Pricing Practices

Some important pricing strategies and practices are briefly explained below.

A. Price Discrimination

Price discrimination is the practice of charging a different price for the same good or services to different consumers or in different markets. It means price discrimination refers to a pricing strategy that charges consumers different prices for identical goods or services. Price discrimination is possible only in the monopoly.

Buyers may be discriminated in respect of prices based on their income or purchasing power, geographical location, age, sex, the quantity they purchase, their relation with sellers, frequency of visit the shop, the purchase for the use of the commodity or service, and on other grounds which the seller may find suitable.

According to N.G. Mankiw, *"Price discrimination is the business practice of selling the same good at different prices to different customers."*

Some Examples of Price Discrimination

- *Telephone companies charge higher prices for calls during business hours than in the evening and on holidays.*
- *Medical and legal professionals charge lower fees to low-income people and higher fees to higher-income people.*
- *Cinema halls charge a higher price to the ticket of the common people and a lower price to the ticket of the students.*
- *Some firms sell goods at a lower price at the foreign market and high prices in the domestic market known as dumping.*

Conditions Required for Price Discrimination

The following conditions need to be fulfilled for a monopolist to charge different prices to different buyers.

1. Monopoly Power
2. The market must be divided into different sub-markets based on the price elasticity of demand
3. There must be different price elasticity of demand in different sub-markets
4. There should not be any possibility of reselling the products

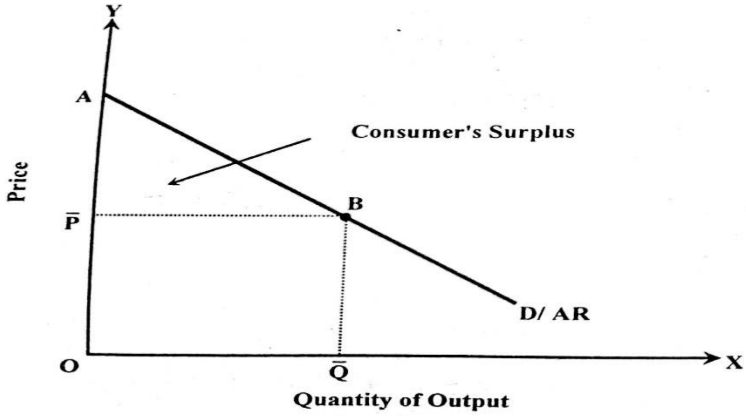
Types/Degrees of Price Discrimination

In terms of nature, price discrimination can be divided into the following three types/degrees.

1. **First Degree Price Discrimination**
2. **Second Degree Price Discrimination**
3. **Third-Degree Price Discrimination**

First Degree Price Discrimination

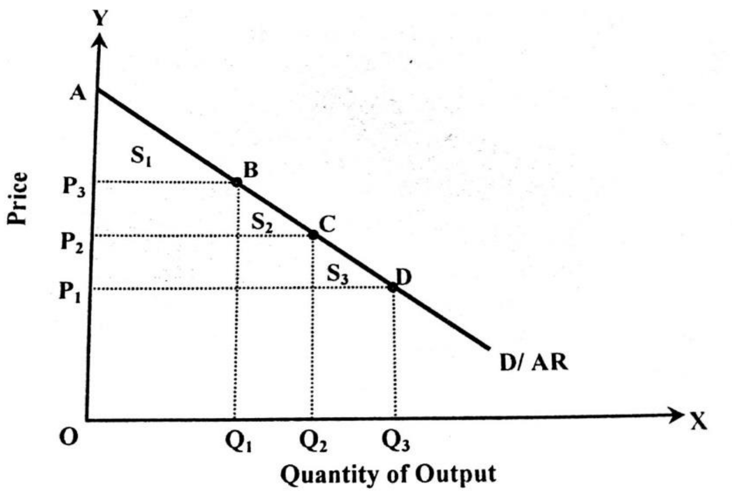
Under first-degree price discrimination, the monopolist tries to know the maximum amount of money that each consumer will pay and he/she will set the price equal to their willingness to pay and take the entire consumer surplus away from each consumer. It is also known as perfect price discrimination and involves charging consumers the maximum price that they are willing to pay for a good or service. Here, consumer surplus is entirely captured by the firm. In practice, a consumer's maximum willingness to pay is difficult to determine. Therefore, such a pricing strategy is rarely employed. The following diagram helps to explain the concept of first-degree price discrimination.



In the above diagram AD is the demand or average revenue curve of the monopolist. The consumer could buy $\overline{Q}$ units of output in the absence of price discrimination by spending the amount shown by the area $O\overline{P}B\overline{Q}$, at the uniform price $\overline{P}$. Since the monopolist can charge every consumer a maximum price so the monopolist can take an entire revenue equal to area $AO\overline{Q}B$ under the demand curve AR. This is the case of perfect price discrimination and in this case, the monopolist does not give any consumer surplus satisfaction from the consumption of the commodity.

Second Degree Price Discrimination

Second-degree price discrimination involves charging consumers a different price for the amount or quantity consumed. It means that in the case of second-degree price discrimination, the monopolist charges different prices based on how much one purchases. This type of price discrimination is common in the case of public utilities like electricity, telephone, etc. In such public utilities, the price for the first hundred units may differ from the price of the second hundred units and so on. This concept can be explained with help of the following diagram.



From the above diagram, we can see that the monopolist charges P_3 prices for Q_3 units of purchase, P_2 price for Q_2 units of purchase, and P_3 price for Q_1 units of purchase by a consumer. The demand curve shows that consumers will consume these various levels of output at different but fixed prices. In case of first-degree price discrimination, the monopolist would obtain revenue from the consumer revenue equal to the area ADQ_3O. With second-degree price discrimination, the monopolist will extract a part of the consumer's surplus shown by an area equal to ADP_1.

Third-Degree Price Discrimination

Under third-degree price description, the monopolist divides his consumers into two or more classes or groups or markets and charges different prices at different markets to sell the product determine according to the MR-MC approach. It is also known as group price discrimination and it involves charging different prices depending on a particular market segment or consumer group. It is commonly seen in the entertainment industry. For example, when an individual wants to see a movie, prices for the same screening are different depending on if you are a minor, adult, or senior.

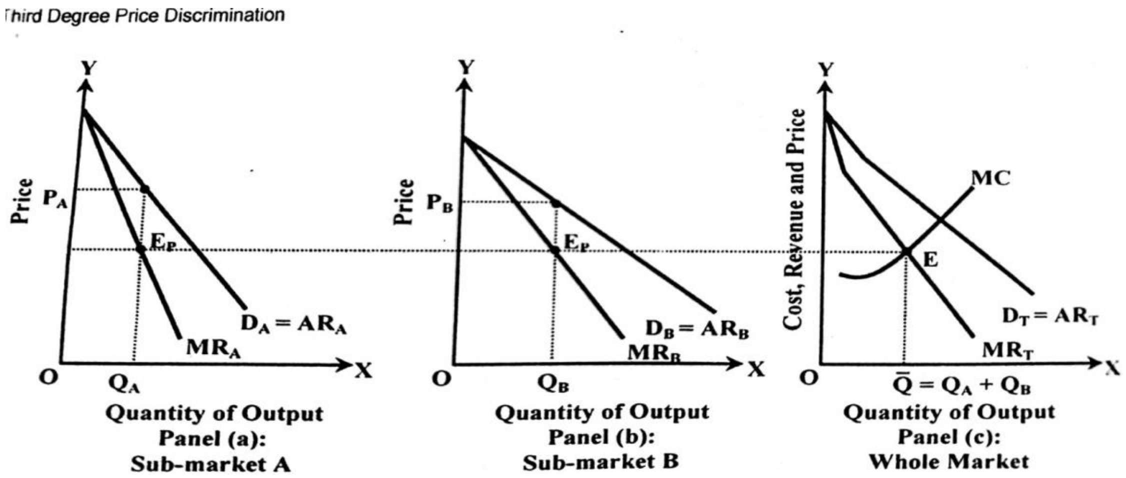
The division of the whole market into two or more than two submarkets based on the price elasticity of demand is essential for third-degree price discrimination. Third-degree price discrimination is most common in practice. The main aim of this type of price discrimination is to increase total revenue and profit. The monopolist charges higher prices in less elastic demand and lower prices in the elastic market. To maximize profit by the price discrimination with third-degree requires the completion of the following conditions.

1. The marginal revenues in two market/submarkets should be equal, i.e. $MR_A=MR_B$

   Where MR_A is marginal revenue of market A and MR_B is marginal revenue of market B.

2. The marginal revenue received from each market should be equal to the marginal cost of the monopolist, i.e. $MR_A=MR_B=MC$
   Or $MR_A=MC$
   Or $MR_B=MC$
3. The monopolist's MC curve must cut the MR_T curve from below.

The pricing under third-degree price discrimination can be explained with help of the following diagram.



In the above diagram, submarket A is the less elastic market so that the monopolist charges price OP_A and sells OQ_A output in the market. Similarly, in the submarket B, the demand is elastic so that monopolist charges lower price OP_B and sells more output OQ_B. In panel c of the figure, point E is the equilibrium point with $MC=MR_T$ and MC intersecting MR_T from below. The total output of the monopolist is $\overline{OQ}$ which is the sum of output sold in the two submarkets A and B. At that point, $MR_T=MR_A=MR_B=MC$ and MC curve has cut MR_T curve from below. Therefore, under third-degree price discrimination, the monopolistic firm can maximize total revenue and profit by charging different prices in different submarkets based on the price elasticity of demand.

B. Cost Plus Pricing

Cost-plus pricing, also called mark-up pricing, is the practice by a company of determining the cost of the product to the company and then adding a percentage on top of that price to determine the selling price to the customer.

With cost-plus pricing, the seller/producer first adds the direct material cost, the direct labor cost, and overhead to determine what it costs the company to offer the product or service. A mark-up percentage is added to the total cost to determine the selling price. This mark-up percentage is profit. In certain cases, the mark-up percentage is agreed upon by both buyer and seller. This percentage can also serve as a bargaining chip during the sale.

Steps to Computing Cost-Plus Pricing

There are three steps involved in computing cost-plus pricing for a product.

Step 1: Determination of the total cost of the product or service, which is the sum of fixed and variable costs (fixed costs do not vary by the number of units, while variable costs do).

Step 2: Divide the total cost by the number of units to determine the unit cost.

Step 3: Multiply the unit cost by the mark-up percentage to arrive at the selling cost and the profit margin of the product.

Therefore, P=AC(1+M)

Where M is mark-up on cost, AC is average cost and P is the product price.

There are two techniques of this method which are briefly discussed below.

a. Mark-up on Cost

The mark-up on cost is the percentage of profit based on cost. Mark-up cost can be calculated by the following formula.

Mark-up on Cost=$\frac{P-C}{C}$

Or P-C=C (Mark-up on cost)

Or P=C +C (Mark-up on Cost)

Or P=C (1+Mark-up on Cost)

For example, if the average cost (C) of producing a product is Rs. 10 and mark-up on cost is 10% or 0.1, we can calculate price (P) with the help of the above formula as:

P=C (1+Mark-up on Cost) = 10(1+0.1) = Rs. 11

b. *Mark-up on Price*

The mark-up on price is the percentage of profit based on price. The mark-up on the price is calculated by using the following formula.

Mark-up on Price= $\frac{P-C}{C}$

Or P-C=P (Mark-up on Price)

Or P-P (Mark-up on Price) =C

Or P (1-Mark-up on Price) = C

Or P= $\frac{C}{1-\text{Mark-up on Price}}$

For example, if the average cost (C) is Rs. 10 and the mark-up on price is 10% or 0.1, price (P) can be calculated with the help of the given formula.

P = $\frac{C}{1-\text{Mark-up on Price}} = \frac{10}{10-0.1}$= Rs. 11.1

In such a way, the price determined based on a mark-up on price is higher than the price determined based on a mark-up on cost.

C. Incremental Cost Pricing

The pricing based on incremental cost is known as incremental cost pricing. The incremental cost is an addition to variable cost, not total cost due to an expansion in product line using existing capacity or plant. It means the incremental cost is an additional variable cost associated with an additional variety of products under the given capacity of the firm. As a result, the incremental cost is lower than the full cost.

For example, a company currently producing desk and bench has added sofa set in its product line with the same fixed cost and the only addition to the variable cost of producing sofa set. It is known as incremental cost. The transportation company will start its new route of operation after analyzing the possible incremental cost and possible incremental revenue.

Under this method, price is determined in such a way that it should cover the only incremental cost as the fixed overhead cost has already been covered or absorbed by existing production and sale. For example, suppose a furniture company decides to produce 12 units of sofa set with the existing size of the plant (no additional fixed cost) that adds Rs. 60,000 to its variable cost (for each sofa it is Rs. 5000) and this is known as incremental cost. The company now sets the price to cover this incremental cost as the fixed cost has already been realized by the company with its existing production. So, the price per sofa more than Rs. 5000 is set by the company. This method is called the incremental cost pricing method or strategy.

Most old firms in the industry use this method when they produce new products. This method is considered more useful even in depression as the firm should not close its business until the price goes to below average variable cost. For this pricing, as a guideline pricing should increase revenue more than it does cost.

D. Administered Pricing

The pricing strategy in which the price of a product is established by the conscious decisions of individuals or agencies rather than by the interaction of market forces of demand and supply is known as administered pricing. It can be seen in two ways. First, the price charged by a monopolist independently not considering the marginal cost. Second, it is fixed arbitrarily by the government and it is not allowed to determine by the free play of market forces.

Administered prices are generally the outcome of government intervention in the free market and they are below or above the equilibrium price. For example, the price of public utilities like electricity, drinking water, and products like petrol, diesel, kerosene, salt, a liquid gas are administered prices in Nepal.

Features of Administered Pricing

- This is fixed by the government
- They are statutory or they are legally enforced by the government
- They are regulatory
- They are mean to corrective measures
- They are the outcome of the price policy of the government

Objectives of Administered Pricing

There are many objectives or purposes behind administered pricing. They are below.

- To protect the interest of the weaker sections of the society
- To discourage or encourage the consumption of certain commodities
- To prevent inflation
- To raise public revenue
- To ensure the efficient allocation of resources
- To promote the egalitarian goal
- To promote equitable distribution of scarce goods

E. Export Pricing

The pricing for the products which the exporter intends to sell in the overseas market is known as export pricing. So, it is the method of fixing the price of products that the exporter exports to the foreign markets. This pricing is more difficult than domestic pricing as the exporter must consider not only the cost of production but also the conditions and circumstances prevailing in the international market that may influence the prices of the product. In the determination of export pricing, the firm should be fully aware of the varied market structures and changing business environment for the products in different countries from time to time. Hence, export pricing is not only a calculation of the cost of production but also a practical exercise based on the international market circumstances. There are additional costs that are incurred and need to be incorporated when setting export pricing. Those sorts of costs are briefly enlisted below.

Costs Before Exporting

It includes the following cost heads.

- Warehousing and storage costs
- The cost related to the preparation of export documentation and meeting any other export formalities
- The cost of packing the products for export
- Any costs related to pre-shipment inspection, if needed,
- The cost of transporting the products from the warehouse to the port of departure that is the airport, seaport, etc.
- The selling cost on a cost, insurance, and freight (CIF)

Costs at Country of Destination

It includes the following cost heads.

- The costs of clearance documentation at customs,
- The costs related to the payment of any duties, tariffs, and taxes
- The costs of meeting any product testing requirements if any
- The costs of transportation to the storage facility
- The costs related to the logical distribution of the product

Costs Related to the Marketing or Selling Structure in Target Country

It includes the following cost heads.

- The costs of distributer or agent's fee
- The costs of any discounts offered to a distributor or agent
- The costs related to advertising and any public relations operation
- The costs related to setting up a marketing operation that influences costs related to meeting the costs of establishing a legal presence, accounts, etc; setting up any facilities; setting up any maintenance or services facilities, etc.

Economists have guided marginal cost pricing as the basis of export pricing in developing nations. The marginal cost pricing of export goods is determined as

$$\mathbf{P_X = MC + IC}$$

Where P_X is the price of an exported product; MC is marginal cost and IC is identical export charges

Therefore, the pricing of goods to export is based on basic output costs/domestic price and identical export charges.

F. Predatory Pricing

Predatory pricing is a method of pricing in which a seller sets a price so low that other suppliers cannot compete and are forced to exit the market. Predatory pricing involves charging very low prices, the aim being to get rid of competitors so that the supplier can charge considerably higher prices later. The predator is willing to sell at a loss (below-average cost but higher than average variable cost) for a period, in the hope that its rivals either go bust or decide to stop selling that product. When competing companies have left the market, the predator pushes prices back up.

Under this method, the predator deliberately fixes very low prices to protect market share from its rivals. This is a short-run policy adopted until the competitors are eliminated. Once the competitors are eliminated, the predictor (dominant) firm will raise the price to fulfill previous losses. Thus, the predator firm bears short-term pain for long-term gain. For this pricing, the dominant firm should have sufficient backup to survive in heavy losses in the short run.

Predatory Pricing is thus

- Selling below a price floor
- Selling to push a competitor out of business
- Selling to become a monopoly

Predatory pricing not only causes others to leave the market but also restricts entry for others. Since this is the purpose of predatory pricing, it is banned in many places because it is considered a violation of competition laws. However, in many cases, it is difficult to prove a business is actively trying to implement predatory pricing rather than just partaking in normal competition. If you had a competitor that was selling a TV at Rs. 10,000, and you sold the same TV at Rs. 8,000 (while taking a loss) because you knew they could not beat your price; you're enacting predatory pricing. This is illegal in many countries and is treated very harshly by many justice systems.

G. Skimming Pricing/Creaming Pricing

Price skimming, also known as skim pricing, is a pricing strategy in which a firm charges a high initial price and then gradually lowers the price to attract more price-sensitive customers. The pricing strategy is usually used by a first mover who faces little to no competition. Price skimming is not a viable long-term pricing strategy, as competitors eventually launch rival products and put pricing pressure on the first company.

The objective of a price skimming strategy is to capture the consumer surplus and earn maximum revenue or profit in the shortest time possible rather than maximizing sales. This strategy encourages the entry of competitors. When other firms see the high margin available in the industry, they will quickly enter. Price skimming can be considered a form of price discrimination.

The effectiveness of price skimming is based on

- There should be sufficient consumers to buy the product at a higher price/inelastic demand curve
- There should not be the availability of close substitutes in the market or cross elasticity of demand must be low
- The high price does not attract the competitors in the industry
- The product is the outcome of expensive research and development and is new to the market
- The goal of the firm should gather as much revenue as possible while consumer demand is high

- If the lowered price would have only a minor effect on increasing sales volume and reducing unit costs
- The higher price is interpreted as a sign of high quality

H. Penetration Pricing

Penetration pricing is a pricing strategy that is used to quickly gain market share by setting an initially low price to attract customers to purchase. This pricing strategy is generally used by new entrants into a market. An extreme form of penetration pricing is called predatory pricing.

Penetration pricing is entering the market of a product with below-average prices. Any size or type of business use this tactic when they are highlighting a new product or service or wish to enter a new market. It is a great strategy to add the marketing mix of a company to grab a huge portion of the potential customer base early on or to capture customers from rivals.

It is common for a new entrant to use a penetration pricing strategy to quickly obtain a substantial amount of market share. Price is one of the easiest ways to differentiate new entrants from existing market players. The overarching goal of this pricing strategy is to:

- Capture market share
- Create brand loyalty
- Switch customers from competitors
- Generate significant demand, looking to utilize economies of scale
- Drive competitors out of the market

Situations where penetration pricing works effectively

- When there is little product differentiation
- Demand is price-elastic
- Where the product is suitable for a mass-market (and, therefore, for utilizing economies of scale)

References and Suggested Readings

Ahuja, H.L. (2004), *Advanced Economic Theory*, New Delhi: S. Chand & Company.

Adhikari, R.P., Acharya, K.R., Lamichhane, B., Gyawali, S., & Tiwari, S. (2020), *Microeconomics for Business*, Kathmandu: Asmita Publication.

Shrestha, P.P., Adhikari, D.B., Khadka, P., & Shrestha, K (2020). *Microeconomics for Business*, Kathmandu: Advance Saraswati Prakashan.

Dhakal, Rijan. (2020), *Microeconomics for Business*, Kathmandu: Smajhana Publication.

https://www.investopedia.com/terms/p/predatory-pricing.asp

https://www.priceintelligently.com/predatory-pricing

https://corporatefinanceinstitute.com/resources/knowledge/strategy/price-skimming/

https://corporatefinanceinstitute.com/resources/knowledge/strategy/penetration-pricing/