4.PRICING DECISIONS

TRANSFER PRICING

- We consider a transfer price as a term used when one subsidiary of a corporation sells to another. A transfer price is a substitute for a market price.
- **A transfer price** can be defined as the **monetary value of goods or services exchanged or sold between organizational units of the same company. Or it's the monetary value of intracompany exchanges that occur between operating units of the same corporation.**
- This transfer price is recorded by the seller as revenue and by the buyer as cost of goods sold.
- **Example:** Subsidiary A sell 1,000 units of products x to subsidiary B for sh 7 per unit. These sh 7 is the transfer price
- The main objective is to determine a transfer price of goods / services exchanged between organizational units of the same company.

7.0.1 Why Transfer Pricing Is Necessary?

Transfer pricing [TP] is the process of determining the price at which goods are transferred from one profit centre to another profit centre within the same company. Such internal trading is more prevalent within horizontally and vertically integrated companies than conglomerate operations with their heterogenous groupings. **(Lucey 2003)**

If profit centres are to be used, transfer prices become necessary in order to determine the **separate performances of both the 'buying' and 'selling' profit centres**. If transfer prices are set **too high, the selling centre will be favoured whereas if set too low the buying centre will receive an unwarranted proportion of the profits.**

In general terms, **transfer pricing is purely an internal, bookkeeping exercise which does not affect the overall profitability** of the firm. However, **in certain circumstances, transfer pricing may have an indirect effect on overall company profitability by influencing the decisions made at divisional levels**. For example, based on the proposed transfer price, a divisional manager may decide to purchase an item externally rather than accept the internal transfer even though such a decision may reduce overall company profitability.

Also, where **international transfers take place, the level of the transfer price can affect where profits are declared and thus the amount and location of tax paid**. Naturally multi-national companies prefer to declare most profits in countries with low business taxation.

7.0.2 TRANSFER PRICING SYSTEM FOR A DOMESTIC CORPORATION SHOULD ACCOMPLISH THE FOLLOWING OBJECTIVES:

i **Divisional autonomy**. The prices should seek to maintain the maximum divisional autonomy so that the benefits of decentralization (motivation, better decision making, initiative, etc.) are maintained. The profits of one division should not be dependent on the actions of other divisions. It should communicate information that resulting in desirable decision making by divisional managers.

ii **Performance appraisal**. The prices should enable reliable assessments to be made of divisional performance. It should provide a report on divisional profits that reasonably measures the economic performance of the division. The prices form part of information which should:

- guide decision making
- appraise managerial performance
- evaluate the contribution made by the division to overall company profits
- assess the worth of the division as an economic unit.

iii **Goal congruence.** The prices should be set so that the divisional management's desire to maximize divisional earnings is consistent with the objectives of the company as a whole. The transfer prices should not encourage sub-optimal decision making. Ensure divisional goals and objectives align with those of the parent / headquarters (objectives and goals) **(Lucey 2003)**

N/B: Achieving the above objectives may be difficult because one division may show increased profits (due to high or inflated transfer prices) while another show losses as a result of acquiring goods and services at higher transfer prices. However, a divisional manager must act in the best interest of the company as a whole even if it is at the expense of reported profits of his / her own division. To effect this ideal behavior, the system of performance evaluation must reward a manager who chooses companywide goal congruence over divisional over divisional performance.

7.0.3 Selecting A Transfer Price:

- The headquarter management team takes a global perspective when considering the trade-offs between the costs and the benefits of setting transfer prices for their operations throughout the world.
- The decision makers must consider the following variables when selecting transfer prices: **tax rates, inflation, foreign exchange controls, government price controls, government stability, and a whole host of other factors operating in each country.**

7.0.4 Methods Used to Set Transfer Prices

Generally, there is insufficient information to set prices using the economic analysis. Firms need to use methods for setting transfer prices which are feasible, which use information that is available without undue costs, and which meets as many of the objectives of transfer pricing.

Most transfer pricing systems in use today are based on either:

a. **External market transfer prices or**
b. **Internal costs – variable or full costs and negotiated transfer prices**

The methods can be summarized as below:

a) **market-based pricing**
b) cost-based pricing – variable or full costs
c) negotiated pricing (Lucey 2003)

MARKET BASED TRANSFER PRICING:

Where a market exists outside the firm for the intermediate product and where the market is competitive (i.e. the firm is a price taker) then the use of market price as the transfer price between divisions would generally lead to optimal decision making.

Benefits of using market-based transfer prices:

1. Goal congruence would be achieved as the divisions could act in their own best interest without reducing overall company profits.
2. Performance evaluation would be possible in a realistic manner.
3. The autonomy of the divisions would be maintained as the selling division could sell on the open market or internally and the buying division would have the option of purchasing in the market place or internally.
4. Market prices appear less arbitrary to government tax authorities who are watching for manipulation of profits and therefore tend to apply less scrutiny.
5. Market based transfer prices, creates the sense of competition that would normally be present if subsidiaries were independent corporations transacting business at an arm's length market prices.

Where significant external buying and selling costs exist then a transfer price may be set somewhat lower than market price to reflect the cost savings from internal transfers. These circumstances may lead to **negotiated market prices where the total cost savings are apportioned between the buying and selling divisions**. In such circumstances an arbitration procedure may be required but too much central intervention of this nature could undermine the autonomy of divisions.

Where appropriate market prices exist then their use represents a feasible ideal. However, there are difficulties in applying the concept universally. **(Lucey 2003)**

Difficulties or Limitations of Using Market Based Transfer Prices:

a) Using market prices **does not afford** the MNC much flexibility with which to **manipulate profits and cash flows** to accomplish the various objectives discussed earlier. **This is the main limitation of using market-based transfer prices.**

b) Frequently there is **no market for the intermediate product or service** being considered. This is typically the case for specialized components, materials, parts or services.

c) Even where some form of intermediate market does exist it may be **difficult to obtain an appropriate price.** A price is only strictly comparable when all features are identical- quality, delivery, finish, and so on.

d) Where a market does exist **it may not be perfectly competitive**, which means that the market is affected by the pricing decisions of divisional managers. Where there is interdependence between output and pricing decisions there is no such thing as a single market price.

e) The market prices that are available may be considered **unrepresentativ**e. For example, there may be considerable excess capacity in the intermediate market so that current quotations are well below long run average prices. In such circumstances the use of either the current, abnormally low, price or the long run 'normal' price may lead to sub-optimal decision making on the part of the supplying divisional management or to loss of motivation and autonomy of the purchasing division. **(Lucey 2003)**

COST BASED TRANSFER PRICING

Cost-based transfer pricing systems are **commonly used because the conditions for setting ideal market prices frequently do not exist**; for example, there may be **no intermediate market** or the **market which does exist may be imperfect**.

Costs based transfer prices may either be set on:

i **Full costs**

ii **Variable costs or**

iii **Marginal cost with a mark-up added** – this allows the subsidiary some percentage of profits

Without the necessary conditions for establishing market prices there is no simple decision rule which leads to optimal decision making and which meets all the objectives for the ideal transfer price.

Providing that the required information is available, a rule which would lead to optimal decisions for the firm as a whole would be to transfer at **marginal cost up to the point of transfer, plus any opportunity cost to the firm as a whole**.

Even assuming that **variable outlay costs** as conventionally recorded in accounting systems are a reasonable approximation of economic marginal costs, the imposition of such a rule would undermine the concept of profit centres in that the profitability of divisions required to transfer at marginal cost could not be appraised, and the autonomy of divisions would be affected.

Given all the difficulties in establishing ideal prices, firms have to find some answer to the transfer pricing problem so that methods based on costs which are readily available from the normal accounting systems are frequently used. **(Lucey 2003)**

Benefit Of Cost Based Transfer Prices

1. Using market prices **affords** the MNC much flexibility with which to **manipulate profits and cash flows** to accomplish the various objectives discussed earlier. To achieve the overall goal, MNCs tend to manipulate transfer prices (try to avoid the use of market based transfer prices).
2. Using cost plus a markup is easily justified as reasonable when dealing with government authorities, which is another important consideration when administering transfer prices.
3. Cost based transfer prices are conveniently determined, because the information on costs is available from the records of the company**(Lucey 2003)**.

Limitation Of Cost Based Transfer Prices:

1. A general problem which arises in such circumstances is that the costs may include inefficiencies of the selling division which would thus be passed on to the buying division. Therefore, Cost based transfer prices give the selling party (subsidiary) little incentives to control costs or operate efficiently, since the inefficiencies may be passed along to the purchasing subsidiary.
2. The use of marginal (variable) costs would undermine the concept of profit centres in that the profitability of divisions required to transfer at

marginal cost could not be appraised, and the autonomy of divisions would be affected.

3. Undesirable behavior may result in the form of poor decision making **(Lucey 2003)**.

NB: Accordingly, standard costs, rather than actual costs should be used as the basis of the transfer price in order not to burden the buying department with the inefficiencies of the supplying department.

The two main cost derived methods are those based on **full cost and variable cost.**

FULL COST TRANSFER PRICING

This method, and the variant, which is full costs plus a profit markup, ***has the disadvantage that sub-optimal decision making may occur particularly when there is idle capacity*** within the firm.

The full cost (or cost plus) is likely to be treated by the buying division as an input variable cost so that external selling price decisions, if based on costs, may not be set at levels which are optimal as far as the firm as a whole is concerned. **(Lucey 2003)**

A simple example of this follows.

Division S sells to division B at full cost + 33 1/3% and division B sells externally at a similar mark up. The following data are available.

Division S		**Division B**	
	Shs		Shs
Variable cost per unit	26	Transfer Price	48

Division S	shs	Division B	shs
Variable cost per unit	26	Transfer Price	48
Fixed costs per unit	10	Own variable costs per unit	15
Total cost per unit	36	Fixed costs per unit	9
Mark up	12	Total cost per unit	72
		Mark up	24
Transfer Price	48	Selling Price	96

Thus, based on the stated pricing rules, division B would be attempting to sell at Shs96. If spare capacity exists then B may try to obtain any price above marginal cost but is likely to treat marginal cost as the variable costs of the division, i.e. shs 63 (shs48 + shs15). As far as the firm as a whole is concerned the marginal cost is the variable cost in each division, Shs41 (Shs26 + Shs15) so that the firm may lose a contribution margin if Shs63 is deemed to be the minimum acceptable figure for marginal pricing. **(Lucey 2003)**

Full cost transfer pricing suffers from a number of other limitations.

a) The calculated cost is only accurate at one level of output.

b) The validity of any pricing decision based on past costs is questionable.

c) When transfers are made at full cost plus a profit markup, the selling division is automatically given a certain level of profit rendering genuine performance appraisal difficult.

d) When the selling division is inefficient or working at low volume the costs may be unacceptably high as far as the buying division is concerned**(Lucey 2003)**.

VARIABLE COST TRANSFER PRICING

Using this system transfers **would be made at the (standard) variable costs up to the point of transfer.** Assuming that the variable cost is a good approximation of economic marginal cost then this system would enable decisions to be made which would be in the interests of the firm

(Lucey 2003).

<u>Benefits of using variable cost transfer pricing</u>

Variable cost-based transfer price minimizes making of sub-optimal decisions and, as a separate exercise, credit the supplying division with a share of the overall profits which eventually results from the transferred item. This dual transfer price approach has an apparent fairness in that credit for profits earned is shared between divisions. This is because performance appraisal based on arbitrarily apportioned profit shares has obvious shortcomings and administrative difficulties **(Lucey 2003)**.

<u>Variable cost transfer pricing suffers from a number of other limitations.</u>

Variable cost-based prices will result in **a loss for the selling division** so performance appraisal becomes meaningless and motivation will be reduced.

<u>NEGOTIATED TRANSFER PRICING:</u>

As an alternative to setting prices based on rules or formulae, transfer prices could be set **by negotiation between the buying and selling divisions**. This would be appropriate if it could be assumed that such negotiations would result in decisions which were in the interests of the firm as a whole and which were acceptable to the parties concerned.

Limitation of using negotiated transfer pricing:

1. It is unlikely that the parties concerned have equal bargaining power and protracted negotiations may be time consuming and divert management energies away from their primary tasks.

2. Disagreements, which are all too likely, will require some form of arbitration by central management which itself undermines the autonomy of divisions and may cause resentment. It must be remembered that the objective of divisionalization is to enhance the overall efficiency of the organization so that care must be taken not to nullify any benefits through inter-divisional wrangling over transfer prices **(Lucey 2003)**.

<u>INTERNATIONAL TRANSFER PRICING</u>

In general, **multi-national companies** try to set transfer prices between countries so that they are able to **show higher profits in low tax countries and lower profits where tax rates are high.** However, **many countries require** that transfer prices are set on an **arm's length basis** using the prevailing market price where one is available. As an example the **UK taxation authorities** have the power to **adjust the taxable profits of a home-based firm** that has been the party to an inter-country transaction to the figure that would have resulted from true arm's length pricing.

The level of the **transfer price** can also **affect the amount of import duties to be paid** and is a **way of repatriating dividends**. Some countries place restrictions on the amounts of dividends that can be paid from the branches of multi-national companies in their country. Where this restriction exists it may be partially avoided by charging a high transfer price in the particular country **(Lucey 2003)**.

For a detailed discussion on Multi-national Corporation transfer pricing, it shall be covered in year four under BACT 410: International Accounting.

<u>Learning activities</u>

QUESTION ONE: (Practice question)

a) Discuss the strengths and limitations of cost based transfer pricing system **[5marks]**

b) Using your own appropriate illustration, demonstrate how a company can use

   i. Market based transfer prices **[10marks]**

   ii. Internal costs-based transfer prices. **[10marks]**

<u>QUESTION TWO:</u> (Practice questions)

a) Why do transfer prices become necessary?

b) What objectives should transfer prices attempt to meet?

c) What is the theoretically optimum transfer price?

d) In what circumstances should central management intervene in setting transfer prices or transfer quantities?

e) What is market-based transfer pricing and why might there be difficulties in using this approach?

f) Describe full cost transfer pricing and its characteristics.

g) What is variable cost transfer pricing and how might any possible disadvantages be overcome?

h) What is negotiated transfer pricing?

i) What level of transfer price would multinational companies ideally like to set for international transfers?