

Utility analysis

- There is demand of products/services because of a desire to consume
- There is consumption because of satisfaction = the pleasure derived from consumption

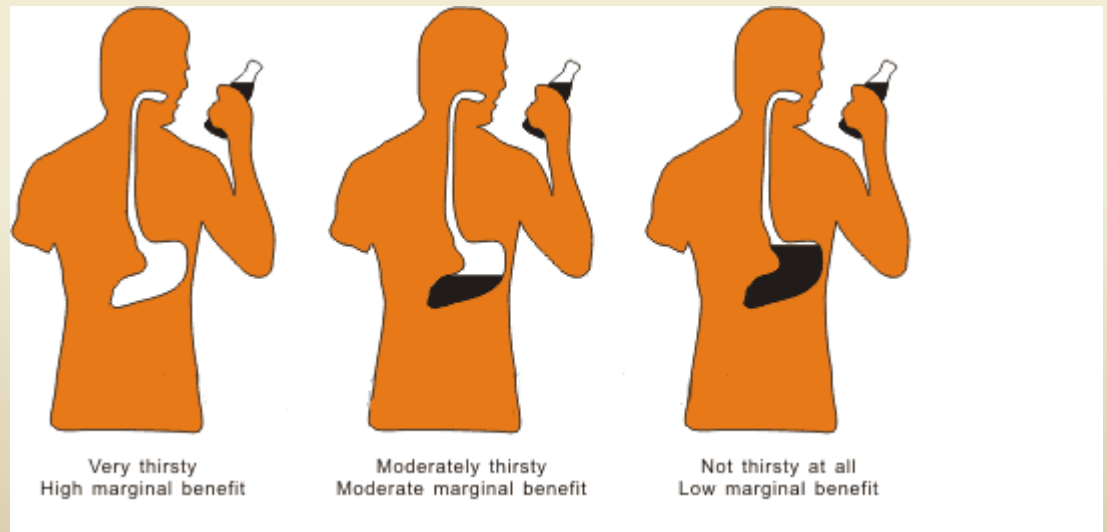


A way to measure this satisfaction is utility.

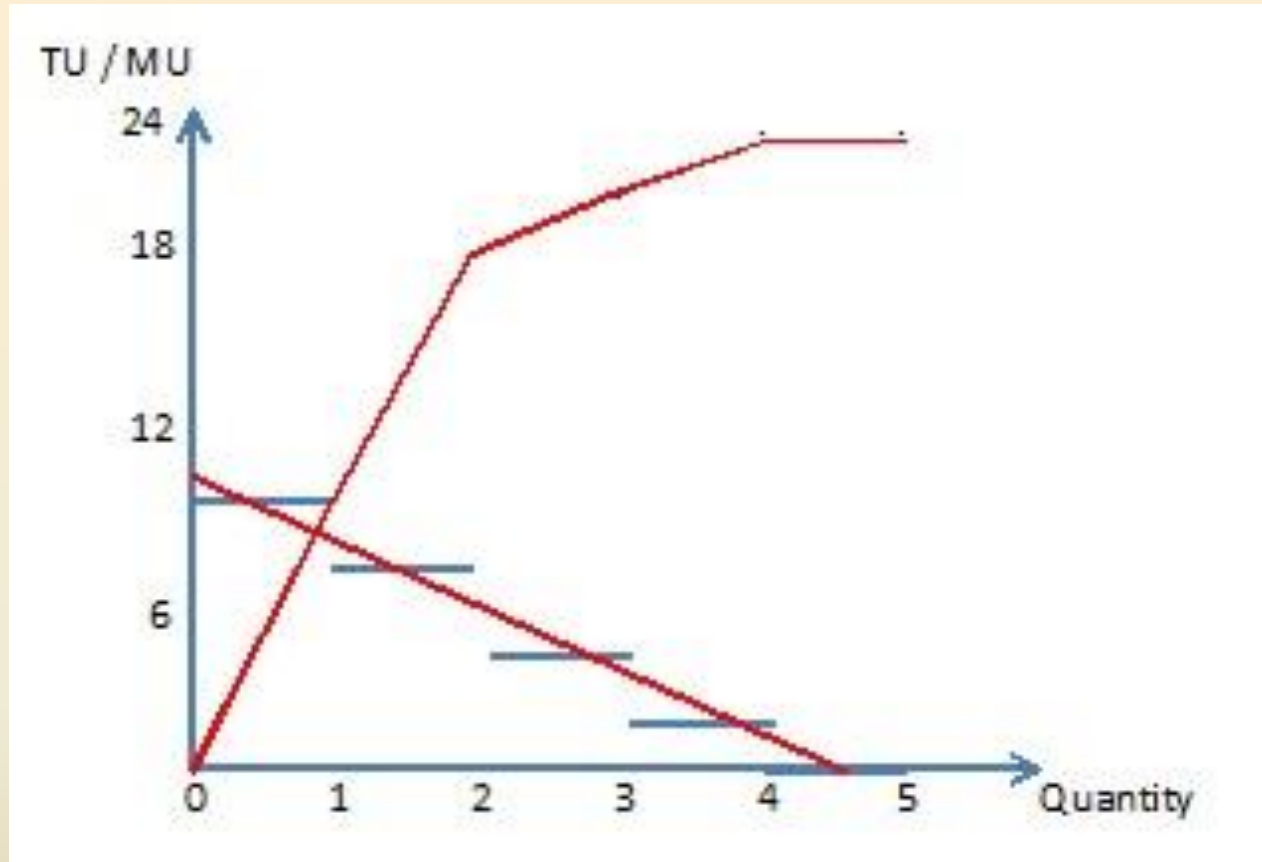
Utility is more about the overall/total satisfaction, or the total utility (TU) consumers derive from consuming a given quantity (Q) of commodities.

But since this quantity is not consumed at once, i.e. one consumes unit by unit, at each time (punctual consumption), an additional unit is consumed, an additional/marginal utility (MU) is derived.

What is particular about MU is the Law of diminishing marginal (additional) utility = as quantity consumed increases, MU falls, thus TU reaches a limit



Consumption Q	Total utility	Marginal utility
0	0	
		10
1	10	
		7
2	17	
		5
3	22	
		2
4	24	
		0
5	24	



Therefore: since there is a limit as to what we can consume, marketers, as we have seen, seek to take consumers beyond this limit.

Indifference analysis

Since consumption is more of a bundle of commodities rather than single commodities (e.g. McDonald's menu), consumers will indicate preference in terms of the quantity to be purchased relative to the satisfaction derived.

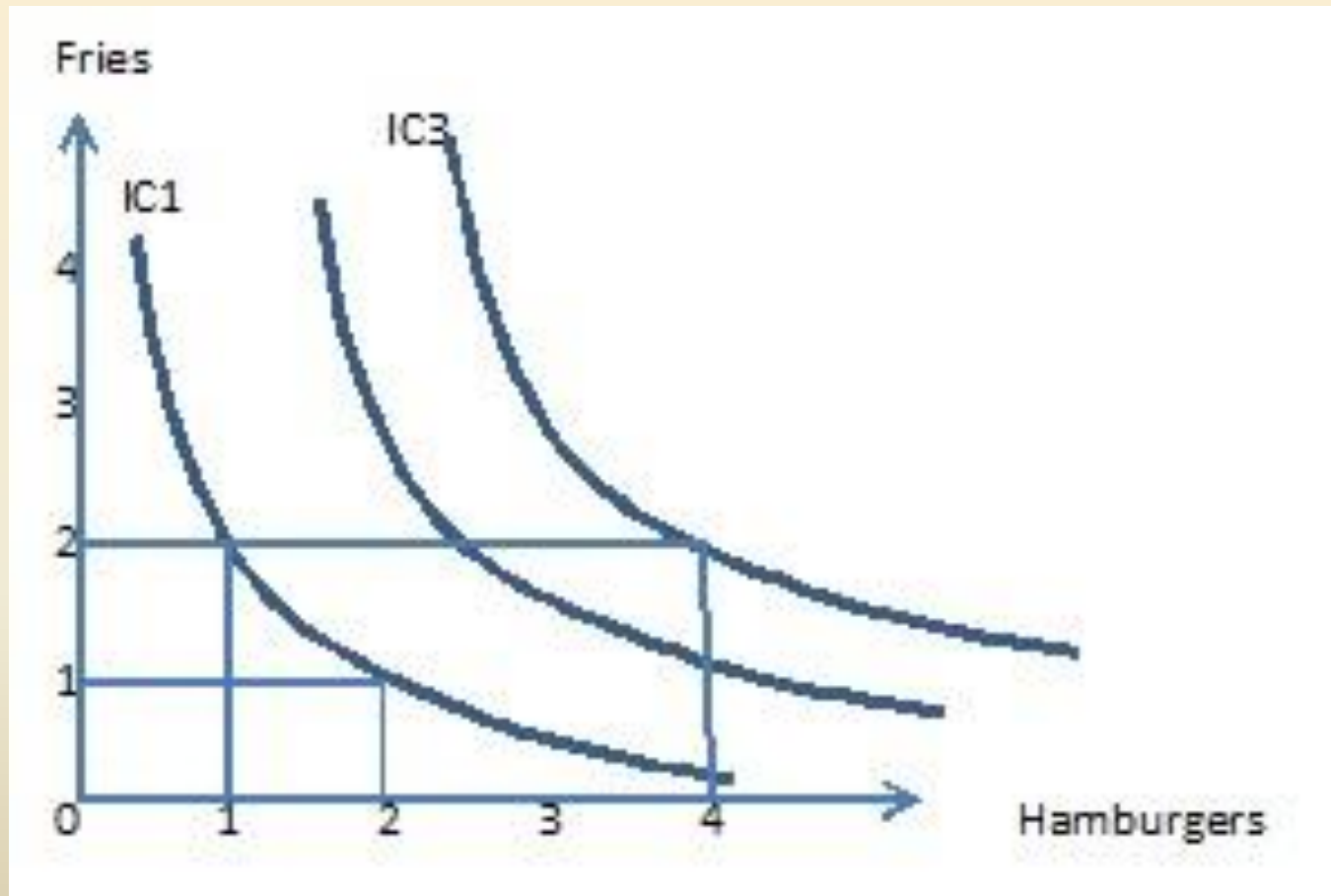
Bundles generate different levels of satisfaction/utility; hence different choices/preferences.

At the same time when consumers consume combinations of products that give to them the same overall satisfaction they are indifferent to as to which combination they might want to consume (e.g. “I don’t mind – can have either menus”) – how often does this happen though?.

Thus, bundles are described by indifference curves (IC): hence consumers are indifferent over the composition of a bundle given a level of satisfaction.



Consumption of 2 goods e.g. hamburgers & portions of fries



Example

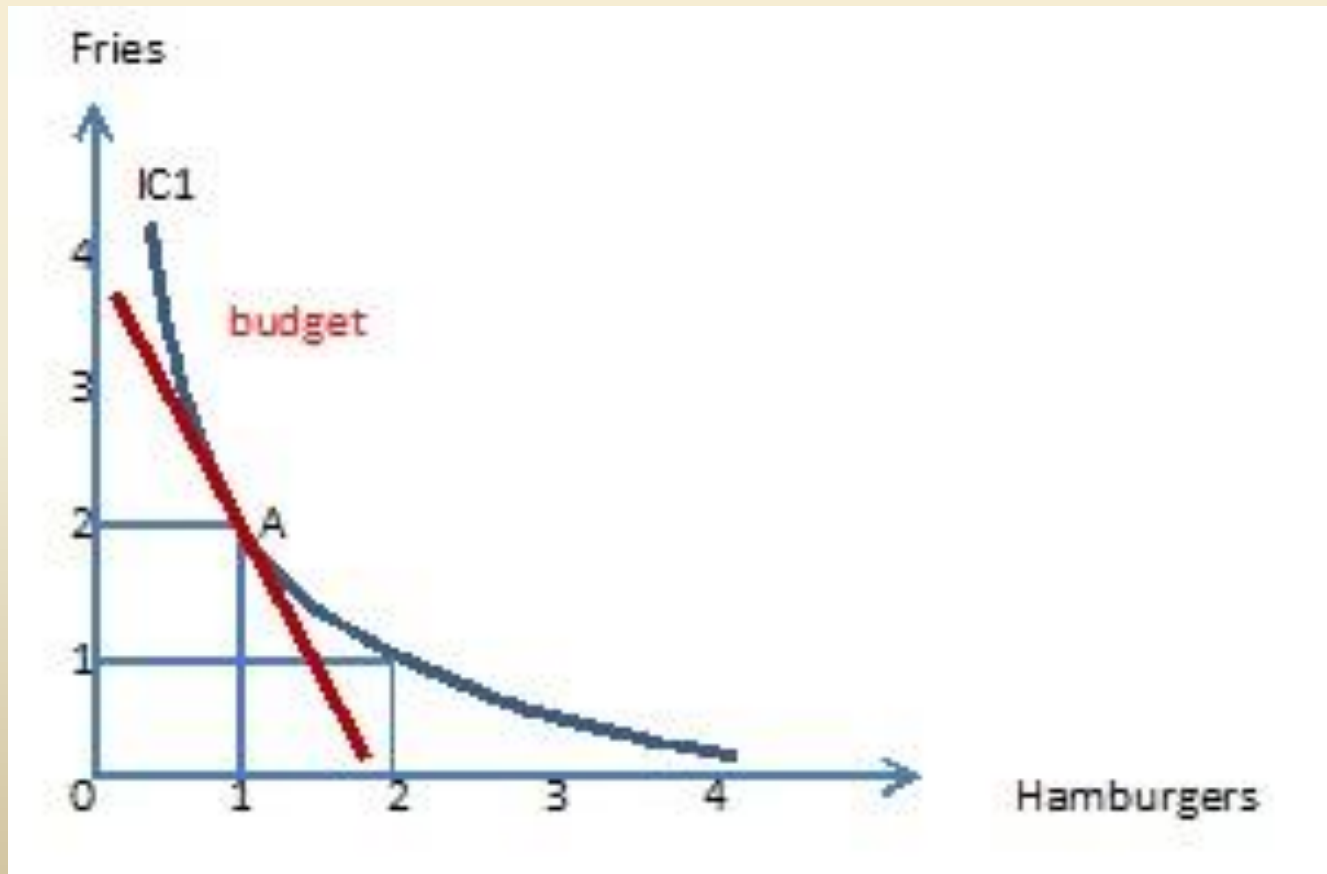
- Joe has a level of satisfaction described by IC1; he is indifferent as to the compositions $(F, H) = (2, 1)$ or $(1, 2)$; Mark has a wider appetite at IC3 and chooses $(F, H) = (2, 4)$
- What will be Joe's final choice? It depends on the budget! So suppose that $F = 2$.-; $H = 2.50$; so bundle $(F, H) = (2, 1) = 6.50$ and bundle $(F, H) = (1, 2) = 7$; Joe will go for $(F, H) = (2, 1)$ because it is cheaper BUT if he has the money he might also go for $(F, H) = (1, 2)$

The example shows that since consuming involves a first decision over acquiring commodities, and since commodities have a value, there is an additional limit to making such decisions than satiation: the budget constraint (M).

Therefore: consumer equilibrium occurs when, given a budget constraint, a consumer can maximize the purchase of combinations of products the budget allows.



Consumer equilibrium for Joe: Point A represents the consumer equilibrium between a given budget, Q consumed, chosen bundle at a given P and maximised satisfaction.



Observation

Consumer dilemma:

- If $P \downarrow \Rightarrow QD \uparrow$
- But if $QD \uparrow \Rightarrow MU \downarrow \Rightarrow$ a tendency to consume less i.e. $QD \downarrow$

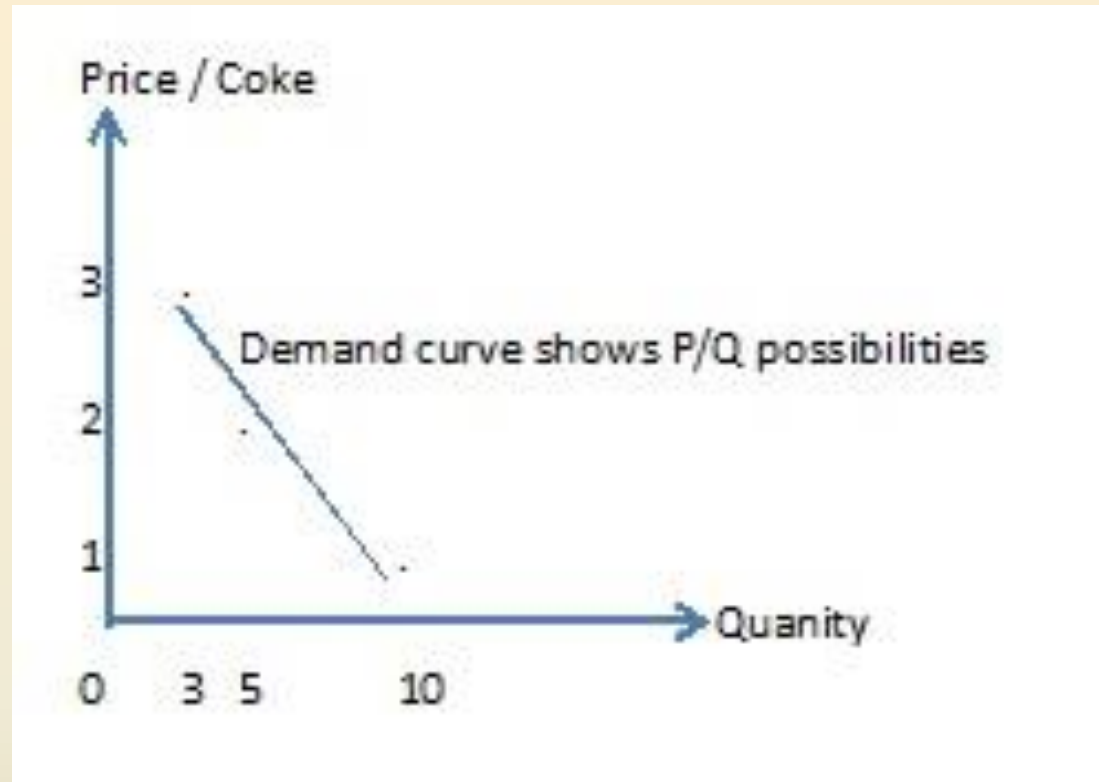
The two opposing forces make that there is consumer equilibrium i.e. that the consumer will settle for a given QD at price P1 that is neither high nor too low that will give him/her an acceptable level of satisfaction; if the demand curve represents P/QD possibilities one of which will be optimal e.g. $(P, QD) = (2, 2)$

Demand

If consumer equilibrium shows the best option possible, the other options are also existent. The mapping of such possibilities defines the demand of a product/service.

Thus: demand is the quantity Q of a product/service that a consumer is willing and able to purchase at a given price P

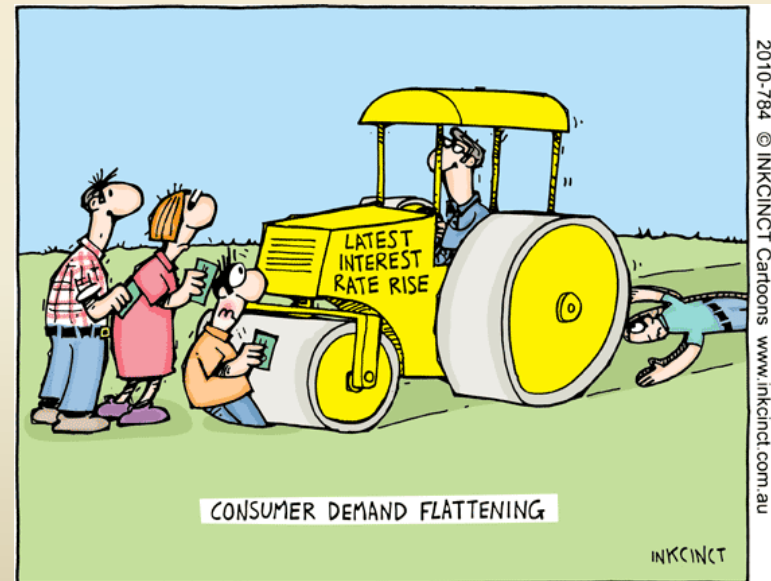
- Willingness = satisfaction (non-price)
- Ability = budget (price-related)



Law of demand = as P falls/increases, Q demanded increases/falls

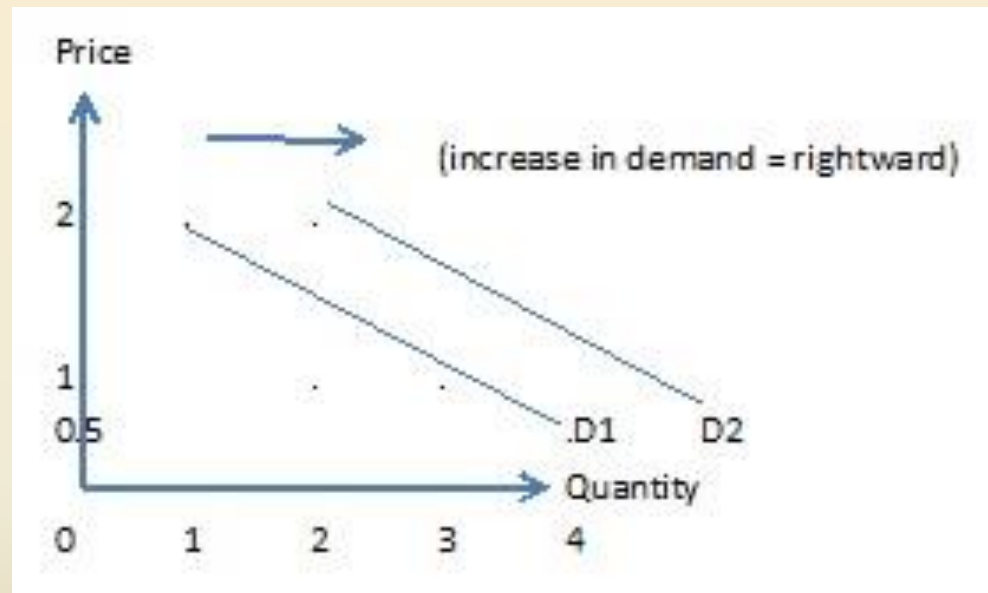
In addition to P, other factors affecting demand include:

- Personal income;
- Price of related goods (substitutes, complements);
- Interest rate & credit
- Seasonality;
- Fashion;
- Weather ;
- Marketing effort;
- Tastes ;
- Regional demographics



What happens if there an increase in any of the above factors?

Demand increases = rightward shift of demand curve



Personal income is the key variable in determining consumption and its quantity = income elasticity of demand

Elasticity

P is (arguably for some) the most important factor (but not the only factor) affecting directly Q_d , or that $Q_d = f(P)$

But different consumers respond differently to changes in the prices of the products at hand = price elasticity of demand

Example: the consumption of bread at home is less elastic than the consumption of meals at a restaurant

However, price elasticity depends on one's income; the higher the income the less sensitive one is to price changes!

Low elasticity (e.g. petrol) vs high elasticity (cinema tickets)

