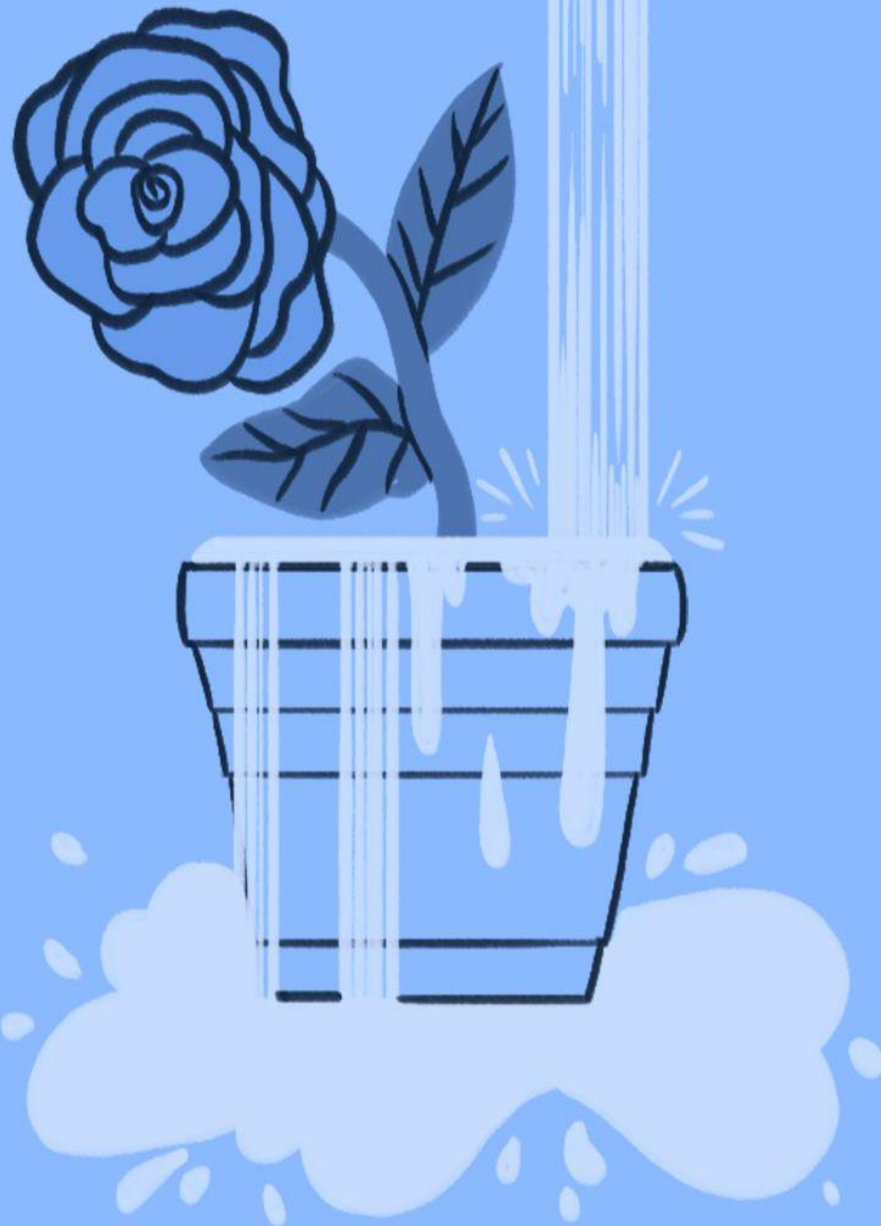


**MGT 104**

**Micro Economics**

# Law of Diminishing Marginal Utility



# Law of Diminishing Marginal Utility

*['lò əv də-'mi-nish-inj 'mārj-nəl yü-'ti-lə-tē]*

An economic law that states that, all else being equal, as consumption increases, the satisfaction derived from each additional unit decreases.



Very thirsty  
High marginal benefit



Moderately thirsty  
Moderate marginal benefit



Not thirsty at all  
Low marginal benefit

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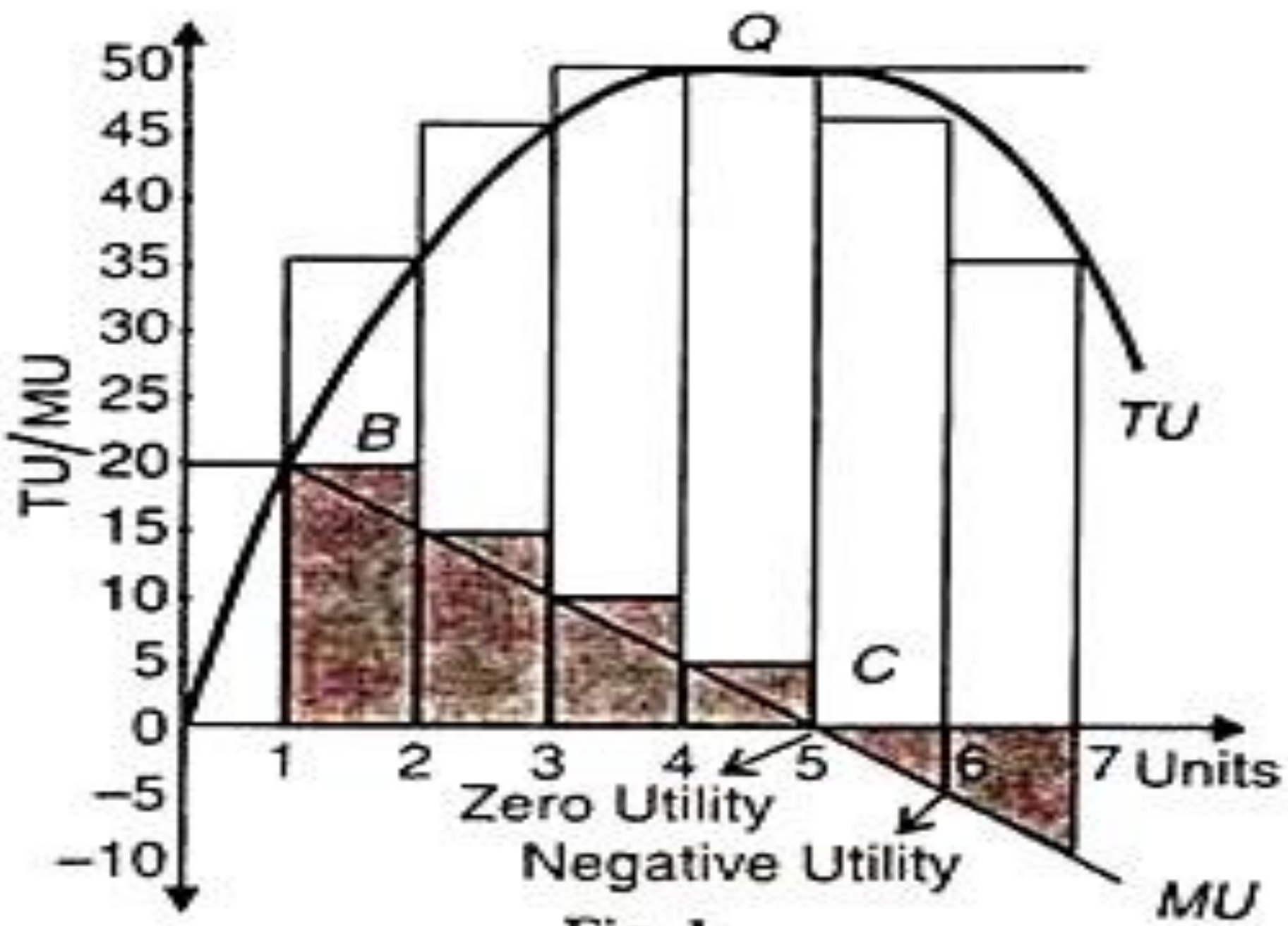


Fig. 1

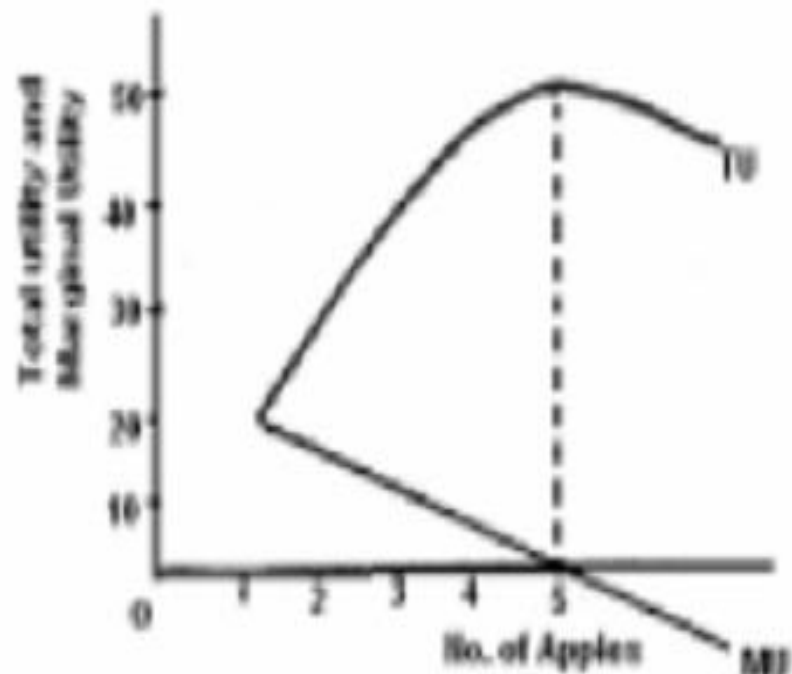
## Tables

### Total and Marginal utility schedule

Units of apple	Total utility	Marginal utility
1	20	20
2	35	15
3	45	10
4	50	5
5	50	0
6	45	-5
7	35	-10

## Figure:

### Total and Marginal utility curves



# Utility

The utility is the degree of satisfaction or pleasure a consumer gets from an economic act. For example, a consumer can purchase a sandwich so they are no longer hungry, thus the sandwich provides some utility.

# Marginal Utility

Marginal utility is the enjoyment a consumer gets from each additional unit of consumption. It calculates the utility beyond the first product consumed.

**If you buy a bottle of water and then a second one, the utility gained from the second bottle of water is the marginal utility.**



# Law of Diminishing Marginal Utility

The law of diminishing marginal utility states that all else equal, as consumption increases, the marginal utility derived from each additional unit declines.

**Marginal utility is the incremental increase in utility that results from the consumption of one additional unit. "Utility" is an economic term used to represent satisfaction or happiness.**

# Law of Diminishing Marginal Utility

The law of diminishing marginal utility means that the more of an item that you use or consume, the less satisfaction you get from each additional unit consumed or used.

# Law of Diminishing Marginal Utility

## KEY TAKEAWAYS

- ✓ The law of diminishing marginal utility says that the marginal utility from each additional unit declines as consumption increases.
- ✓ The marginal utility can decline into negative utility, as it may become entirely unfavorable to consume another unit of any product.
- ✓ The marginal utility may decrease into negative utility, as it may become entirely unfavorable to consume another unit of any product.

# Law of Diminishing Marginal Utility

Imagine you can purchase a slice of pizza for Tk.50. You're very hungry, so you decide to buy five slices of pizza. When you eat the first slice of pizza, you gain a certain amount of positive utility from eating. Because you were hungry and this is the first food you are eating, the first slice of pizza has a high benefit.

After you eat the second slice of pizza, your appetite is becoming satisfied. You're not as hungry as before, so the second slice of pizza had a smaller benefit and enjoyment than the first. The third slice holds even less utility since you're only a little hungry at this point.

# Law of Diminishing Marginal Utility

The fourth slice of pizza has experienced a diminished marginal utility as well. It might be difficult to eat because you're already full from the first three slices.

Finally, you can't even eat the fifth slice of pizza. You're so full from the first four slices that consuming the last slice of pizza results in negative utility.

# Diminishing Marginal Utility in Business

Businesses can use this principle to structure their workforce. For example, a company may benefit from having three accountants on its staff.

If there is no need for another accountant, though, hiring another accountant results in a diminished utility, as there is a minimum benefit gained from the new hire.

However, if you have two accountants but no one to process paperwork, hiring a new administrative assistant has a higher level of utility than hiring a third accountant.

# Diminishing Marginal Utility in Business

The law of diminishing marginal utility can also affect what goods and services businesses offer to customers, as it encourages a certain level of diversification.

In the above example with the pizza, if the consumer knows they won't want the fourth or fifth slice of pizza, they might not buy them in the first place. But they may see a high level of utility in a different food, such as a salad.

By diversifying its menu, the shop selling pizza can avoid diminished marginal utility and encourage consumers to purchase more.

# How the Law Affects Pricing

The law of diminishing marginal utility directly relates to the concept of diminishing prices. As the utility of a product decreases as its consumption increases, consumers are willing to pay smaller dollar amounts for more of the product.

For example, assume an individual pays Tk. 20 for 4 bananas. She or he has little value for next 4 bananas, the same individual is willing to pay only Tk. 18 for the time. And third time she or he will not pay any for purchasing banana.



# Limitations of the Law of Diminishing Marginal Utility

# LAW OF DIMINISHING MARGINAL UTILITY

- ❖ As per this law, amount of satisfaction from consuming every additional unit of good/service drops as we increase total consumption
- ❖ According to this law, total utility is maximum when marginal utility(MU) is 0
- ❖ After 0 MU, total utility starts to drop & MU goes negative

## ASSUMPTION

- |  |  |
|--|--|
| <input type="checkbox"/> Consumer to behave rationally | <input type="checkbox"/> MU of money remains constant                |
| <input type="checkbox"/> Continuous consumption        | <input type="checkbox"/> Income & price remain constant              |
| <input type="checkbox"/> Standardized product          | <input type="checkbox"/> No change in taste & preference of consumer |
| <input type="checkbox"/> Measure utility               |  |
| <input type="checkbox"/> Consume reasonable quantity   |  |

## EXCEPTIONS

- Addictions or hobbies
- Items that are rare or valuable