

CONSUMER BEHAVIOUR

[Ordinal Approach]

Ordinal Utility

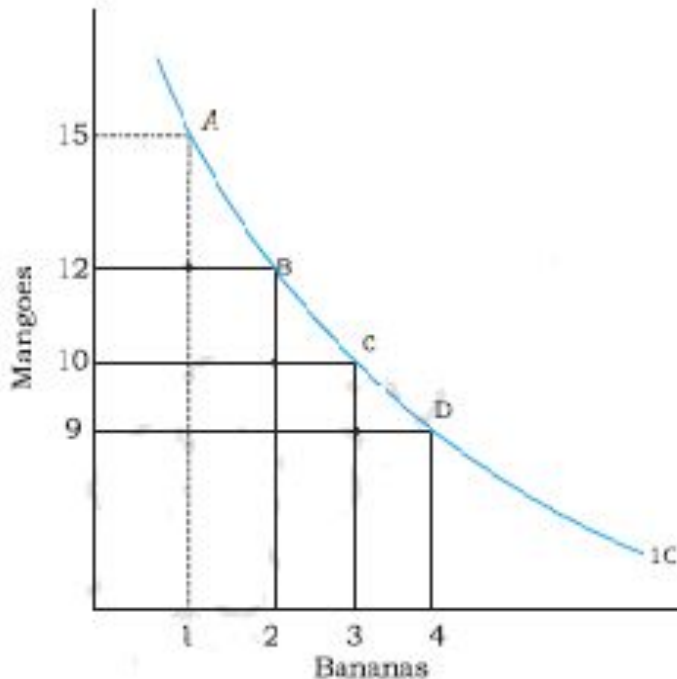
- The consumer can compare the satisfaction derived from different goods or from different units of the same goods.
- The term ordinal means, ranked or ordered, Like “First”, “Second”, “Third” are ordinal Number, they imply a rank or order. Ordinal Number expresses the preferences of the consumer for different goods
- Ordinal Utility of different household cannot be compared or added together..
- Modern demand theory utilizes an analytical approach, called indifference curve analysis to understand how the household makes the economic choices it must make.

Ordinal Utility Analysis

- **Indifference curve:** represents bundles which give the consumer equal utility.

An Indifference curve (IC) is the locus of all those **combinations of two goods** that give the **same level of satisfaction** to the consumer.

Thus the consumer is indifferent towards all the combinations lying on the same indifference curve. **In other words, the consumer gives equal preference to all such combinations.**



Indifference curve

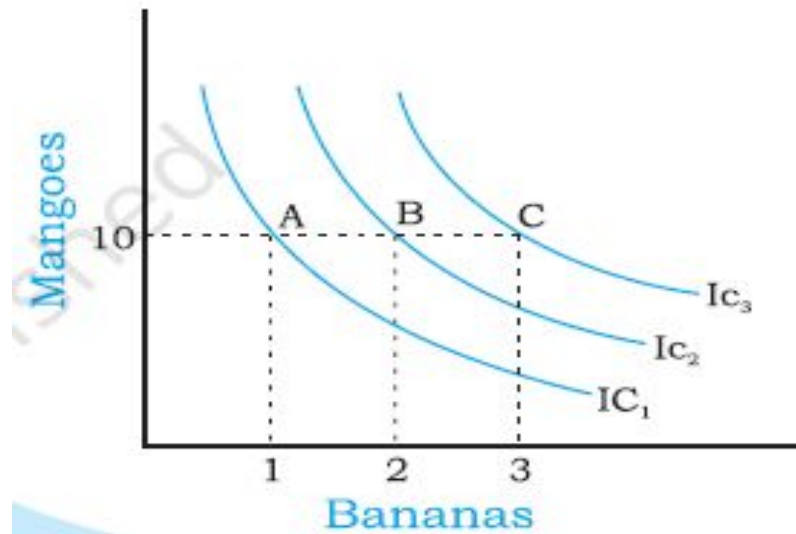
- Slope of Indifference Curve : Marginal rate of substitution (MRS)
- MRS is simply the rate at which the consumer will substitute bananas for mangoes, so that her total utility remains constant.

$$MRS = dy/dx$$

- MRS diminishes with increase in the number of good x (bananas)

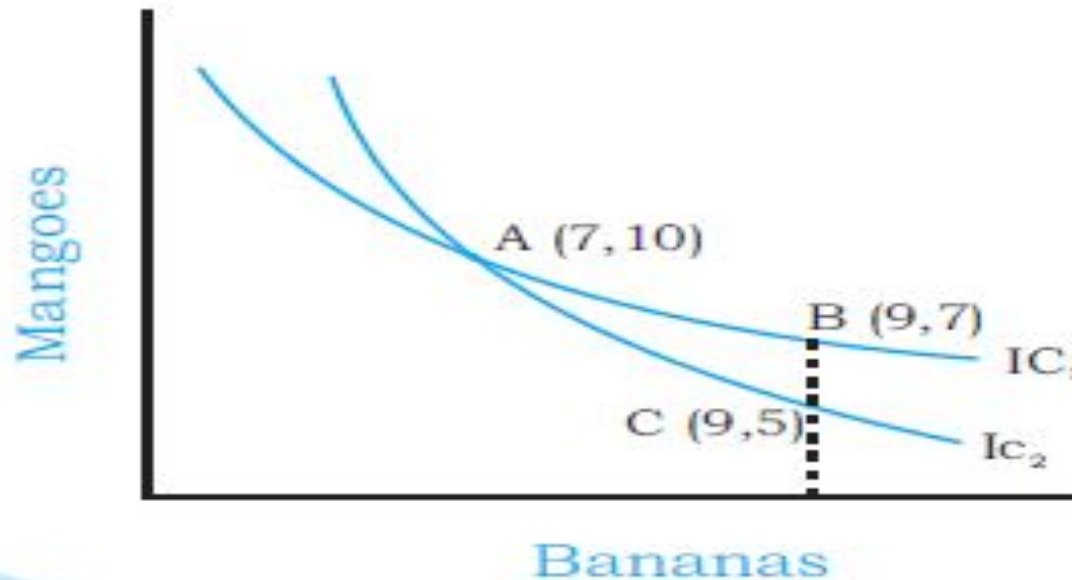
Features of Indifference Curve

1. Indifference curve slopes downwards from left to right
2. Higher indifference curve gives greater level of utility.



Features of Indifference Curve

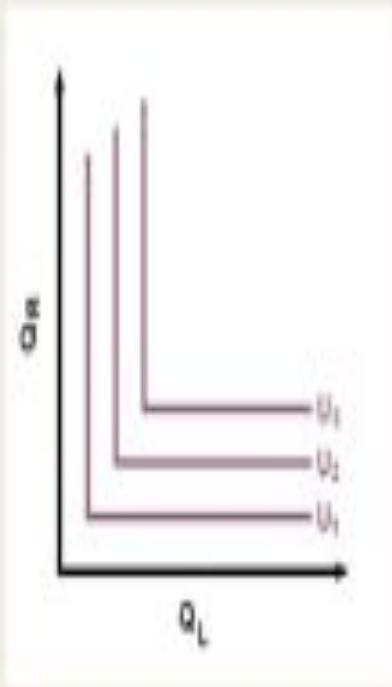
3. Two indifference curves never intersect each other.



IC curve for complementary and substitute goods

<https://www.economicdiscussion.net/indifference-curves/substitutes-and-complements-in-indifference-curve-analysis/18361>

PERFECT COMPLIMENTS



- Demand for complementary goods is not independent but directly related.

- E.g. – Gloves

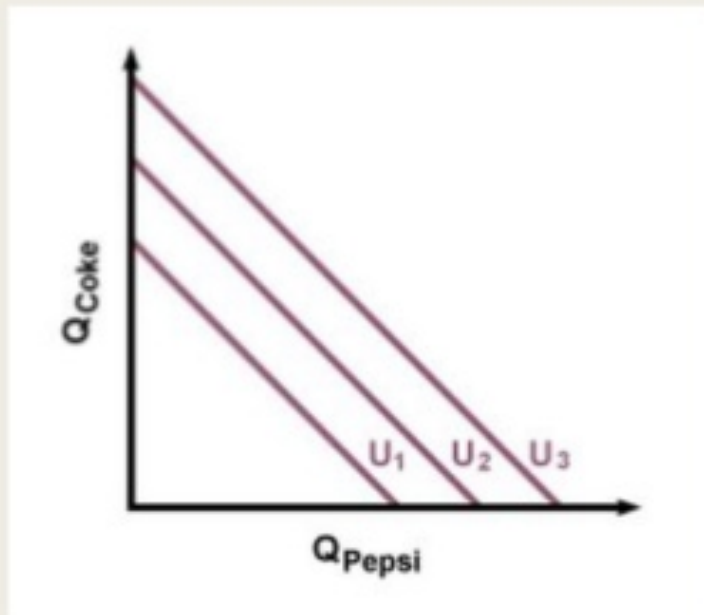
- Virtually no difference in happiness whether you have one right glove or one left glove.

Thus MRS_{XY} is zero. The two goods X and Y are consumed in the desired ratio, as indicated by the slope of the ray OR at point M. Such complementary goods are left and right shoes which are used in the 1:1 fixed ratio.

IC curve for complementary and substitute goods

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PERFECT SUBSTITUTES



- Interchangeable goods
- Utility for both the goods is same
- Consumer does not mind having either
- Consumer would not trade less quantity of one good for more quantity of another good

IC Curve

- The curvature of IC tells about the substitutability of goods. More the curvature means the goods are less substitutes.
- Close substitute flatter the IC higher the MRS
- MRS is the rate at which a consumer is willing to substitute /give up amount of one commodity in place of other and still be on the same IC.
- IC is convex as it follows the principle of diminishing MRS

Consumer's budget

□ Let us consider a consumer who has only a fixed amount of money (income) to spend on two goods. The prices of the goods are given in the market.

□ **Budget Set and Budget Line**

- Suppose the income of the consumer is M and the prices of bananas and mangoes are p_1 and p_2 respectively.
- If the consumer wants to buy x_1 quantities of bananas Similarly, if the consumer wants to buy x_2 quantities of mangoes
- Given the prices of the goods and the income of a consumer, she can choose any bundle as long as it costs less than or equal to the income she has.

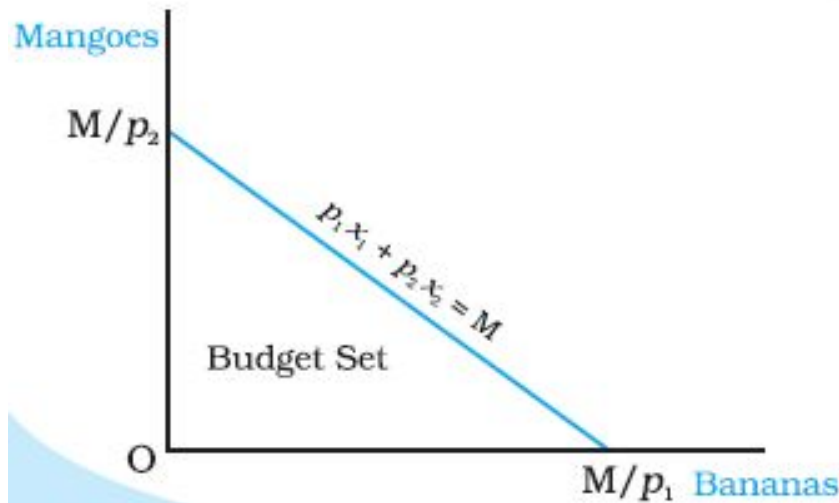
$$p_1x_1 + p_2x_2 \leq M$$

- The above inequality is called the consumer's budget constraint. The set of bundles available to the consumer is called the budget set

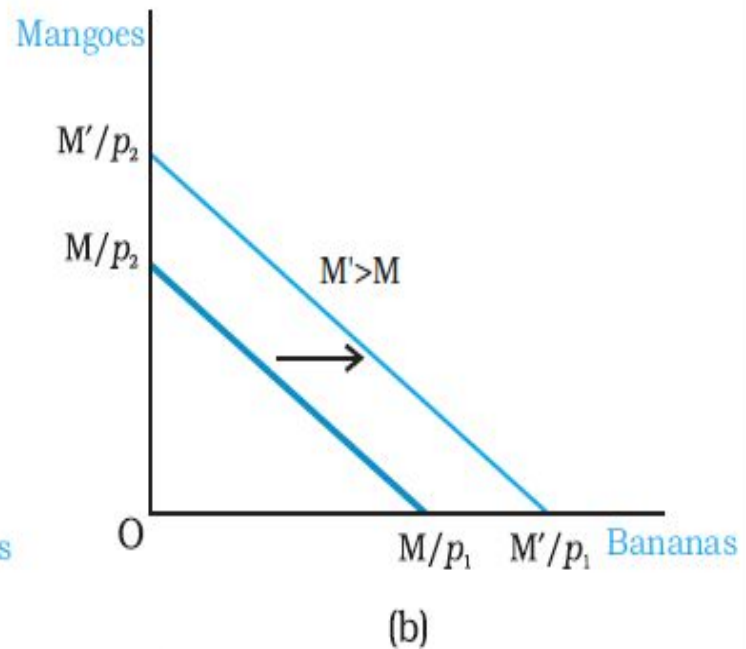
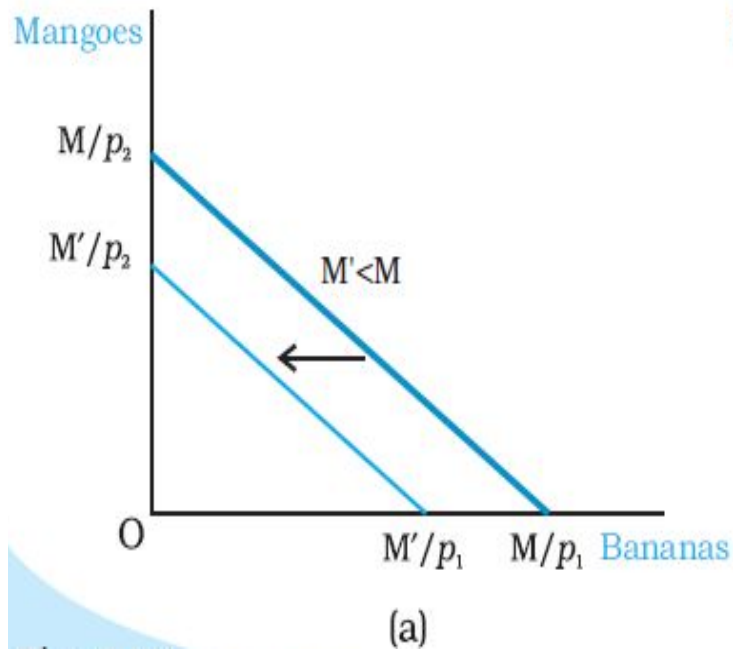
Consumer's budget

- The equation of the budget line is $p_1x_1 + p_2x_2 = M$
- The Slope of budget line

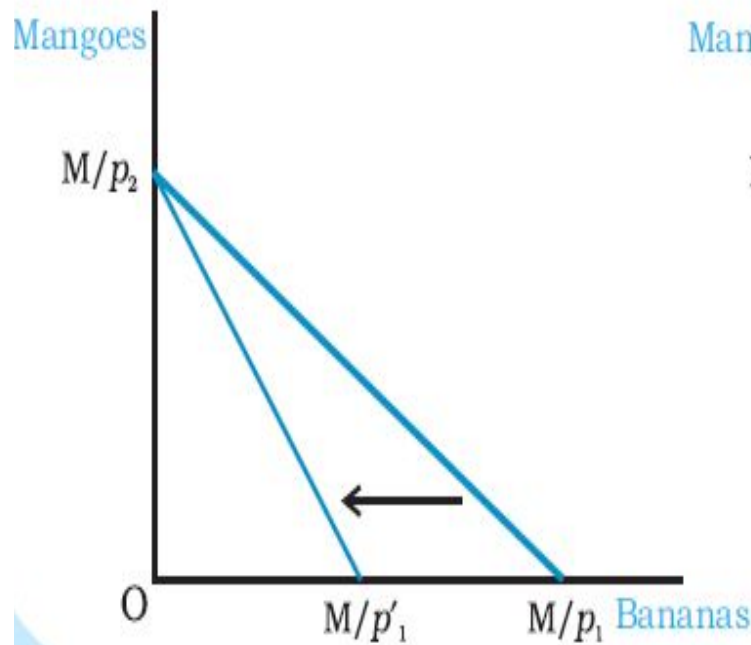
$$\frac{\Delta x_2}{\Delta x_1} = -\frac{p_1}{p_2}$$



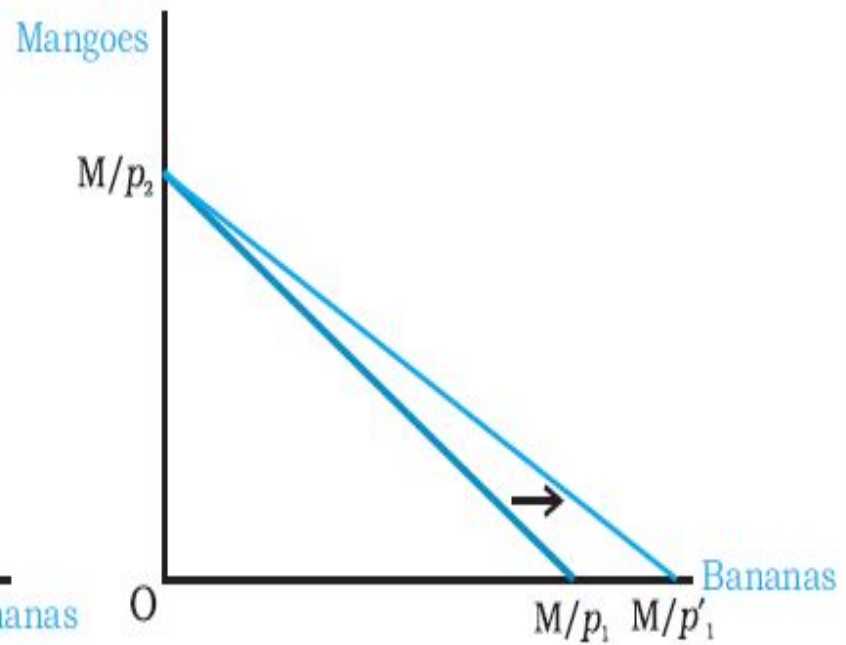
Changes in the Budget line



Changes in the Budget line



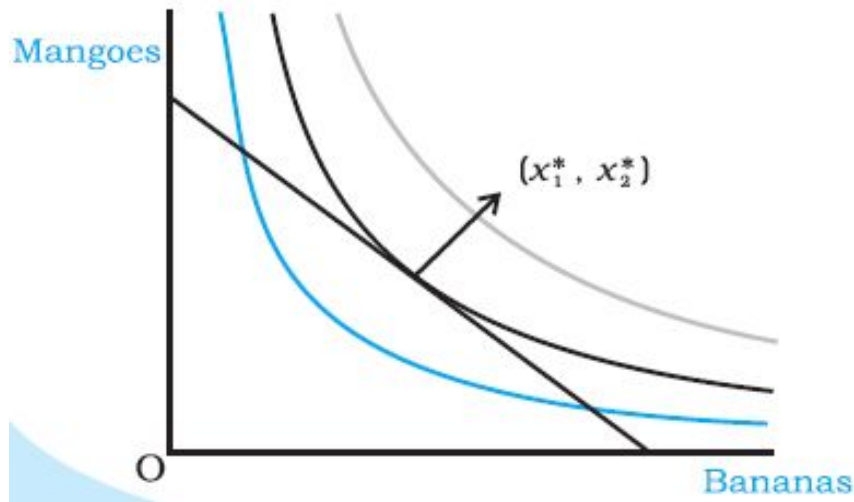
(a)



(b)

Optimal choice of the consumer

- Slope of Indifference Curve = Slope of Budget line
- $MRS = -\frac{p_1}{p_2}$



Price consumption curve and Income Consumption curve

<https://www.economicdiscussion.net/indifference-curves/price-consumption-curve-with-diagram-indifference-curve-economics/27524>

<https://www.economicdiscussion.net/notes/income-effect-income-consumption-curve-with-curve-diagram/1026> .

Thank You

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