CIE Economics A-level

Topic 2: Price System and the Microeconomy

a) Law of diminishing marginal utility

Notes

The relationship of the law of diminishing marginal utility to derivation of an individual demand schedule

- The demand curve is downward sloping, showing the inverse relationship between price and quantity.
- The law of diminishing marginal utility states that as an extra unit of the good is consumed, the marginal utility, i.e. the benefit derived from consuming the good, falls. Therefore, consumers are willing to pay less for the good.
- This can be explained using the example of chocolate. The first chocolate bar will benefit the consumer more, because it satisfies more of their needs, and so the consumer is willing to pay more for it. The second bar will satisfy the consumer less, because they have less need for it, and the consumer will be willing to pay less for it. Eventually the utility derived will become zero.

Equi-marginal principle

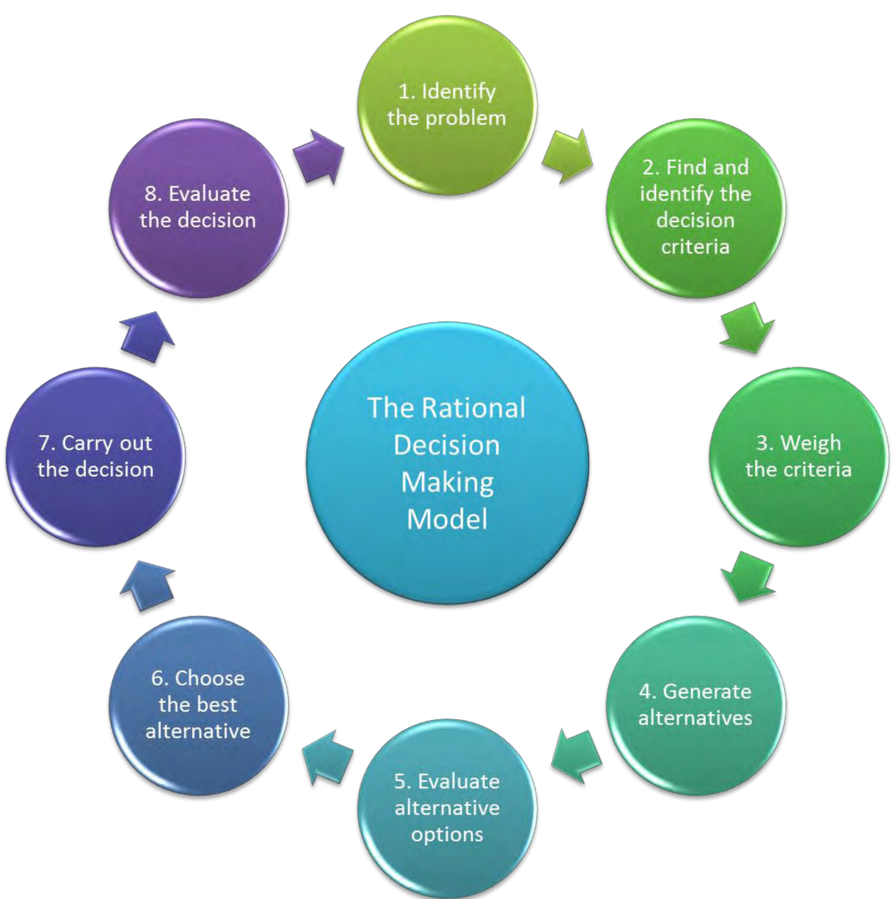
- This extends the law of diminishing marginal utility by explaining consumer behaviour when distributing their income across different goods and services.
- Consumers allocate their incomes differently across goods and services in order to maximise their utility.
- Consumers allocate more income to the goods and services which derive greater utility.

Limitations of marginal utility theory; rational behaviour versus behavioural economic models

- When making economic decisions, consumers aim to maximise their utility and firms aim to maximise profits.
- A consumer's utility is the total satisfaction received from consuming a good or service.
- Daniel Kahneman is a Nobel Prize winner in Economic Sciences, which he won for his work on behavioural economics. He devised a two-system model which explains how decisions are made.
    - The first system is based on common sense estimates and emotional responses to the choice made. It uses short cuts and quick decisions are

made. This is the dominant system, but the bias and potential for error in the system can mean irrational decisions could be made.
- The second system takes longer than the first. It uses thoughts and reflections, and avoids the bias and errors from the first system. However, because of how easily the system is manipulated, the decisions made could be harmful to the consumer or others around them.

- A firm or an individual can make decisions using intuition or rationally. Intuition uses the feelings or instincts of the consumer and does not use facts. Businesses use this when they do not have access to facts or when making the decision is difficult. A rational decision is made using several steps, and it involves analysis and facts.



1) **Identify the problem:** For a firm, this might be falling profits.
2) **Find and identify the decision criteria:** The firm might have to find information or criteria that will increase their profits. The firm's criteria might include, for example, keep a certain number of employees or to not change the price of their goods. The criteria might include how the decision will affect stakeholders (the customer and the staff, for instance), and how the quality might be affected.

3) **Weigh the criteria:** The firm will have to rank the criteria based on their relative importance. They might think keeping all of their employees is the most important, for example.
4) **Generate alternatives:** The firm might consider some alternative options. For instance, they might think that moving their premises somewhere else will reduce costs and hence increase profits. Perhaps they will consider a loyalty scheme or a promotion for the consumer. Alternatively, the might decide to reduce the size of their workforce.
5) **Evaluate alternative options:** The firm might now consider which of the alternatives meet their criteria the best, and help them increase their profits the most.
6) **Choose the best alternative:** Now the firm will choose the alternative they think meets their criteria.
7) **Carry out the decision:** The firm can now see what the consequences of the decision are.
8) **Evaluate the decision:** After seeing what effect the decision has on the firm, they can consider whether this was the best option or not.

- **Limitations:**

- This is not always the best or most realistic way for firms to make decisions. Although it might be fairer than making an intuitive decision, it takes significantly longer to decide, which is not practical in a firm with strict time constraints.

- **The Administrative Man:**

- Herbert Simon recognised these limitations, so he devised the **bounded rationality model,** which is also known as the administrative man theory.
- The assumptions of this model are:
    - The first alternative that is satisfactory is selected
    - The decision maker recognises that they perceive the world as simple
    - The decision maker recognises the need to be comfortable making decisions without considering every alternative
    - Decisions could be made by heuristics.

- Heuristics simplify the decision making process to come to a reasonable decision. They are shortcuts to avoid taking too long to make the decision, and they avoid the problem of having imperfect information or limited time.
- For example, the consumer might use common sense or intuition. They might consider how it is cheaper to buy goods in the sale. They might have pre-decided

criteria, or a rule-of-thumb, and only buy the good if it is in a sale. This could lead to irrational decisions being made.