communities.

Example 1 - if we see our friends drinking alcohol, we are more likely to do so.

Example 2 – some people start investing in houses so others think this is a good idea too (housing market booms can be caused by this effect)

Example 3 – people might grab an item in a sale because others seem to be rushing to buy it too

Example 4 – if choosing to buy a new car, traditional economics says demand will depend on income, tastes, prices of other cars, etc. However, if your brother buys an Audi, you might like to buy a more expensive car, maybe a Mercedes. If he switches to a Jaguar, you might opt for a Porsche. (Advertisers exploit this by using advertising showing other people buying the product!)

### Using social norms to influence consumer decisions:

Policy makers can use the power of social norms to demonstrate that most other people behave differently, e.g. information about other people paying their taxes on time or donating their organs *in order to change our behaviour*.

<https://www.theguardian.com/money/2019/jan/27/stephen-rubin-owner-of-jd-sports-coates-ashley-dyson-paid-most-tax-last-year-with-181m-bill>

Watch the clip 'Just how well has the 'nudge unit' done'? BBC News 26 Aug 2014:

<http://www.bbc.co.uk/news/uk-28936581>



What extra line added to a letter resulted in a significant increase in the number of people who paid their tax on time?

## 2. The importance of habitual behaviour

This is the tendency which individuals have of sticking with their first choice for a long time, i.e. maintaining the 'status quo' or staying with the default option. Examples:

- Similar weekly shopping patterns of most families at the supermarket
- Students tendency to sit in the same seats in class
- Staying with the same bank
- Reluctance to switch energy suppliers



This could be because consumers want to 'play safe', not wanting to make a change which could make them worse off (loss aversion - giving something up is often more painful to us than an equal gain) or it could be due to the **difficulties involved** in changing bank or energy supplier and the time spent filling out forms. This could result in consumers *not maximising their utility*.

A person might want to maximise utility but face complex choices and imperfect information and they may decide it is not worth the time or effort of getting more information. Their ability to be 'rational' is therefore limited or 'bounded' by the situation they are in. This is called **bounded rationality**. So they resort to making the best guess or drawing on *past experiences* that turned out to be good or bad. The use of strategies that draw on simple lessons from past experiences is known as **heuristics**. E.g. consumers may have liked a particular brand in the past and therefore, may use the same brand for a new product they have not tried before. This 'brand loyalty' is something that companies recognise and aim to develop in their customers! In fact, businesses have been using the ideas of behavioural economics for years.

## 3. Consumer weakness at computation

Humans have a tendency to be bad at mathematical computation. E.g. difficulty in calculating best buys. We may find it hard to understand probabilities and to make forecasts about how we will feel in the future. Richard Layard, in his book *Happiness: Lessons from a new science*, states that people tend to **exaggerate small probabilities**. E.g. people may react to 'health scare' stories in the media about certain foods or the purchase of foods reported as 'super foods' may soar, following a news story, despite the fact that its effect on reducing our real risk of a disease may be mathematically almost negligible.

Layard also argues that individuals find it hard to **forecast future feelings**. People think their purchasing decision, e.g. whether to buy a new car, will give them happiness for a longer time than it does in reality. We often hear friends (or ourselves) saying 'If only I had the latest iPhone...'

Individuals also have a tendency to **underestimate** the future problems of for example, smoking and overly base their decision to buy cigarettes on the **immediate gratification** they receive. According to the authors of the book *Nudge* – individuals have an 'unrealistic optimism', despite statistical data and so 'overestimate their personal immunity from harm'.



## Extension:

### Heuristics

Tversky and Kahneman (1974) studied how humans go about making judgements. They observed three **heuristics** (mental short cuts) which individuals tend to use in decision making. They help consumers make quick and often useful decisions. Some examples include:



*Should I spend money on a more secure front door?* What is my likelihood of being burgled? **The availability heuristic** says that people tend to base their assessment of risk on immediate examples which spring to mind. If they recently watched a programme about being burgled, this will lead them to think the chances of being burgled are higher than they actually are.

*Should I buy a bread maker?* A famous example from Dan Ariely involves a business based in San Francisco. They originally offered one type of bread maker priced at \$275 and had virtually no sales. However, they then launched a \$400 version on the market which was bigger but otherwise had the same features. The original, smaller bread maker sales then doubled! **The anchoring heuristic** shows a tendency for us to use anchors (reference points). The first bread maker had no reference point, so consumers were unsure about its value and whether they wanted it. Once the \$400 version became available, consumers then decided the cheaper option was an attractive proposition.



### Independent Tasks:

1. Do you ever purchase things irrationally? If so, what are they and why is your behaviour irrational?
2. If you buy something from a shop on the corner when you know that the same item could have been bought more cheaply two miles up the road in the supermarket, is your behaviour irrational? Explain.
3. How might individuals spending patterns change in reaction to sensationalist stories, e.g. about 'scare food products' or 'wonder foods' – **find an article** from a tabloid newspaper and consider how these stories may influence spending patterns. Is it always rational?
4. Discuss why consumers choose to smoke even though they are aware of health risks in future
5. Discuss why consumers keep wanting the next updated iPhone

## Nudges

Nudge theory is generally used to describe situations where nudges are used to improve the life and wellbeing of people and society.

In their book 'Nudge', Thaler & Sunstein identify how people can be 'nudged' to change their behaviour. They use the expression '**choice architecture**' which involves the deliberate **framing** of choices to 'nudge' people into making the preferred decision. E.g. healthy food can be placed in a prominent position in a school cafeteria.



Therefore, policy makers could aim to change our behaviour through nudges rather than traditional policies such as indirect taxes. Examples of nudges:

- Apps which show how many calories we have eaten
- A text message reminding us of an appointment scheduled for the next day.
- Default settings on computers and mobile phones
- Systems for automatic payment of credit card bills.
- Graphic warnings for cigarettes or nutritional facts on food.
- Speeding signs reminding us to 'slow down'

Watch the clip from the 'Nudge' website:

<https://www.youtube.com/watch?v=xoA8N6nJMRs>



1. What is meant by a 'nudge'?

2. Give 2 examples of a nudge from the clip



## Some important nudges for policies – Default settings

In the book Nudge, when issues are complex, making it hard for individuals to assess the full costs and benefits of a consumption decision, individuals are likely to go for the 'default opinion.' We often select the 'default' choice whether it is the best one or not e.g. mobile phone ringtones

This means businesses and the government can influence our behaviour by setting 'defaults'.

By setting defaults so that we automatically enrol on savings schemes, pension schemes, etc, financial behaviour might be improved

By setting printing to double-sided as a default, there are environmental benefits

Making salad the default side option instead of chips improves our health



### **Some important nudges for policies - Simplification**

We are naturally bad at calculating things. Complexity causes confusion. We are influenced by the way that information or choices are presented. This is called **'framing'**

E.g. to promote a healthy food it could be given a more attractive name or promoted as the dish of the day

### **Some important nudges for policies - Warnings**

There is a natural human tendency to be optimistic e.g. that we will not be the ones to get lung cancer if we smoke. Warnings/government information can counteract this and increase the likelihood that people will pay attention to warnings.



President Obama established the White House Social and Behavioural Sciences Team and the UK government has the Behavioural Insights Team (BIT) – these make active use of nudge theory to improve social outcomes. (The BIT team has since become independent from the government).

[www.gov.uk/government/organisations/behavioural-insights-team](http://www.gov.uk/government/organisations/behavioural-insights-team)

Watch the clip: The Speed Camera Lottery – The Fun Theory

<http://beta.tutor2u.net/economics/reference/shoves-and-nudges-behavioural-economics-in-action>

What idea is used to try to reduce speeding?

### **Behavioural Economics and the recent credit crunch (Link to Theme 4 – Financial market)**

Behavioural Economics might also help us to understand market 'bubbles' and the recent financial crisis.

Keynes wrote about 'animal spirits' within markets, meaning irrational (or non-economic) behaviour that might affect business decisions

Behavioural Economics might help us to question whether market equilibrium theory is correct and whether some sort of intervention is needed.



In their book, 'Understanding Animal Spirits' Akerlof and Schiller explain how the behaviour of human beings contributed to the breakdown of credit markets and global recession - which traditional economic models failed to predict or explain.

Bubbles occur when animal spirits take over. Overconfidence drives peoples' actions, people buy when prices are rising, thinking that they can only rise more. Prices may not reflect market fundamentals but this is ignored.

### **The City Uncovered – 'When Markets Go Mad' (disc 3) - Presented by Evan Davis**

#### **Questions (from 31.35 minutes):**

1. Why are people more similar to buffalo than cats?

2. What is confirmation bias?

3. What is superiority bias?

#### **Questions (from 51.37 minutes):**

4. What clinical symptoms of mania are shown by some traders?

5. What is the effect of testosterone on the male body?

6. What is the effect of cortisol on the body?

7. What could be a possible solution to avoid 'bubbles' and 'crashes' in the future?

### Exam practice:

a. Most people pick a retirement savings plan and then forget about it, despite opportunities to make a higher return by switching their investments over time. This demonstrates that:

- A Consumers are rational
- B Consumers have a tendency to stick with the 'status quo'
- C consumers will behave in such a way to maximise their utility
- D The costs of switching are always greater than the benefits (1)

b) In the UK, a change in legislation now means employees will automatically be enrolled in corporate pension plans unless they actively choose to opt out. Explain why this is likely to increase retirement savings. (3)

---

---

---

2. Which statement is true?

- A Other people's behaviour has no influence over an individual's consumption decision.
- B A rational consumer never aims to maximise utility.
- C Behavioural economics makes the assumption that consumers are rational.
- D There are many reasons why consumers may not behave rationally.

3. It is difficult for consumers to make a fully informed consumption decision because ...

- A consumers have perfect information to help them make choices.
- B it is always easy to compare the prices of goods and services.
- C they are strong at computation skills.
- D information is not always perfect and available to consumers.



Nudge - Thaler and Sunstein

Thinking Fast and Slow – Daniel Kahneman

Dan Ariely: Predictably Irrational

Sloman Ch4 pp 125-131

