

Transfer pricing in conglomerates and multinationals Concept and practices

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Abstract: *International access and globalization have been inextricably linked today. One sustains the other. Transnational and multinational corporations have been there for over 100 years. But they are being spotted, inter alia, now because of the speed with which they are being established, and the earlier ones making their presence felt in the hitherto unknown destinations. This trend has been given a fillip by Information Technology (IT) and the convergence of IT, communications, and broadcasting. The pace at which the information is generated and then disseminated is simply incomprehensible. The microchips are available now which are 1/1,000,000 of the width of the human hair, with much more operating capability and much lower consumption of power. In such a backdrop, transfer pricing is now one of the key issues in industrial management. When a conglomerate within a country and multinationals across the countries is a common phenomenon, sourcing within an organisation is a necessary concomitant. Then, as businesses continued globalization efforts and fiscal authorities become increasingly concerned with claiming their fair share of tax revenues. Truly, transfer pricing has evolved from primarily a country's concern to a global one.*

Despite all the literature which has been built around the transfer pricing, no universally applicable method has been devised so far. It is not something surprising and not something that was unexpected. A therapy is patient-specific, and so is transfer pricing. Although arm's length principle has been widely advocated, there are companies all the world over which have adopted the variants thereof, and made them a success.

A large share of world trade consists of transfer of goods, intangibles and services within Multinational Corporations (MNCs). Determination of right price for these transactions is of great importance to arrive at the correct tax liability in each jurisdiction. Extensive guidelines have been issued by the Organisation for Economic Co-operation and Development (OECD) for determination of the arm's length price in order to avoid economic double taxation and the consequent impediments to world trade. To ensure that the tax base of an MNC is divided fairly, it is important that transfers within a group should approximate those which would be negotiated between independent firms.

It is important to note that transfer pricing is in a sense directly related to the concept of permanent Establishment (PE). An organisation operating abroad through a PE is taxable on the profits attributable to it. Transfer pricing helps in computing profits of the PE. Transfer pricing is a key, international tax issue for MNCs recognising that there is a clear connection between double taxation and transfer pricing. Global surveys indicate that 61%¹ of the MNCs consider transfer pricing as a key concern today and for years to come.

The concept of transfer pricing, becomes relevant from the viewpoint of revenue authorities. Every jurisdiction would be interested in getting a fair share of revenue in respect of economic activities carried out therein. The transfer pricing seeks to achieve this. It is also relevant from the management viewpoint, for various reasons, including decision-making, evaluation of performance of the enterprise or a unit, and to arrive at fair profit of an enterprise.

Transfer pricing developed as a logical result of the movement towards divisionalisation of operations by large business organisations like General Motors and General Electric in US during the early part of the twentieth century. Highly centralised operations were decentralised by establishing numerous profit centres in search for more productivity. Delegation of increased authority to local managers in turn gave rise to a mechanism of internal pricing that would serve the dual purpose, on the one hand of optimising allocation of corporate resources, and on the other of motivating the divisional managers to operate their units at a high degree of efficiency so that goal congruence prevails between divisional and corporate management. At the same time, it serves as a device for monitoring the performance of divisional managers.

The Concept

A division, branch, department or any other component of an entity may transfer goods or services to other subdivisions of the same entity. Transfers may be of tangible property like raw material, unfinished components, ready to sell items or services like marketing and distribution and research and development. The

amount used to record such transfers between divisions is known as transfer price. Horngren and Foster defined transfer price as "the price one segment of an organisation (sub unit, department, division and so on) charges for a product or service supplied to another segment of the same organisation". A slightly modified version of this definition would include inter-company transfers between affiliates.

Transfer price can also be defined as exchange value assigned to a product or service that one unit of an organisation provides to another unit of the same organisation. The transfer price is entered as a credit in the books of the supplier and as a debit in the books of the receiver. Here the terms division, unit, affiliate, company and wherever appropriate, subsidiary have been used interchangeably.

The significance of transfer pricing for a firm depends to a large extent on the quantum of transactions amongst its different segments. Where interdivisional transfers are minimal, the transfer price has little impact on segmental performance or taxation. On the other hand, substantial interdivisional transfers can have a dramatic effect on the reported performance or international tax liability.

Unique Features

- **An offshoot of Cost Accounting**

Transfer pricing is an offshoot of cost accounting. When the organisation grows in size, the centralised control becomes more difficult. To this end, many entities have decentralised their activities into autonomous divisions or subsidiaries. This process of decentralisation has resulted in financial benefit to the organisation as a whole because of delegation of authority at the divisional level provides an added incentive. At this stage, the idea of transfer pricing was introduced. The concept seemed to be a good financial tool until it was used to try to measure what the price of transfer should be.

- **Cost Allocation**

It is the price used for internal transfer of goods and services between divisions of a business enterprise. In a sense, all cost allocation is a form of transfer pricing. The basic purpose of transfer pricing is to allocate cost to the production department.

- **Critical Success Factor**

There are several financial and non-financial factors for a business to succeed. Variables are there which make things happen. Performance of any organisation has to be judged not simply in financial terms of net profit or its derivatives like Rate of Return on Investment (ROI) or Residual Income (RI). Research has rightly emphasised the significance of non-financial variables like customer satisfaction. Transfer pricing belongs to the area of financial factors. This is exactly what has been referred to as the "Balanced Scorecard". Any transfer pricing method has to get integrated. An integrated transfer pricing system, should have been developed by the joint efforts of both accounting and manufacturing personnel. If a divisional manager is responsible for divisional performance, he should have had input in the development of transfer pricing system. Failure to follow this method will result in sub-optimisation of resources.

Mechanism of Transfer Pricing

Reinvoicing centres are set up in tax heavens. They are used to coordinate transfer pricing around the world. Intercorporate transactions are routed through the reinvoicing centres. The reinvoicing centre takes title to the goods sold by the selling unit and resells them to the receiving unit. The prices received by the seller and charged to the buyer are determined administratively. There is no interference with the actual flow of goods which are shipped from the seller to the buyer but the documentation show the two stage transfer. The purpose is to siphon the profits away from a high tax parent to low tax affiliates and position funds in locations with strong currencies and virtually no exchange controls.

Requisites of an Optimal Method

A transfer pricing method should have the characteristics which make it an effective system. The criteria, which a good transfer pricing should satisfy, though not necessarily all are the following:

- **Objectively Determinable and Fair**

The system adopted must be fair to all the parties concerned; it must be objectively determinable and impartial to the extent possible. It should not favour manager of one division against another. The inequalities in the system will cause its breakdown. It should minimise the conflict between buying and selling units. Conflicts over transfer pricing are inevitable but techniques should be developed to reduce internal differences and conflicts.

- **Goal Congruence**

The pricing system should be consistent with the overall corporate objectives. It should encourage managers to pursue corporate goals together with their personal goals; no decision should be permitted to act in a way that is in contradiction with company objectives. The system ought to be designed to ensure that

divisional management and top management would make the same optimal decision if all the information available is known to the parties. The method must promote cooperation across divisions.

- **Economic Efficiency**

The pricing system must promote utilisation of resources to achieve the maximum benefit possible. It should act as an incentive to keep costs down and facilitate speed and minimise delays. It must offer a fast response to changing business challenges in the world.

- **Simple and Flexible**

Then the system has to be reasonably simple, minimising duplication and paper work. It must offer flexibility where and when it is needed.

- **Long Range in Scope**

The transfer pricing system should be long range in scope. It should not sub optimise by pursuing only short- range objectives. Once long range perspective is lost track of, the system could be disastrous.

Governing Considerations

Transferpricing technique is dependent on an industry’s economic conditions, corporate return and sales policies. There are various considerations that may force multinationals to manipulate transfer pricing to their advantage. The factors that are likely to prompt transfer pricing are:

- **Coordinate and Control Operations**

Transfer pricing is one of the tools by which global resources can be controlled and allocated by the headquarter. Generally, the headquarters have access to the data base needed to make resource decisions in the long-term interest of the whole firm which may at times run counter to the short-run benefits of certain units or divisions. In such cases, the interest of the sub-unit must be coordinated to those of the whole firm. Transfer pricing serves as the core of the database used for decision making reports to the headquarter. It must reflect the relevant cost involved, regardless of the transfer pricing, reflected in transactions among sub-units. Consequently, meaningful cost accumulations for internal reporting dictate that transfer of resources with the MNC is based upon cost.

- **Minimise overall Corporation Tax on Profits**

Multinational corporations, like other companies try to maximise their profits. Corporation tax is an important variable in case of transfer pricing. Many companies try to increase their net world income by manoeuvring their profits to the lowest tax areas. If in country A, the corporation tax burden is higher than in country B, other circumstances being equal, the multinational is rewarded when it overprices its sales from B to A. The transfer pricing gambits are particularly profitable whenever tax rates in two countries diverge widely. Prof. J. S. Arpon, after analysing the transfer pricing policies of some 60 non-US multinational firms and their subsidiaries, found that French, Italian, Canadian and American companies considered income tax to be the most important variable affecting transferpricing, policy. Other things being equal, profits accruing to the corporate system as a whole can be increased by setting a higher transfer price to siphon profits from subsidiaries domiciled in high tax countries and setting a low transferprice to subsidiaries located in low tax countries.

As an example, Blue Jeans, Hong Kong, a wholly owned manufacturing subsidiary of global Enterprises (U.S.A) ships 5,00,000pairs of designer blue jeans to a related U.S.Sales affiliate, Blue Jeans - U.S A. also wholly owned by Global Enterprises, for \$6 a pair. Assuming wholesale price of each garment is \$12 in the United States, consolidated profits (after eliminating intercompany sales and costs) and taxes would total \$11,44,000 and 7,56,000 respectively This is shown in table 1.1

Table 1
Consolidated Profits from Blue Jeans

	Blue Jeans Hong Kong (\$)	Blue Jeans USA (\$)	Global Enterprises (\$)
Sales	30,00,000	60,00,000	60,00,000
Cost of sales	*21,00,000	**30,00,000	21,00,000
Gross Margin	9,00,000	30,00,000	39,00,000
Operating Expenses	5,00,000	15,00,000	20,00,000
Pre-tax Income	4,00,000	15,00,000	19,00,000
Income Tax (16.5%/46%)	66,000	6,90,000	7,56,000
Net Income	3,34,000	8,10,000	11,44,000

* Equal to 70% of Sales

** Based on transfer price of \$ 6 per unit.

Given a US Corporate Tax rate of 46 percent versus only 16.5 percent in Hong Kong, an increase in the transfer price of Blue Jeans from \$ 6 to \$ 8.50 a pair produces a system which benefits as shown in Table — 1.2

Table 2

Consolidated Profits from Blue Jeans with Transfer Price Increase

	Blue Jeans Hong Kong (\$)	Blue Jeans USA (\$)	Global Enterprises (\$)
Sales	42,50,000	60,00,000	60,00,000
Cost of sales	21,00,000	42,50,000	21,00,000
Gross Margin	21,50,000	17,50,000	39,00,000
Operating Expenses	5,00,000	15,00,000	20,00,000
Pre-tax Income	16,50,000	2,50,000	19,00,000
Income Tax (16.5%/46%)	2,72,250	1,15,000	3,87,250
Net Income	13,77,750	1,35,000	15,12,750

Thus, we see that by raising the transfer price charged by Hong Kong affiliate, increases the taxable income there and reduces taxable income for the U.S. affiliate by \$12,50,000. Owing, to the differential tax rate of 29.5 percent between U.S A. and Hong Kong, corporate income taxes for the MNC as a whole decrease by 3,68,750 with an increase in consolidated after tax earnings.

• Customs Duties

In another fiscal area of custom duties, transfer pricing manipulation can be expected to entail benefits to multinational corporations. Suppose, a commodity with a normal price of 1,000 is subjected to a 60 percent import duty in country M. It pays to the multinational to lower the value declared on the transaction to 700 as the import duty will be reduced by 180. These are differences between field of corporate taxation and of import duties. In the area of custom duties, only value lowering transfer pricing tactics are profitable as regards corporate taxes, depending on the circumstances would involve under pricing or over charging the normal price. Also, when the multinational lowers the value declared on the commodities declared in country M only that country is involved. The exporting country X would experience no gain or loss in customs revenues.

• Competitive Variables

In order to facilitate the establishment of a subsidiary abroad, a parent company could supply the subsidiary with inputs invoiced at very low prices. The price subsidies would gradually be removed as the foreign affiliate strengthens its competitive foothold in the foreign market. Similarly, lower fashion prices could be used to shield an existing operation from the effects of increased foreign competition. Indirect competitive effects are also possible. In order to improve foreign subsidiary's access to local capital markets, its reported earnings and financial position can be bolstered by setting low transfer prices on the subsidiary's inputs and high transfer prices on its outputs.

• Environmental Hazards

Risks associated with the overseas investments can also be reduced by selective use of the transfer price. A high transfer price can be used to return resources to the parent firm as soon as possible if the short-term investment is made or when the political environment is deteriorating and considered to be irreversible. Exchange risk is also one of the reasons for using the mechanism of transfer pricing. Floating-exchange-risk has made companies engaged in international trade and investment view exchange uncertainties as their most pervasive risk. Devaluation of currency involves not only monetary items such as cash, receivables but also real assets like real estate.

• Profit and Capital Repatriation

Governments of all countries impose restrictions on repatriation of profits and capital. Thus, foreign exchange control is quite stringent particularly in developing countries where situation of balance of payments is very tight. MNCs view stringent restrictions on profit remittances as negative parameters on their profit and sales maximisation. Transfer pricing manipulation can circumvent the explicit restrictions on the remittances, e.g., the prices of sales by the parent to the subsidiary are artificially raised. Conversely, sales of the latter are under priced. Such a device substitutes the direct dividend route. Thus, the objectives of transfer pricing vary. The relative significance of these depends on the quantum of transactions between its different segments. Of late, exchange control and profit repatriation has taken precedence over minimising tax liability as the object of transfer pricing.

- **A Survey of existing Literature**

In fact, the subject of transfer pricing has failed to attract the attention of researchers in India. So far, limited research has been undertaken on this issue. The primary constraint is lack of willingness on the part of companies to disclose the required information. In an earlier study, Govindrajan and Ramamurthv concluded that market price based transfers were popular with companies in India. This was followed by manufacturing cost-based prices. However, a recent study by Shirin Rathore reveals that other methods such as sales minus and negotiated price methods are gaining ground probably on account of their ability to achieve better the objectives of transfer pricing.

METHODS

The transfer pricing methods used in actual practice can be classified into three main categories, namely cost-based, market-based and others. Variations exist, within each category and occasionally, a hybrid form is also used, i.e. a combination of cost-based and other methods.

- **Cost based Systems**

Cost based transfer prices are a popular pricing mechanism in circumstances where market prices are not feasible either because they are not available or are otherwise unsuitable. In most cases of vertical transfer, to successive levels of production or distribution where the transferring unit is viewed as a cost centre, the cost-based methods of transfer pricing are applied. Analogously, horizontal transfer, to similar levels of production or distribution by captive units are also usually executed at cost, which may include freight and handling charges. The more centralised firms tend to favour cost-based transfers as a basis for control, decision-making and monitoring performance. Cost-based transfers may take various forms; they may be at (a) full cost (b) modified cost, (c) standard cost, and (d) partial cost.

(a) Full cost

Perhaps the least satisfactory transfer price is a mechanical full cost pricing system. Under this method, the price is determined by including all direct and indirect costs, fixed as well as variable. The advantages frequently cited of a historic cost transfer price are that it is simple, definitely determinable and readily available. Besides, it is easy to defend externally to the government and other regulatory agencies. Again, it is argued that fixed costs usually form an ingredient of long-run decisions, hence ought to be included in the transfer prices.

The method, however, suffers from numerous shortcomings. Transfers at actual costs fail to provide the supplying division with incentive to control its costs. A blank permit to transfer at actual costs may, therefore, eliminate the stimulus for production efficiently and cost reduction. Consequently, the inefficiencies of the selling division are passed on to the buying segment of the firm, which adversely affects its competitive position in the external market. Nor is it an appropriate guide for evaluating the divisional performance. Profits cannot be used as motivators for the transferring division. Cost being the basis for intermediate transfer, profits will be recorded by the final transferees only. Such transfer prices are also not very helpful to the transferees in the process of decision-making, unless variable costs are reflected separately. Consequently, at times, decision, that is dysfunctional for the firm as a whole may be taken.

(b) Modified Cost

In practice, many variations of the cost based methods have been developed. A common variant is the full cost plus transfer pricing method. Under this model, the cost of the product or service is inflated by some amount. The addition may take the form of a fixed amount per unit or it may be percentage of the cost. The method attempts to overcome some of the shortcomings of the full cost method. It would provide the benefit of profit as a motivator. Besides, in situations where pricing practices must be defended, cost plus method often satisfies the arm's length criterion. However, it is doubtful whether cost-plus transfer prices (where actual costs are used for computation) would provide any incentive for efficiency on the part of the selling division. On the contrary, the selling division would generate more profits by incurring more costs. For instance, assume that the method provides for a ten per cent plus on actual costs and cost of production of the selling division is Rs. 100 per unit. A profit of Rs. 10 per unit is generated for the division. On the other hand, if the costs increase to Rs. 120 the division would be generating a profit of Rs. 12 per unit of the product transferred. This problem of the selling division profiting from its own inefficiencies is eliminated when standard costs are used as the base for cost plus transfers. Also, the modified cost model fails to serve the purpose of decision-making.

(c) Standard cost

Substitution of standard or budgeted costs for actual costs could rectify the shortcoming of the earlier method where inefficiencies are passed on to the buying unit in the form of inflated prices. Under this method, price to the buying division is based on efficient performance. Inefficient operations are detected early, hence,

they are not carried through to the final product. Standard costs provide the incentive to operate efficiently as the transferring unit is not permitted to recover costs of its inefficiencies from the buying division. Standard costs, however, would not avoid the more serious problem of sub-optimal decision-making.

(d) Partial Cost

A modified version of the full cost approach is the method under which only part of the costs are considered for setting the transfer price. The partial costs generally taken into account are the variable costs* of manufacturing the product. This method is advantageous in so far as control of relevant costs is concerned. By aiding in the cost and input decisions, it minimizes the possibilities of purchase from outsiders at higher costs to the organisation.

Criticism generally levied against the variable cost method is that it is further removed from sensibility to market factors. Lack of consideration for fixed expenses and capital employed is likely to influence long term profitability. Again, this method being based only on costs, profits have no role in motivating and evaluating the performance of the divisions. Yet more weighty criticism is the one advanced in case of international transactions: use of this method of pricing would lead to charge of dumping being levied against the transferor as these prices would neither be representative of economic substance nor fulfil the arm's length criterion.

At times an additive is applied to the variable costs to motivate the divisional managers. This only serves to blunt the utility of the transfer price so determined as decision tool and is therefore rarely used in actual practice.

• Market Price Based Systems

Transfer prices based on market price may be based on the market price of the semi-finished product, or on the ultimate market price.

(a) Based on Semi-Finished Product

There is a general agreement that if competitive markets for the intermediate product exist, market prices would be the ideal transfer price; the reason being that it is determined by parties that are external to the firm and deal at arm's length with one another. Market price, when used for internal transfers is, therefore, the most objective measure of value employed while charging for the goods or services exchanged. As Horngren puts it:

When an organisation has profit centres, market prices should be the prime candidate for selling transfer prices. In this way buyers and sellers systematically keep abreast of their internal and external opportunities, and problems of congruence, effort and autonomy are minimized.

Market oriented transfer prices offer numerous benefits to the concerns employing them. Use of market price is consistent with decentralised profit centres orientation. Profits determined by external markets are less subject to internal manipulations and are a reasonable measure of performance. Shillinglaw and Burton have expressed the objectivity of transfer pricing at market price as follows:

A transfer price system based on market price has considerable appeal. It seems a fair, objective measure of the value of the product transferred. It introduces external competitiveness pressure, and standards, and it measures divisional profits in terms of external opportunities.

Market based transfer price helps to distinguish between profitable and non-profitable operations. Competitive market prices thus stimulate control of costs and encourage efficiency. Market prices easily fit into the notion of arm's length price. Among host governments, sensitive to anti-competitive practices, a consensus seems to be emerging that arm's length pricing is an appropriate norm in computing taxable profits.

The benefits, which accrue from market based transfer prices, should not lead one to the conclusion that they are free from shortcomings. Market price is the appropriate transfer only where the commodity being transferred is produced in a competitive market, that is, competitive in the theoretical sense, where no single producer considers himself large enough to influence price by his own output decision. A major problem associated with market price is the frequent absence of an intermediate market for the product or service in question. This happens in the case of semi-finished products or specialized components. For instance, where the product or service is specially made for a particular division, or has special characteristics, market price would only give a rough estimate of the market value of the specific product or service. Besides, decision regarding internal transfer made on the basis of market price, under normal operating conditions, at less than full capacity, may not be congruent with the best interests of the total enterprise. The management is not left with much scope to adjust prices for competitive and strategic purposes under this mechanism of transfer pricing. Again, overemphasis on market prices may result in the lack of adequate attention to control of costs.

(b) Based on Ultimate Market Price

This category includes the sales minus method. Under this method, the basis of transfer pricing is found in the price realized by the marketing division, which sells the product to third parties. The transfer price is determined by reducing this price by an amount (usually a percentage) considered appropriate to cover the expenses of the marketing division in acting as an independent distributor. This method of transfer pricing would be appropriate in cases where the marketing division has no production of its own but is merely involved in selling and distribution activities. Determination of the level of allowance for profit is a difficulty generally encountered under this mechanism. One alternative is to permit an allowance in consonance with comparable enterprises in the same industry. Another possibility is to deduct a percentage of cost or turnover which would be enough to cover selling and distribution expenses and also the profit mark-up.

A leading automobile manufacturing company in India follows the policy of transfer price as a proportion of selling price. The tractor, motorcycle and spares manufacturing divisions transfer the final product to the marketing division at 97.5% of the selling price. The profit of the market division is found after deducting its expenses (selling, administrative and allocation of head office expenses) from 2.5% of the selling price.

• **Modified Market Price**

Market price is sometimes modified to reflect the specific situation involved in the intra-company transfers of products and services. The market price may be reduced to make allowance for reduced effort in selling and transportation expenses that often characterize inter-divisional transfer. The justification put forward is that since the selling division would be incurring less cost in making a sale to another division, part of the savings should be passed on to the buying division.

This method would, however, not be very appropriate where transfers are made among subsidiaries situated in two different countries owing to the distance involved, economics on shipping, etc., would not be realized. In certain situations, however, it may be necessary to revise the market price upwards to take care of hidden costs arising on account of the buying division making reasonable delivery demands on the selling division or the extra cost incurred to meet a more stringent quality standard.

• **Others**

This category may include transfers on the basis of (a) negotiated price, (b) target profit, and (c) dual price.

(a) Negotiated Price

This mechanism represents a refinement of the market based transfer prices. It is also termed as bargained price. As its name indicates, this price is determined by bargaining between the subunits involved. It suggests an arm's length bargaining process such as would be encountered when dealing with entities external to the firm. The negotiation approach rests on the assumption that the entities have complete freedom to bargain. In other words, if an agreement were not reached on the transfer price they would be free to sell in the external market. In the absence of availability of such alternatives the negotiation approach would break down. Kaplan and Atkinson refer to certain conditions that are essential for the negotiated price technique to succeed. These include:

1. Some form of outside market for the intermediate product. This avoids a bilateral monopoly situation in which the final price could vary over too wide a range, depending on the strength and skill of negotiators.
2. Sharing of all market information among the negotiators. This should enable the negotiated price to be close to the opportunity cost of one, or preferably both, the divisions.
3. Freedom to buy or sell outside. This provides the necessary discipline to the bargaining process.
4. Support and occasional involvement of top management. But such involvement must be done with restraint and tact, if it is not to undermine the negotiating process.

There are certain advantages attached to the negotiated price approach. Bargaining makes adjustments for unusual or inappropriate aspects of the market price. Where both parties are open to reasonable concessions, negotiations would improve the use of economic resources in situations where excess capacity exists.

The negotiated price mechanism, however, is not free from defects. The negotiation process no doubt consumes useful management time of both the parties involved and also the top management, which is required to oversee the negotiating process and to mediate disputes. The measurement of divisional profitability is rendered sensitive to the negotiating skills of the managers. Besides, captive units are generally placed at a relative disadvantage in such negotiation. In situations where the negotiated price is above the opportunity cost of supplying the transferred goods, it may lead to sub optimal levels of output. Despite its limitations, however, the negotiated price mechanism seems to be the most practical method for establishing the transfer price between two divisions.

(b) Target Profit Price.

The approaches discussed so far are either cost oriented or market based, another approach suggested by Hager and Matulich is to arrive at a transfer price based on a target profit. According to them, "Target profit transfer prices attempt to provide reasonable or desired profit levels for divisions when a market price is not available or when other transfer pricing methods would yield unsatisfactory results"⁷. Thus, under this method the transfer price is designed to provide a reasonable profit to the selling division, say 10% of the standard costs or actual costs. To illustrate, assume that Sunset Limited has two divisions — a manufacturing division and an assembly division. The units produced by manufacturing division are transferred to the assembly division and the policy of the company is to provide a divisional profit of 30% on sales with standard costs as the base. The cost data of the manufacturing division is as follows:

Table 3

	Standard Costs (Rs.)	Actual Costs (Rs.)
Standard units	20,000	
Units produced		20,000
Manufacturing Expenses	1,60,000	1,97,600
Operating Expenses	50,000	82,400
Total costs	2,10,000	2,80,000

To determine the transfer price it is essential to first compute the total revenue required to yield the target profit. This figure would then be divided by the units produced to obtain the transfer price. The computation therefore is:

$$\begin{aligned}
 TR &= 0.3 TR + TSC \\
 TR &= 0.3 TR + (1,60,000 + 5,000) \\
 0.7 TR &= 2,10,000 \\
 TR &= 2,10,000 \text{ divided by } 0.7 \\
 &= 3,00,000
 \end{aligned}$$

Where TR represents total revenue and TSC represents total standard costs.

Thus, Rs. 3,00,000 is the total revenue required to generate a 30% profit on sales using standard costs as the base. The transfer price per unit is therefore equal to Rs. 3,00,000 divided by 20,000 i.e. Rs. 15 per unit.

Had the profits been measured against actual cost, the process of computation would have been similar except that actual cost would have been substituted for standard cost. Thus:

$$\begin{aligned}
 TR &= 0.3 TR + TAC \\
 TR &= 0.3 TR + 1,97,600 + 82,400 \\
 0.7 TR &= 2,80,000 \\
 TR &= 2,80,000 \text{ divided by } 0.7 \\
 TR &= 4,00,000
 \end{aligned}$$

Where TAC represents total actual costs.

The transfer price would be fixed at Rs. 4,00,000 divided by 20,000 = Rs. 20 per unit.

The situation becomes slightly more complicated when the transferring division sells part of its product to the outside market. In such cases, to determine the transfer price, the revenue obtained from outside sales would be deducted from the desired total revenue and the difference divided by the number of units transferred internally. In the previous example, assume that the manufacturing division sells 15% of its output to an outside buyer @ Rs. 20 per unit. The targeted profit continues to be 30% of sales using standard costs. The transfer price will be computed as follows:

The total revenue required will be the same as the target profit and the standard costs are the same. Thus:

$$\begin{aligned}
 TR &= 0.3 TR + (1,60,000 + 50,000) \\
 TR &= \text{Rs. } 3,00,000
 \end{aligned}$$

Revenue generated from outside sales = 3,000 x Rs. 20 = Rs. 60,000

Revenue to be generated from internal sales = 3,00,000 - 60,000 = Rs. 2,40,000

Transfer price = Rs. 2,40,000 divided by 17,000 = Rs. 14.12 approx.

(c) Dual Pricing

Since it is virtually impossible for a single transfer price to simultaneously meet the criteria of goal congruence, sub unit autonomy and managerial effort, some companies resort to dual pricing. Under this

mechanism a given transaction is recorded at two prices arrived at by using two different methods. This system has gained acceptance over the years as it attempts to reconcile the objectives of control, performance evaluation and decision-making. Most of the complex enterprises operate somewhere along the centralised-decentralised continuum. The cost centre approach would be most appropriate in case of some units; a profit centre approach would be more suited for others. To illustrate, where a company has a captive central manufacturing unit and distribution unit, the manufacturing unit may be controlled internally by using a standard cost plus mechanism of transfer pricing for transfers to the distribution unit. The transferee unit, however, would be charged only the standard cost. This will enhance decision making at that level and at subsequent levels. The method, however, suffers from the drawback that it would result in some double counting of profits and so the aggregate of divisional profits would not reflect the profits of the enterprise as a whole. Another argument put forward against its use is that it would lead to deterioration in control of costs at all levels. This situation, however, would not necessarily result in all cases, as it would depend on the calibre and astuteness of the management.

The pros and cons of the different transfer pricing models discussed so far give us an insight into their nature but do not provide an answer as to which model is optimal. There is seldom a single transfer price model that can ensure the desired results. As Merville and Petty observe,

The transfer pricing issue has been addressed from a variety of perspectives and vantage points, however, endeavours to construct an all purpose intra-company price have produced more questions than answers.

The reason being that an appropriate transfer price is dependent upon numerous factors such as economic and legal circumstances and the decision at hand. One transfer pricing model may be required for motivation and another for evaluation. Again, what may be an optimal price for tax purposes may not be so for other external purposes. Concisely stated, the appropriate determination of a transfer price must be aligned with the end objective. As Sharav puts it,

What, if any, is the 'preferred method' of transfer pricing? No method that has emerged to date, be it cost, - or market based, has been immune from criticism. The practices of actual companies involved in transfer pricing demonstrate a consistent rejection of any dogmatic and singular approach, no matter how theoretically superior it may have been proclaimed. Users and uses determine the transfer pricing technique to be selected.

Though there is no all-pervasive rule for transfer pricing which would lead to optimal decisions for an organisation as a whole. Horngren and Foster have devised a general rule, which according to them, has proved to be helpful in setting a transfer price. Accordingly, Minimum Transfer Price = Additional outlay costs incurred per unit to point of transfer + Opportunity costs per unit to the firm as a whole.

The outlay costs is defined as the cash outflows that are directly associated with the production and transfer of the products and services. Opportunity costs on the other hand, represent the maximum contribution foregone by the company when the product or service is transferred internally. This distinction between outlay and opportunity costs is necessitated by the fact that the accounting system typically records only outlay costs. Where a perfectly competitive intermediate market exists, the opportunity cost will be the market price minus the outlay costs. For instance, if the outlay cost of a product is Rs. 25 per unit and the market price is Rs. 40 per unit, assuming that a perfectly competitive intermediate market exists, the transfer price will be Rs. 40 per unit arrived at as follows:

$$\begin{aligned} \text{TP} &= \text{OtC} + \text{OpC} \\ &= 25 + (\text{MP} - \text{OtC}) \\ &= 25 + (40 - 25) \\ &= 25 + 15 \\ &= \text{Rs. } 40 \end{aligned}$$

Where TP denotes transfer price, OtC outlay costs, OpC, opportunity costs and MP the market price.

Transfer Pricing of Services

Numerous methods have been devised successfully for transfer pricing of products exchanged within the company. However, in the increasingly services oriented business world, most companies encounter significant hurdles in devising an appropriate transfer pricing mechanism for services. The challenges arise on account of the peculiar feature of services as compared to commodities. In the first instance, as services are intangible it is difficult to define exactly what is for sale, that is the product content. This feature creates a problem for sellers to defend or buyers to understand the prices of services. Besides, the skill and experience of the personnel involves challenges of proper evaluation. To understand how companies formulate transfer pricing policies for services a survey was conducted by Keegan and Howard of Price Waterhouse. According to their findings, historically services have been transferred at cost or at a mandated market price, equivalent to standard cost plus a mark-up.

In recent years, however, with burgeoning white-collar workforce many large companies expect market-based transfer pricing to play a more important role in structuring relationships between internal service organisations and core operations. The survey reveals that establishing an external market price is always troublesome in a transfer pricing system. It is relatively easy to identify market-based prices for commodity like services, such as order of catalogue items. This mechanism would, however, be inappropriate for customary services like executive recruitment, etc. In situations like 82% of the companies' surveyed report that transfer prices of similar services provided by outside vendors frequently serve as the basis for this negotiation. The surveys suggest that in order to reduce the potential for disputes among internal buyers and sellers, the corporate financial staff must issue definitive guidelines for transfer pricing services based on factors such as substitutability, volume and costs. The objectives of transfer pricing exercise a decisive influence on the method to be adopted. The objectives of transfer pricing are discussed in the following section.

Transfer Pricing in Multinational Firms

The issues involved in fixing of transfer prices in the case of a multinational firm are slightly different than that of a multi-division company operating within a country. For the multinational firms, transfer pricing must accomplish two objectives, such as performance evaluation and optimum determination of income taxes.

Performance Evaluation

Subsidiaries are frequently evaluated on the basis of net income and return on investment. As is the case for any transfer price, the selling subsidiary wants a high transfer price that will raise its net income. The buying subsidiary wants a low transfer price that will provide better margins and increase its net income. Transfer prices in MNCs are frequently set by the parent company. Therefore, the use of mandated transfer prices makes the use of ROT and net income suspect. That is, they are not under the control of division managers and no longer serve as an indicator of management performance.

Income Tax and Transfer Pricing

If all the countries have the same tax structure, then transfer prices would be set independently of taxes. However, reality is different. There are high tax countries (like the United States) and low tax countries (such as Cayman Island). As a result, MNCs may use transfer pricing to shift cost to high tax countries and shift revenues to low tax countries. Table 3.2 illustrates this concept, as two transfer prices are set. The first transfer price is \$ 100 as title for the goods passes from the Belgian Subsidiary to the re-invoicing centre. Since the first transfer price is equal to full cost, profit is zero and taxes on zero profit are also nil. The second transfer price is set at \$ 200 by the re-invoicing centre in Puerto Rico. The transfer from Puerto Rico to the United States does result in profit, but this profit does not result in any tax liability because Puerto Rico has no corporate income tax. Finally, the US subsidiary sells the product to the external party at the \$200 transfer price. Again, price equals cost, so there is no profit on which to pay income taxes. Without the re-invoicing centre, the goods would have gone directly from Belgium to the United States. If the transfer price were set at \$ 200, the profit in Belgium would have been \$ 100 subject to the 42% tax rate. Alternatively, if the transfer price set was \$ 100, no Belgian tax would have been paid, but the US subsidiary would have realized a profit of \$ 1000 and that would have been subject to the US corporate Income Tax rate of 35 per cent.

Table 4
Use of Transfer Pricing to Affect Taxes Paid

Action	Tax impact
Belgian subsidiary to parent company produces a component at a cost of \$100 per unit title to the component is transferred to a Re-invoicing centre in Puerto Rico at a transfer Price of \$ 100 per unit.	42% tax rate \$ 100 revenue - \$100 cost = \$0 Tax paid = \$0
Re-invoicing Centre in Puerto Rico, also a subsidiary of parent company, transfers title of component to US Subsidiary of parent company at a transfer price of \$ 200 per unit.	0% tax rate \$ 200 revenue - \$ 100 cost = \$ 100 Tax paid = \$0
US subsidiary sells component to external company at \$ 200 each	35% tax rate \$200 Revenue - \$ 200 cost = \$0 taxes paid = \$0

US based multinationals are subject to Internal Revenue Service (IRS) codes the section 482 on the pricing of inter-company transactions. This section gives the IRS the authority to reallocate income and deductions among subsidiaries if it believes that such allocation will reduce potential tax evasion. Basically, Section 482 requires that sales be made at "arm's length". That is, the transfer price set should match the price that would be set if the transfer were being made by unrelated parties. The IRS allows three pricing methods that

approximate arm's length pricing. In order of preference these are the comparable uncontrolled price method, the resale price method, and the cost plus method. The comparable uncontrolled price method is essentially market price. The resale price method is equal to the sale price received by the reseller less an appropriate mark-up- that is, the subsidiary purchasing a product for resale sets a transfer price equal to the resale price less gross profit. Percentage the cost-plus method is simply the cost based transfer price.

Of course, MNCs also subject to taxation by other countries as well as the United States. Since income taxes are virtually universal, consideration of income tax effects prevails management decision-making. Manager may legally avoid taxes, they may not evade them. MNCs may have tax — planning information systems that attempt to accomplish global tax minimization.

Surveys of Company Practice

Table 3.4 summarises the factors that executives consider important when determining transfer prices for both domestic and multinational operations. Table 3.5 summarises the result of studies of domestic transfer pricing method. Observe the widespread use of both market based and full cost based transfer prices. For companies using, cost based methods, standard costs are more widely used than actual costs. One survey of US companies reports that standard cost were used by 54% of respondents, actual cost method was used by 16% of the companies surveyed and some of each method was used by 30% of the respondents¹². Organisations differ in how they handle transfer pricing disputes. Approaches used in practice include the following¹³.

Table 5

Factors That Executives Consider Important on Transfer Pricing (In Order of Importance)

A. DOMESTIC TRANSFER PRICING¹⁴

1. Performance evaluation — to measure the result of each operating sub unit.
2. Managerial motivation- to provide the company with a "profit-making" orientation throughout organisational sub unit.
3. Pricing and product emphasis — to better reflect "Costs" and "Margins" that must be received from customers.
4. External market recognition — to maintain an internal competitiveness so that the company stay in balance with outside market forces.

B. MULTINATIONAL TRANSFER PRICING

1. Overall income to the company
2. The competitive position of subsidiaries in foreign countries
3. Performance evaluation of foreign subsidiaries
4. Restrictions imposed by foreign countries on repatriation of income or dividend.
5. The need to maintain adequate cash flows in foreign subsidiaries.
6. Maintaining good relationship with host government.

Table 6

Surveys of Transfer Pricing Method

A. Domestic Transfer Pricing methods

Methods	United States*	Australia**	Canada***	Japan*	India****	U.K.
1. Market Price based	30%	13%	34%	34%	47%	41%
2. Cost Based: Variable cost	4	N.D.	6	2	6	6
Absorption or full cost	45	N.D.	37	44	47	19
Others	1	N.D.	3	-	-	4
Total	50%	65%	46%	46%	53%	29%
3. Negotiated	18%	11%	18%	19%	-	24%
4. Other	2%	11%	2%	1%	-	6%
	100%	100%	100%	100%	100%	100%

B. Multinational Transfer -Pricing methods

Methods	United States*	Australia**	Canada***	Japan*	India****	U.K.
1. Market Price based	35%	-%	37%	37%	-	31%
2. Cost Based: Variable cost	2	-	5	3	-	5
Absorption or full cost	42	-	26	38	-	28
Others	2	-	2	-	-	5
Total	46%	-	33%	41%	-	38%
3. Negotiated	14%	-	26%	22%	-	20%
4. Other	5%	-	4%	-	-	11%
	100%	-	100%	100%	-	100%

Sources:-

* R.Tang, C Walter and T.Raymond "Transfer Pricing — Japanese V/s American Style, "Management Accounting January, 1979, pp 12-16

** P.Blainey and M.Joye, "Cost Accounting Practices in Australian Manufacturing companies", Working Paper, University of Sydney, 1989.

*** R.Tang "Canadian Transfer pricing practices", in C.A.Magazine March, 1980, pp32-38

**** V.Govindarajan and B. Ramamurthy, "Transfer Pricing Policies in Indian Companies: A Survey", Chartered Accountant, Nov. 1983, pp. 296 — 301.

N.D.means not disclosed.

Conclusion

For intra-company transfer pricing, although a number of methods have been developed over the years, there is no final answer to the problem. There is no and there cannot be "one correct approach" to the issue. Policies tend to a for different types of products and services even within the same organisation of, the trading price based upon external market conditions appears to be most satisfactory method as it would considerably reduce the extent of possible manipulation and satisfy the test of objectivity. Where such external prices are not available for intermediate products especially when they are of a specialised character, negotiated prices should be adopted. But, these should be reviewed every six months or every year. The dual or two-step pricing could also be tried to mitigate the difficulties associated with the problem. However, despite extensive literature on the subject, 'optimum' transfer pricing- method for management purposes remains a goal rather than a reality. The unresolved problem is one of developing a set of transfer prices that will simultaneously guide a division's decisions in the best long-run interests of the firm and also serve as an equitable price for measuring divisional performance.

At the same time, the study by Vancil quoted earlier, reveals that the negotiations, is by far the most popular method (22% of the divisionalised manufacturing companies applying it), followed by listed market price (17.2%, full actual cost (13%), full standard cost (12.5%), competitor's price (11.7%) and full cost plus mark-up (10.9%).

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- [11] A study of seventy multinational corporations revealed that 80% corporations used these measures. See Heler Gernon Morsicato, "Currency Translation and Performance Evaluation in Multinationals", Ann Arbor UM1 Research Press, 1982
- [12] "Transfer Pricing Practices of American Industry", Price Waterhouse, New York, 1984.
- [13] R. Eccles, "Analyzing Your Company is Transfer Pricing Practices" Journal of Cost Management, Summer, 1987.
- [14] Source Price Waterhouse, "Transfer Pricing Practices of American Industry" p.2
- [15] Source R.Tang "Environmental Variable of Multinational Transfer Pricing: A UK Perspective", Journal of Business Finance & Accounting Vol.9 No.2, p.182.