

Utility Theory

- We assume that consumers make choices *rationally*.
- Utility theory asserts that *rational* consumers will allocate their incomes to *maximize their own well-being*.
- Philosopher Jeremy Bentham argued that human action results from a type of *cost-benefit analysis*, where people make decisions based on the *marginal utility* they hope to derive.

Marginal Utility Analysis

- ***Marginal utility analysis: A way to study consumer decision making.***
 - **assumes that satisfaction can be measured**
 - **consumers maximize satisfaction when the marginal utility per dollar are equal for all products and services.**

Marginal Utility Analysis

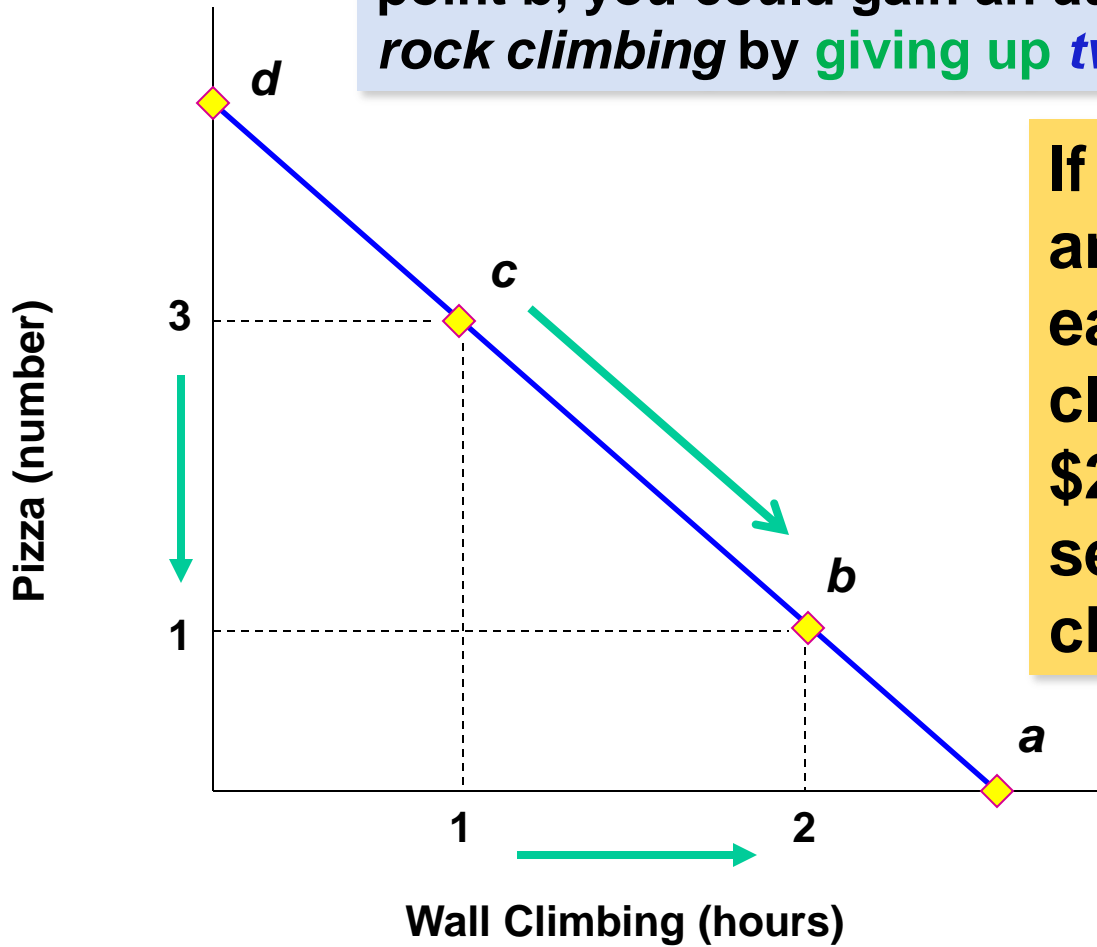
- **When you face a set of choices on how to allocate time or resources between *two possible endeavors*, we can represent these choices by a budget line.**
 - **Points along the line are *attainable with the resources at hand*.**
- **Economic theory asserts that the individual will choose the point of maximum utility.**

Budget Line and Utility

- ***Budget line:*** Graphically illustrates the possible combinations of two goods that can be purchased with a given income, given the prices of both products.
- ***Utility:*** A hypothetical measure of consumer satisfaction.

The Budget Constraint

In moving from point c to point b, you could gain an *additional hour of rock climbing* by **giving up two pizzas**.



If your income = \$50, and pizzas cost \$10 each and wall climbing costs \$20/hour, you have a set of consumption choices...

Total and Marginal Utility

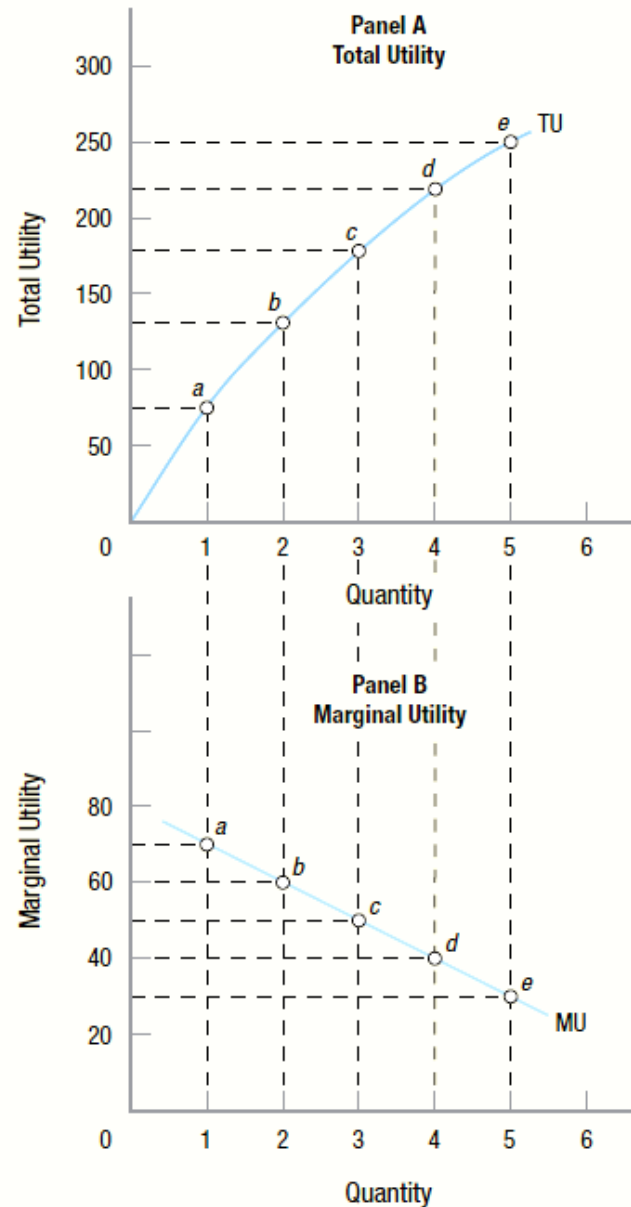
Total utility is the total amount of satisfaction a person receives from consuming a given quantity of goods and services.

Marginal utility is the additional satisfaction derived from consuming one further unit of a good or service.

Law of Diminishing Marginal Utility

Law of diminishing marginal utility: As we consume more of a given product, the added satisfaction we get from consuming an additional unit declines.

Total and Marginal Utility



The Utility-Maximizing Rule

- ***Utility maximizing rule: utility is maximized where the marginal utility per dollar is equal for all products.***
- **For all goods “a” through “n”,**

$$\frac{MU_a}{P_a} = \frac{MU_b}{P_b} = \dots = \frac{MU_n}{P_n}$$

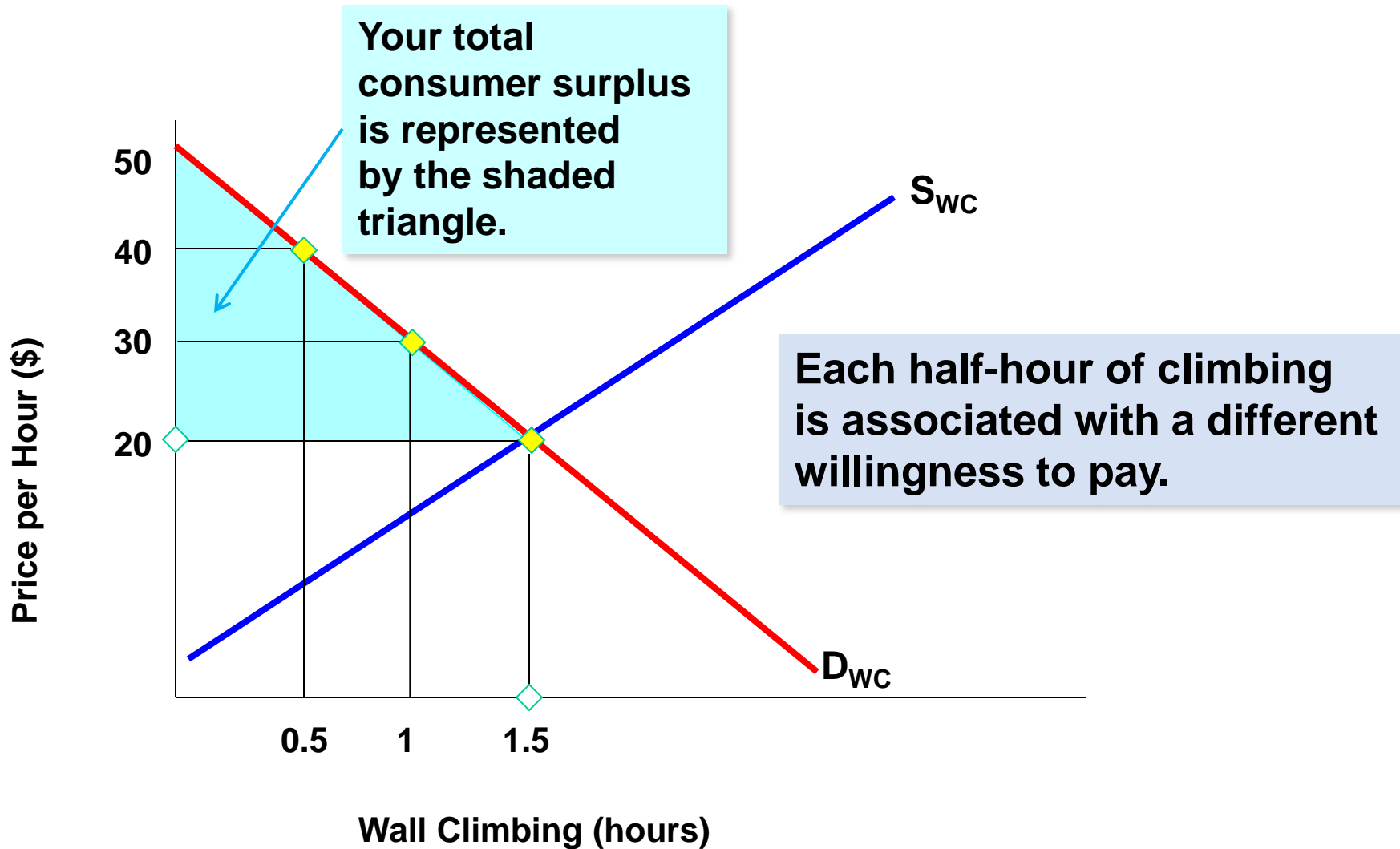
Deriving Demand Curves

- **How will consumers behave if the price of a good falls?**
- **If the price of a good changes, this will change the quantity consumers buy (because it changes their optimal point).**

Consumer Surplus

***Consumer surplus* is the difference between what consumers would be willing to pay for a product and what they must actually pay for the product in the market.**

Consumer Surplus



Criticisms of Marginal Utility Theory

Can consumers really measure the utility they receive from different goods?

Do consumers calculate the marginal utility ratios associated with each activity?