CHAPTER - IV

TRANSFER PRICING : SOME THEORETICAL ISSUES

4.1 The Concept

In the following chapter, where the results of empirical investigation are discussed, it will be shown that transfer pricing is not only a significant mode of surplus transfer but in fact the single most important constituent of surplus transfers by TNCs in the drug industry in India. The present chapter, concerns itself with the theoretical issues involved in transfer pricing, beginning with a discussion of the concept.

Transfer pricing is an instrument for transfer of financial resources between units of a TNC through either over invoicing of imports or under invoicing of exports. Transfer pricing refers to not only the pricing of intra-firm trade in goods but also technology, services and credit. Intra-firm trade in goods refers to the trade in raw materials, intermediates and final goods, which include capital goods. Transfer pricing needs to be distinguished from the faking of foreign trade declarations (Bhagwati, 1974a, 1974b) which occurs in the trade between unrelated parties, acting in collusion and where the transfer of resources is not necessarily implied. Transfer pricing need not necessarily be confined to transactions exclusively within a TNC. There could be a technical collaboration...
between a TNC and an unrelated enterprise with tie-in arrangements with respect to supply of inputs. These inputs may be over-priced. Besides, the overpricing in such cases could be a once in for all affair as is the case with the supply of machinery or a continuous process as is the case with the supply of raw materials and intermediates. Transfer pricing is different from faking of foreign trade declarations in as much as transfer of resources is necessarily implied in the former case, while this is not so with the latter. In trade between unrelated partners normally there is no capital transfer as the exporter needs to be paid only the actual value of the exports and not the invoiced value of imports. Capital transfers do however occur when there are restrictions on such movements through the collusion of the trading partners. Indians in East Africa and Malaysia, have moved out capital to India by overinvoicing their imports, in collusion with Indian exporters (Bhagwati, 1974 b, p.73). Similarly, Chinese businessmen have moved out capital from Indonesia, Malaysia and Philippines to Hongkong and Taiwan (See Bhagwati, 1974c, p.148).

Where the subsidiary is transferring its resources to its parent through overinvoicing of imports, tariffs would not alter the direction of invoicing while in the case of trade between unrelated parties, it would result in the underinvoicing of imports. In the trade between unrelated parties the importing firm needs to pay its exporter only the actual value of imports and not its invoiced value.
Where exchange controls exist the authorities make the foreign exchange available to the firm and there exists a premium on the foreign exchange in the black market. The firm would overinvoice its imports, if the tariff (ad Valorem) is less than the premium to be earned by the sale of foreign exchange in the black market constituting the difference between the invoiced value and the actual value. The firm would underinvoice its imports if the tariff rate is greater than the premium in the black market, minimising thereby its costs, not only in terms of the tariff but the premium which it would now have to pay to buy the foreign exchange to pay its exporters the difference between the actual value of imports and its invoiced value. If \( t_1 \) is the tax rate in the parent country of the TNC and \( t_2 \) the tax rate in the host country, and \( t_2 > t_1 \), then profits would be declared in the parent country since it would mean a lower tax burden. The affiliate in the host country would overinvoice its imports from the parent and thereby transfer profits to be declared in the parent. If the structure of corporate taxes now changes and \( t_2 > t_1 \), then it would be profitable to declare profits in the host country. The parent would now underinvoice its exports to its affiliate, thereby lower the costs of the affiliate and declare profits in the affiliate (Hanson, 1975). Conceptually it is important to view only overinvoicing of imports and underinvoicing of exports as instruments of transfer pricing because of the capital flows implied in them. When a subsidiary, overinvoiced its imports from the parent, then
that part of the import bill which is on account of overinvoicing, constitutes the profits transferred from the subsidiary to the parent. When the subsidiary underinvoiced its exports to the parent it implies a lowering of the parent's costs and a corresponding increase in the latter's profits.

In what follows, first the earlier contributions to the theory of transfer pricing and surplus flows are summarised and subsequently some additional aspects of this theory are considered. The two principal contributions to the theory are those of Horst (1971) and Vaitsos (1974).

The contribution of Horst falls in what could be termed as the domain of pure theory. Secondly, the considerations of Horst relate to the conditions for declaration of profits in a particular location or what is the same thing, it concerns itself with the determination of intermediate capital flows. Perhaps this is the best opportunity to digress on the nature of theory; particularly as it obtains in the present thesis. In the theory of transfer pricing, one could distinguish between what could be termed as pure theory and a theory, which explains transfer pricing as a component of surplus - transfers from the third world. The pure theory of transfer pricing would not make a distinction between the operations of TNCs in Europe with that of what obtains in the third world. Nevertheless, since the discussion of Horst relates to intermediate capital flows, the theory could be applied to
the third world, without losing its relevance. The discussion of Viatsos is more closely drawn to the third world, though this is more evident in his empirical evidence rather than in his theory. What a theory of transfer pricing as it applies to the third world would capture, is on the one hand the dominant patterns of TNC behaviour in its relation to transfer pricing, as well as the minor tendencies for the sake of completeness. Alternatively, one can conceive of theory as an abstraction which not only considers the dominant relations but all the possibilities which could prevail. The minor tendencies or possibilities may be at variance from the dominant tendency. In what follows, what obtains in the third world both in its dominant and minor forms for the TNC in its surplus transfers are considered.

4.2 Tax differentials, tariffs and subsidies

Horst (1971) argues the inducement to transfer pricing arising from the relative effects of international corporate tax differentials, tariffs and subsidies and Kapits (1976, p. 663) has some evidence in support of this at least for the intrafirm trade in intangibles.

Horst's argument presupposes a given structure of international production and direction of intra-firm trade among affiliates of a TNC.

If the parent in country 1 exports to its affiliate in country 2 and the corporate tax in 1(t) is less than that
in 2(t), the firm would declare its profits in 1 and 2 through overinvoicing of imports in 2, transfer profits to the parent. If \( t_1 > t_2 \) then the profits would be declared in 2 and the firm would underinvoice its exports to the affiliate in 2. If \( t_2 > t_1 \) and \( t_2 - t_1 > r(1-t_2) \), where \( r \) is the advalorem tariff rate in country 2 (assuming no tariff in 1), the firm would overinvoice its imports in 2 and transmit its profits to 1 since the saving in taxes represented by the tax differential by not declaring profits in 2 is greater than the net tariff cost in 2. \( t_2 - t_1 \) gives the tax savings accruing on account of declaring profits in 1 rather than 2. The term net tariff cost requires explanation. A little later both an algebraic exposition and an arithmetic illustration is considered which will make this clear. Presently, it would suffice to note the following. \( r_2 \) measures the tariff cost. \( t_2 r_2 \) is an element of tax savings which needs to be deducted from the tariff cost to give the net tariff cost \( r_2 - r_2 t_2 \) or \( r_2 (1-t_2) \). This additional tax savings given by \( r_2 t_2 \) arises in the following manner. Overinvoicing of imports in 2, means an increase in the cost of the affiliate in 2 and a corresponding reduction in the profits of the affiliate in 2. The cost of the affiliate in 2 increases not only by the amount of overinvoicing of imports but by an additional amount equal to the tariff cost measured at \( r_2 \). Profits in 2 fall by this amount i.e., by the amount of overinvoicing.

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1 I am grateful to Prof. Prabhat Patnaik for printing out this basic condition.
in 2 plus an amount equal to the tariff cost measured at \( r_2 \). Profits in 1 rise by only the amount of overinvoicing of imports in 2. In other words, profits in 2 fall by an amount greater than what it rises in 1. This difference, representing an additional amount by which the profits fall in 2 also implies an additional tax savings, measured at the rate \( t_r \). A fall in profits in 2 by an additional amount also means that the affiliate does not have to pay tax at the rate \( t_2 \) on that additional amount. Since the additional amount by which profits fall is equal to the tariff cost measured at \( r_2 \), the tax savings which accrue would be given by \( t_2 r_2 \). Net tariff cost therefore would be given by \( r_2 - t_2 r_2 \) or \( r_2 (1 - t_2) \). As \( t_2 \) would always be less than 1, \( t_2 < 1 \), because the corporate rate of taxation in the host country would always be less than 100%, \( r_2 - t_2 r_2 \) or \( r_2 (1-t_2) \) would always be positive. In this entire chapter we shall frequently refer to net tariff cost and by this we shall mean \( r_2 - t_2 r_2 \) or \( r_2 (1-t_2) \). The additional tax savings \( t_2 r_2 \) which arise on account of an additional fall in profits in 2, consequent to the tariff cost arising in the event of transfer pricing is deducted from the tariff cost \( r_2 \) to arrive at the net tariff cost = \( r_2 - t_2 r_2 \) or \( r_2 (1-t_2) \). A distinction has already been drawn between intermediate capital flows and final capital flows. When the movement of capital takes place for declaring profits in a particular region to minimise global tax liability, these could be regarded as intermediate capital flows. Any movement of post-tax profits, such as dividends, would constitute
final capital flows. If $t_1 > t_2$ then profits would be declared in 2 and the profits transferred from 1 to 2 through underinvoicing of exports from 1, which implies a reduction in the cost of the affiliate in 2 and a corresponding increase in its profits as this would enable a tax savings measured at the rate $t_1 - t_2$. In the case of underinvoicing of exports from 1, $r_1^*$ would not matter. This is because underinvoicing of exports from 1 amounts to underinvoicing of imports in 2 and to the extent there is underinvoicing of imports in 2 the affiliate escapes the tariff cost. Where the affiliate imports from the parent or what is the same thing, the parent exports to the affiliate, in the absence of underinvoicing of exports from 1, the affiliate would have purchased from the parent at market prices and borne the tariff cost at these prices. Since now, the affiliate is importing at less than market prices, it is escaping the burden of tariff cost which the amount which has been underinvoiced would have been subject to. Subsidies are negative taxes and therefore will be reckoned with. Assume there is an export subsidy at a flat rate of $s_1$ and $t_2 > t_1$. Further if $(t_1 - t_2) + s_1 > r_2 (1-t_2)$ then there would be overinvoicing of imports in 2 since the tax savings resulting from not declaring profits in 2, together with the export subsidy would more than offset the net tariff costs in 2 i.e., the tariff cost in 2 less the tax savings accruing on account of reduced profits in 2 consequent to the tariff cost arising in the event of transfer pricing. If $t_1 > t_2$ and $s_1 > 0$, then this would result
in the under invoicing of exports, from 1.

Let \( t > t \) and \( r \), the ad valorem tariff rate in 2 be positive, i.e., \( r > 0 \). The pretax profits in 1 (\( \Pr_1 \)) would be given by,

\[
\Pr_1 = R_1 - C_1
\]

Where \( R_1 \) is the revenue from sales of the parent in 1 and \( C_1 \) is the cost of the parent in 1. Since in the present exercise the parent exports the entire amount to its affiliate, the revenue \( R_1 \) is obtained entirely from the sales to its affiliate. Further, Ceteris Paribus conditions are assumed. The post tax profits are given by pretax profits less the tax on profits. The post tax profits in 1, (\( \Prt_1 \)), would be given by

\[
\Prt_1 = \Pr_1 - t \Pr_1 = R_1 - C_1 - t (R_1 - C_1)
\]

The pretax profits in 2 (\( \Pr_2 \)) would be given by,

\[
\Pr_2 = R_2 - C_2
\]

where \( R_2 \) is the revenue from sales of the affiliate in 2 and \( C_2 \) is the total cost of the affiliate in 2, inclusive of the tariff cost,

\[
C_2 = C_2 + r C_2
\]

where \( C_2 \) is the cost of the affiliate in 2 exclusive of the tariff cost. \( C_2 \), the cost of the affiliate in 2 would be entirely because of the imports from the parent.

\[
\Pr_2 = R_2 - C_2 - r C_2
\]
The post tax profits in 2 (Prt \(_2\)), is given by,

\[
Prt = Pr - t Pr
\]

\[
= \frac{(R - C - r C)}{2} - t \left(\frac{(R - C - r C)}{2}\right)
\]

\[
= \frac{R - C - r C - t (R - t C + t r C)}{2}
\]

\[
= Pr + Prt
\]

\[
= \frac{R - C - t R + t C + R - C}{2}
\]

\[
= \frac{r C - t R + t C + t r C}{2}
\]

Equation (1) gives the sum total of post tax profits in 1 and 2. This is the situation which obtains prior to transfer pricing.

In the event of transfer pricing, i.e., overinvoicing of imports by the affiliate in 2, the post transfer pricing situation would be as follows.

Let \(X\) be the volume of profits transferred through transfer pricing from 2 to 1.

The pre tax profits in 1, in the post transfer pricing situation (Pr\(\pi\_1\)), would be given by,

\[
Pr\pi = R + X - C
\]

The sales revenue of the parent in 1, increases by \(X\) and consequently the pretax profits increases by \(X\).

The post tax profits (Prt\(\pi\_1\)) would now be given by,

\[
Prt\pi = Pr\pi - t Pr\pi
\]

\[
= \frac{R + X - C - t (R + X - C)}{1}
\]

\[
= \frac{R + X - C - t R - t X + t C}{1}
\]
The costs of the affiliate in 2, increase by an amount equal to $X$.

\[ C_{\Pi}^{2} = C + X \]

The total cost of the affiliate in 2 inclusive of the tariff cost would be given by,

\[ C_{\Pi}^{2} = C + X + r (C + X) \]

\[ = C + X + rC + rX \]

The pretax profits ($Pr_{\Pi}$) of the affiliate in 2, in the post transfer pricing situation would be given by,

\[ Pr_{\Pi}^{2} = Pr_{\Pi} - t Pr_{\Pi} \]

\[ = R - C - X - rC - rX \]

\[ = R - C - X - rC - rX \]

\[ - t (R - C - X - rX) \]

\[ = R - C - X - rC - rX \]

\[ - t R + tC + tX + trC + trX \]

\[ \leq Pr_{\Pi} = Pr_{\Pi}^{1} + Pr_{\Pi}^{2} \]

Depretax profits in 1, rise by $X$ but depretax profits in 2 fall by $X + rX$. Subtracting equation (1) from equation (2) we get,

\[ \leq Pr_{\Pi} - \leq Pr = t X - t X - rX + trX \]

\[ = X (t - t) - Xr (1 - t) \]

We had postulated the transfer pricing condition as,

\[ t - t > r (1 - t) \]

\[ \leq Pr_{\Pi}^{2} - \leq Pr > 0 \]

or \[ \leq Pr_{\Pi}^{2} > \leq Pr \]
The term $X(t - t^2)$ is the tax savings accruing on account of declaring profits in 1 rather than 2; $X_r$ is the additional tariff cost on account of transfer pricing; $t \times X_r$ is the additional tax saving in 2 because of the additional tariff cost and consequent decline in the profits in 2.

$X_r (1 - t^2)$ is the net tariff cost in 2 i.e., the tariff cost less the additional tax saving accruing because of the decline in profits in 2, consequent to the additional tariff cost in the event of transfer pricing.

Now an arithmetic illustration. Let $t = 10\%$, $t = 12\%$, $r = 50\%$. Suppose the parent in 1 purchases a commodity from the market for Rs. 10 each and supplies 10 units of this commodity to the affiliate in 2 at the same cost or price.

$$
\begin{align*}
C &= 10(\text{Rs}) \times 10 = \text{Rs} 100; \ C \text{ is the Cost in } 1. \\
R &= 10(\text{Rs}) \times 10 = \text{Rs} 100; \ R \text{ is the revenue in } 1. \\
Pr &= R - C = 0; \ Pr \text{ is the pretax profits in } 1. \\
C &= 10(\text{Rs}) \times 10 = \text{Rs} 100; \ C \text{ is the cost in } 2. \\
2 & \\
\end{align*}
$$

Now suppose the affiliate sells 10 units of this commodity at Rs. 40 each in the market.

$$
\begin{align*}
R &= 40(\text{Rs}) \times 10 = \text{Rs} 400; R \text{ is the revenue in } 2. \\
\bar{C} &= C + rC = 100 + \frac{50}{100} \times 100 = \text{Rs} 150 \\
Pr &= R - \bar{C} \\
&= R - C - rC \\
&= 400 - 150 = \text{Rs.} 250
\end{align*}
$$
where \( C \) is the total cost in 2 inclusive of the tariff cost \( 2 \) and \( \text{Pr}_2 \) is the pretax profits in 2.

What part of the argument can be attributed to Horst? The Horst condition for transfer pricing was if \( t_2 > t_1 \) and \( t_2 - t_1 > r \). The transfer pricing condition that we have postulated is a refinement of this namely, if \( t_2 > t_1 \) and \( t_2 - t_1 > r \), \( 1 - t_2 \).

Returning to the discussion above.

The post tax profits in 1(\( \text{Pr}_1 \)) is given by,

\[
\text{Pr}_1 = \text{Pr}_1 - t \text{Pr}
\]

Because, \( \text{Pr}_1 = 0 \)

The post tax profits in 2(\( \text{Pr}_2 \)) is given by,

\[
\text{Pr}_2 = \text{Pr}_2 - t \text{Pr}
\]

\[
= 250 - \frac{50}{100} \times 250
\]

\[
= \text{Rs. 125}
\]

The sum total of post tax profits (\( \sum \text{Pr}_1 \)) in 1 and 2, would be given by,

\[
\sum \text{Pr}_1 = \text{Pr}_1 + \text{Pr}_2
\]

\[
= 0 + 125 = \text{Rs. 125}
\]

let \( \text{Rs. 100} \) be transferred by the affiliate in 2 to the parent, by overinvoicing the imports in 2 from the parent. In other words, a transfer price of \( \text{Rs. 20} \) would be used or the affiliate in 2 would import 10 units of the commodity at \( \text{Rs. 20} \) each from the parent. This would amount to an overinvoicing of 100%.

In the post transfer pricing situation, the revenue from sales for the parent in 1 (RI1), would be given by,
\[ R_1 = \text{Rs. } 20 \times 10 = \text{Rs. } 200 \]

The parent now sells at Rs. 20 instead of Rs. 10 to the affiliate. \( C \), the cost for the parent in 1, is unchanged and is given by,

\[ C = \text{Rs. } 10 \times 10 = \text{Rs. } 100 \]

Pretax profits (\( \text{Pr}_1 \)) for the parent is given by, in the post transfer pricing situation,

\[ \text{Pr}_1 = R_1 - C = 200 - 100 = \text{Rs. } 100 \]

Post tax profits (\( \text{Prt}_1 \)) for the parent in 1, in the post transfer pricing situation, would be given by,

\[ \text{Prt}_1 = \frac{\text{Pr}_1 - t \cdot \text{Pr}_1}{10} = 100 - \frac{100}{100} \times 100 \]

\[ = \text{Rs. } 90 \]

Revenue from sales for the affiliate in 2, \( R_2 \), remains unchanged,

\[ R_2 = \text{Rs. } 40 \times 10 = \text{Rs. } 400 \]

The cost for the affiliate in the post transfer pricing situation, \( C_2 \), is given by,

\[ C_2 = \text{Rs. } 20 \times 10 = \text{Rs. } 200 \]

The affiliate is now purchasing at the transfer price of Rs. 20 each.

The total cost for the affiliate in the post transfer pricing situation (\( \overline{C}_2 \)), is given by,

\[ \overline{C}_2 = C_2 + r_2 R_2 = 200 + \frac{100}{100} \times 200 \]

\[ = 300 \]
Rs. 100 have been transferred by transfer pricing by the affiliate to the parent. The revenue of the parent in 1 has increased from Rs. 100 to Rs. 200. \( R \) was Rs. 100 and \( R_1 \) is Rs. 200. However, the total cost for the affiliate in 2 has increased by Rs. 150. \( C \) was Rs. 150 and \( C_{21} \) is Rs. 300. In other words, the total cost in 2 has increased by Rs. 150. \( C \) was Rs. 150 and \( C_{21} \) is Rs. 300. In other words, the total cost in 2 has increased by an amount greater than the increase in revenue in 1.

The difference between the increase in total cost in 2 and the increase in revenue in 1, is given by the additional tariff cost on account of transfer pricing. \( X \), the volume of profits transferred through transfer pricing is Rs. 100, i.e., \( X = Rs. 100 \), and the increase in cost in 2 is,

\[
X + rX = Rs. 150
\]

Pretax profits \( (P_{r1f})_2 \) for the affiliate in 2 in the post transfer pricing is given by,

\[
P_{r1f}_2 = P_{r1f}_2 - t \frac{P_{r1f}_2}{100} = 100 - \frac{50}{100} X 100
\]

\[
= Rs. 50
\]

\( \leq P_{r1f} \), the sum total of post tax profits in the post transfer pricing situation is given by,

\[
\leq P_{r1f} = P_{r1f}_1 + P_{r1f}_2 = 90 + 50 = Rs. 140
\]
\[ \varepsilon_{P_{1}} - \varepsilon_{P_{2}} = \text{Rs. 140} - \text{Rs. 125} = \text{Rs. 15} \]

Therefore is a net gain of Rs. 15 on account of transfer pricing. The post tax profits in 1 has risen by Rs. 90 i.e., from 0 to Rs. 90 and the post tax profits in 2 has fallen by only Rs. 75 i.e., from Rs. 125 to Rs. 50.

The tax savings are given by,
\[ (t_{2} - t_{1}) = \frac{50}{100} - \frac{10}{100} = \frac{40}{100} = \frac{40}{100} \times 100 = \text{Rs. 40} \]

The tariff cost is given by \( r_{2} \times \),
\[ r_{2} \times = \frac{50}{100} \times 100 = \text{Rs. 50} \]

The additional tax savings on account of reduced profits in 2 consequent to the additional tariff cost in the event of transfer pricing is given by,
\[ t_{2} r_{2} = \frac{50}{100} \times \frac{50}{100} = \frac{25}{100} = \text{Rs. 25} \]

The tax savings less the net tariff cost,
\[ = \text{Rs. 40} - \text{Rs. 25} = \text{Rs. 15} \]

It is important to note that the term \( t_{2} r_{2} \times \) is less than \( r_{2} \times \). \( t_{2} r_{2} \) is always less than \( r_{2} \). This is because \( t_{2} \) is less than 1. \( t_{2} \) is always less than 100%. No country will tax the entire corporate profits.
Therefore, the additional tax savings which arise because of reduced profits consequent to additional tariff cost arising in the event of transfer pricing is less than the additional tariff cost, so that we can speak of a net additional tariff cost which is always positive.

Horst worked out the transfer pricing condition, considering the corporate tax differential and the advalorem tariff rate. To recall, the Horst condition for transfer pricing is that the corporate tax differential, which constitutes the tax saving, exceeds the advalorem tariff rate. What we have done is to consider the net tariff cost i.e., the tariff cost less an element of tax savings which arises on account of transfer pricing. To recall, the condition was that the corporate tax differential should exceed the net tariff cost. We will distinguish this further, once we have considered Vaitsos, which we proceed to do now.

4.3 Meeting fixed costs of the parent

Vaitsos (1974) has argued the use of transfer pricing by TNCs to transfer profits from the subsidiaries to the parent, to meet the latter's fixed costs such as research and development expenditures, and managerial expenses oriented to the global needs of the company, when the revenues of the parent from its sales in the home market and abroad fail to meet these costs along with the prime costs.
If $R$ is the revenue of the parent from global sales and $C$ its costs, prime and fixed, and $R - C < 0$ then assuming that tariffs are zero and the corporate tax rates are identical in the home and host countries, it would pay to transfer funds from the subsidiary to the parent, through transfer pricing rather than remit funds through dividends since the funds remitted through transfer pricing would go to meet the costs of the parent and to that extent imply a reduction, in the taxable income of the parent, while dividend remittances would mean prior payment of corporate taxes at the level of the subsidiary.

If $Y$ is the additional income of the parent that could become available either through dividend remittances or through overinvoicing of imports by the subsidiary then the after tax profits in the two cases $P_A$ and $P_B$ would be:

$$P_A = R - C + Y(1 - t)$$ where $t$ is the corporate tax rate:

$P_A$ is the after tax profits of the parent when the additional income becomes available to the parent as dividend remittances.

$$P_B = (1 - t)(R - C + Y)$$

$P_B$ is the after tax profits of the parent when the additional income becomes available to the parent through the overinvoicing of imports by the subsidiary.

$$P_A = R - C + Y - tY \quad \cdots \cdots \cdots \cdots \cdots \cdots \cdots (1)$$

$$P_B = R - C + Y - t(R - C + Y) \quad \cdots \cdots \cdots \cdots \cdots \cdots \cdots (2)$$

Since $R - C < 0$
\[ t(R - C + Y) < t(Y) \]

and therefore,

\[ \frac{P}{B} > \frac{P}{A} \]

The tax payment in the case of dividend remittances would be \( tY \) assuming full credit for taxes paid abroad and in the case of transfer pricing, the tax payment would be \( t(R - C + Y) \) which would be lower than the former since part of the \( Y \) goes to meet the difference between \( R \) and \( C \), reducing thereby the taxable income in the parent country.

If the parent only exports to the subsidiary, then through over invoicing of imports by the subsidiary the revenue \( (R) \) of the parent could be increased to meet \( C \). If the parent imports as well from the subsidiary then the exports of the subsidiary would be under invoiced, reducing \( C \) until it matches the existing revenues of the parent. Transfer pricing would be pursued up to the point where \( R = C \), since for \( R - C > 0 \) the tax costs for the TNC would be the same for funds remitted through either transfer pricing or dividends.

That there is a net export of capital or transfer of capital from the third world to the parent countries of the TNCs, is all too familiar. There is a transfer of capital from the third world countries and this takes place through a transfer of surplus value which is potential capital. This outflow or transfer of surpluses can take various forms including transfer pricing. It takes the particular form of
transfer pricing, because among other reasons, this is a means of minimising the global tax liability of the TNC. The tax aspect is the most important reason for transfer pricing though there are other reasons. Transfer pricing would occur regardless of whether the affiliate is wholly owned or not as long as the parent has controlling interests or a large enough share in the equity, of the affiliate. That is to say that while transfer pricing may be profitable for tax and other reasons, it would be possible only if the affiliate is wholly owned or if the parent has a large enough share in the equity of the affiliate to be able to control it.

Horst had postulated, that if \( t^2 > t^1 \) and \( t^2 - t^1 > r \), then the firm would overinvoice its imports in 2 and transmit its profits to 1. Profits in other words would be declared in 1. We have postulated a more refined condition which takes into account net tariff costs. Tax savings arise which have to be netted out from tariff costs to arrive at net tariff costs. Our condition is \( t^2 - t^1 > r \left(1 - t^1 \right) \) for transfer pricing. Vaitsos has postulated that under conditions of \( R - C < 0 \) for the parent, transfer pricing would be profitable in as much to the extent that the profits remitted through transfer pricing are absorbed by the costs, no taxes need be paid by the parent. We have developed this argument mainly by introducing differential tariff and considering resource flows involving more than one affiliate. Further, we have
considered three channels of transfer while Vaitsos had considered only two.

In the analysis carried out above, it should be noted that R and C refer to ex-ante positions. In the present thesis, the following extensions to the Vaitsosian formulation have been considered:

One, the determination of the optimal mix of transfers for the TNCs, taking three channels of surplus transfer into account, namely, dividends, interest and transfer pricing.

Two, since transfer pricing is spread across several commodities involved in intra-firm trade and the tariffs are not uniformly distributed, the consequences of differential tariffs are examined.

Three, resource flows occur not only from the affiliates to the parent but among the affiliates as well, and the determination of resource flows involving two affiliates are examined.

And four, the conditions for the use of transfer pricing, as an alternative source of finance for investment by the TNCs is examined.

4.4 Multichannel considerations

A distinction has already been drawn between intermediate capital flows and final capital flows. Intermediate capital flows are those which occur solely for the purpose of declaring profits in a particular location. Capital moves from one location to another, because in doing
so, tax payments are minimised. Profits are declared in a particular location rather than another, because it means lower tax payments and all capital flows which enable declaration of profits in the relatively low tax region could be termed as intermediate capital flows. Final capital flows are those which occur after the declaration of profits in a particular location. The flow of dividends from the subsidiary to the parent would constitute final capital flows. Final capital flows occur after the payment of taxes such as the corporate tax while intermediate capital flows occur prior to the payment of such taxes. Apart from the distinction between intermediate capital flows and final capital flows a distinction needs to be drawn between two distinct kinds of surplus flows within a TNC:

One, the pure profit flow - which takes place from the affiliate to the parent and where ownership of the affiliate by the parent governs the flow. In other words, the returns to the parent on its equity held in the affiliate, constitutes a form of the pure profit flow. Dividends are an explicit form of such a flow though it could take alternative forms and this is the subject matter of this section. The pure profit flow corresponds specifically to final capital flow.

Two, profit as capital flow - which would encompass the various forms of intermediate capital flows and would differ from the pure profit flow in as much as it would not have meeting explicitly the consumption requirements of the
equity holders as an objective. These flows would occur for the purpose of declaring profits in a particular location on the one hand, and for meeting the requirements of production on the other hand. Inter-affiliate loans for meeting the production requirements, of a TNC unit, constitutes a case of profit as capital flow. As shall be seen later, such flows could even take the form of transfer pricing. These capital flows occur to meet the requirements of production, including investment, which could be either ongoing investment or additional investment. Such flows could take place either between affiliate or between the affiliate and the parent. Such flows could be from the parent to the affiliate but dividends would not be one of the forms of such flows, since the affiliate cannot hold equity in the parent.

The various channels available to the TNC for profit transfers are: One, dividends; two, interest; three, royalties; four, technical and managerial service fees and technical knowhow fees; and five, transfer pricing. Technical and managerial service fees and technical knowhow fees, while by themselves do not constitute categories of profit, could nevertheless become conduit of profit, if they

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2 Even certain governments have recognized the substitutable nature of the different channels of profit transfer. The tax authorities in Ghana for instance, tax what has been declared as interest, as dividends, if it is thought that in the normal course it ought to have been declared as dividends instead of being declared as interest (U.N. 1970; p.60).
are subject to transfer pricing. By transfer pricing, will be meant as a rule, the arbitrary pricing of goods involved in intrafirm trade though the concept could extend to include all the other channels of profit transfers, as well. The narrower notion of transfer pricing refers to the arbitrary pricing of goods involved in intrafirm trade. The wider notion of transfer pricing refers to the arbitrary pricing of the services involved in intrafirm trade as well as to the arbitrary determination of intrafirm flows of dividends, interest and royalties. By the goods involved in intrafirm trade is meant inputs such as raw materials and capital goods, and final products. By services involved in intrafirm trade is meant technical and management services.

In the discussion that follows, three channels of profit transfer, namely, dividends, interest and transfer pricing are considered. Interest is a variable, though in practice this would be within a range. Dividends, interest and transfer pricing are the most important constituents of surplus transfers from India. The following assumptions are made: One, only the parent and a single affiliate exist and \( R - C \) \( \leq 0 \) for the parent. \( R \) refers to the gross revenues of the parent and \( C \) its gross expenditures in production incurred in a given year.

Two, \( t_1 = t_2 \), where \( t_1 \) and \( t_2 \) are the rates of corporate taxation in the country of the parent and the affiliate respectively.

Three, there is a single tariff, \( r \), the advalorem import
duty imposed in the affiliate country and is equal to zero. Subsequently, this assumption would be lifted to consider positive tariffs. The export duty in the parent country is also zero and there are no export subsidies.

Four, the parent exports to the affiliate without importing anything from the latter.

Five, dividends, interest and transfer pricing are the only means of surplus transfer.

Normally, withholding taxes are imposed on dividends, royalties and interest payments. The sixth assumption is that there is a withholding tax only on interest payments, \( w \), and that \( w = t_1 = t_2 \). It is assumed that there is no such tax on dividends and the only relevant tax on dividends is the corporate tax on profits. If there were to be a withholding tax on dividends and interest, and if this were to be the same, the tax incidence on the two channels would vary to the extent of the corporate tax, with its specific effects on the mix of these two channels.

Seven, full tax credit is given in the parent country for the taxes paid abroad. In other words, there is no double

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3 U.N. 1978, p. 21, discusses the OECD tax structures and in particular the effects of a differential burden on dividends and royalties. Interest could be substitute for royalties and the discussion would be valid for the differential tax burden on dividends and interest.
taxation of income. And either, interest payments are tax deductible.

Until the equality between R and C is reached, transfer pricing in the form of overinvoicing of imports by the affiliate would be preferred to either dividends or interest payments because of the tax savings it induces without incurring any tax costs while dividends or interest would imply tax costs without inducing any tax savings.

Transfer pricing induces tax savings in the following manner. The effect of overinvoicing of imports by the affiliate is to increase the revenue (R) of the parent by a corresponding amount and since all such transfers up to the point R = C implies no taxation, as no profits are declared, profits transferred in this manner are absorbed entirely by

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4 Interest payments are usually tax deductible in the host countries while dividends are not. If a particular channel is tax deductible while another is not, then, the firm would substitute the channel which is tax deductible for the one which is not (U.N. 1975, p. 65).

5 Lall (1973) has argued that transfer pricing would not be used even when R - C < 0 either for the parent or a subsidiary, since losses can be carried forward in most countries and some parent countries allow tax offsets against losses incurred by a subsidiary in a host country and consequently leaving the resource gap untouched is cheaper than filling it by transfer pricing as the latter involves tariff costs (though in the theoretical exercise above it has been ignored for the present). Since most TNCs depend heavily on the capital markets for raising either additional equity or additional resources in the form of debentures and fixed deposits, no firm either in the home country or in the host country can afford to appear unprofitable, and given this objective, transfer pricing would be used as a least cost channel of transfer.
the costs. A reduction in the taxable income of the parent can also be achieved through the under invoicing of exports by the affiliate. The effect of under invoicing of exports by the affiliate is to depress the C of the parent and until the equality between R and C is reached, no income would be taxable. But the case of exports is outside the present scheme of analysis.

Once the equality between R and C has been reached, transfer pricing would not be able to produce any tax savings and would invite taxation at the same rate as interest or dividends. Excess of R over C, would be taxable as part of the income of the parent but since \( t_1 = t_2 \) the firm would be indifferent among the three channels of transfer. As has already been indicated, to be able to take decisions regarding transfer pricing it is not necessary for the affiliate to be wholly owned by the parent. It would suffice for the parent to have a large enough share in the equity of the affiliate that enables the control of the affiliate. As long as the affiliate is controlled by the parent transfer pricing decisions would be possible.

4.41 Assumptions

(i) \( t_2 \), which is the corporate rate of taxation in the country of the affiliate or the host country is greater than \( t_1 \), the corporate rate of taxation in the country of the parent or the home country. This is in fact a realistic assumption for a country like India, where the tax rate
on corporate profits has been much higher as a rule, than what prevails in the parent countries of the TNCs.

(ii) $t > w$, the withholding tax on interest.

Surplus transfers from the affiliate to the parent, would take place through the transfer pricing channel until the point of equality is reached between $R$ and $C$. This is because while the use of the transfer pricing channel would imply tax savings in the manner indicated above, the use of either the dividend channel or the interest channel would imply tax costs. Dividend remittances would be taxed at the rate $t$, while interest transfers would be taxed at the rate $w$.

Tariffs are assumed to be zero. Beyond the point of equality between $R$ and $C$, in the absence of the interest option, transfer pricing would be preferred to dividends, as it would be taxed at a rate lower than what dividends imply. Funds remitted through transfer pricing beyond $R = C$ would be taxed at a rate lower than what dividends imply. Funds remitted through transfer pricing beyond $R = C$ would be taxed at the rate $t$, which is lower than the tax rate $t_1$, at which dividend remittances would be taxed.

For the choice between interest and transfer pricing the relation between $w$ and $t$ needs to be specified and this leads us to,

assumption (iii) $t > w$, which is also the likely case.

With $t > w$, interest would become a preferred option but a
ceiling on interest remittances, would make transfer pricing profitable.

4.42 Assumptions

i) $t_1 > t_2 > w$ which is a likely case for at least some of the third world countries, with relatively low rates of taxation.

Until the point of equality is reached between $R$ and $C$, transfer pricing would be the most preferred channel on account of the tax savings. Beyond $R = C$, interest would be the most preferred channel. If one introduces the need for declaring a minimum dividend in the affiliate either because of local participation in equity or because the firm is interested in drawing upon local savings and hence has to appear as a profitable venture in the capital market, these results would hold only after the need for declaring a minimum dividend has been met. If the rate of interest is itself subject to restrictions, i.e., the authorities do not permit strong deviations from the market rate then profits in excess of what the interest channel can absorb would be siphoned through the dividend channel. If on the other hand, dividends are also subject to a ceiling, even if it were only indirectly through a ceiling on the rate of profit, then the transfer pricing channel would become active.

$6 \quad w > t_1$, would remain a theoretical possibility.

$7 \quad t_1 > w > t_2$ while possible, would not be considered.
It would be useful at this stage, to answer the following question. Why should surplus transfers take place beyond \( R = C \)? There are four reasons why such flows could take place. One, if there is a need for declaring a minimum dividend at the level of the subsidiary and the parent's holdings in the subsidiary are such that the dividend remittances exceed \( R - C \).

Two, if there is a need for declaring a minimum dividend in the parent country as the parent would want to appear as a profitable venture.

Three, if there are preference stockholders in the parent country, whose dividend requirements need to be met.

Four, if the reserves and surpluses of the parent are desired to be augmented in a planned manner to meet its investment requirements.

4.43 **Assumptions**

i) \( t_1 = t_2 = w \)

ii) \( r_1 \), the advalorem export duty in the parent country is zero but \( r_2 \) the rate of advalorem import duty in the affiliate country \( > 0 \).

The effects of introducing positive tariffs in the affiliate is to introduce tax costs into the calculation of the effects of transfer pricing which would offset the tax savings it induces. We need to consider only the net tariff cost i.e., the tariff cost less the additional tax savings which accrue on account of reduced profits for the affiliate, consequent to the tariff cost. Transfer pricing
would be profitable if pursued up to the point of equality between R and C provided the tax savings exceed the net tariff costs. Transfer pricing would be always profitable as long as \( R - C < 0 \). The non-profitability of transfer pricing becomes relevant only when \( R = C \). As long as \( R - C < 0 \) and transfer pricing is used to bridge this gap, the corporate tax rate, would be irrelevant in as much as since no profits are declared in 1, transfer pricing being used only for the purpose of covering the resource gap, no tax would be levied in 1.

However as a general case one could work out the transfer pricing condition as follows. If \( X \) is the total value of profits remitted through transfer pricing the condition becomes,

\[
t \times X > r \times X - t \times r \times X \quad 1 \quad 2 \quad 2 \quad 2
\]

since \( t = t \), the above condition becomes,

\[
t \times X > r \times X - t \times r \times X \quad 1 \quad 2
\]

or \( t > r - t \times r \quad 2 \quad 2 \quad 2 \)

or \( t > r (1 - t) \quad 2 \quad 2 \quad 2 \)

or \( \frac{t}{2} > \frac{r}{2} \quad 2 \quad 2 \quad 1 - t \quad 2 \)

The first inequality above shows that tax savings are greater than net tariff costs. Since as long as \( R - C < 0 \), and transfer pricing is used only to bridge this gap, no profits would be declared in 1 and hence there would be no taxation of corporate profits. Consequently, measuring tax savings at the rate \( t \) has no meaning. However, if one
chooses to measure tax savings in a slightly different way, the above condition would still hold. Since one alternative to the transfer of funds through transfer pricing would be the transfer through the dividend channels the tax savings could be measured at the rate at which the dividends would be taxed i.e., at the rate $t'$. That is to say, that by resorting to transfer pricing, since the firm is no longer transferring funds through the dividend channel it is being saved of being taxed at the rate $t'$. In which case the above condition would become tenable.

Once the additional revenues have been fully absorbed by the costs, i.e., $R = C$, transfer pricing would no longer be profitable, because it no longer induces any tax savings. It would now not only invite net tariff costs but corporate taxes at the rate $t$. The firm would prefer either dividends or interest payments to transfer pricing but be indifferent between them. What the final mix would be would depend upon the need for declaring a minimum dividend at the level of the subsidiary or a possible ceiling on dividends (effected through a ceiling on profitability) and possible restrictions on the internal rate of interest.

4.44 Assumptions
i) $t_2 > t_1 > w$ and
ii) $r_1 = 0$ and $r_2 > 0$

Upto the point of equality between $R$ and $C$, transfer pricing would be pursued provided.
Here tax savings are being measured at the rate $t_2$, because in the absence of transfer pricing funds would have moved to the parent through the dividend channel, and have been subject to tax at the rate $t'_2$. To the extent that funds are moved through the transfer pricing channel, it is saved of being subject to taxation at the rate $t_2$, which is implied in the alternative course. The gain through transfer pricing would be,

$$t_2 X - r_2 X + t_2 r_2 X_2$$

or

$$t_2 > r_2 (1 - t_2)$$

As long as transfer pricing is possible both the dividend and interest options would be ruled out because of tax costs involved at the rate $t_2$ and $w$ respectively.

Profit transfers take place to fulfil certain needs such as meeting the C of the parent or because of the dividend distribution requirements of the parent company or because it is more profitable to declare profits in a particular region given the global corporate tax structure. Profit transfers from the subsidiary to the parent would take place beyond the point of equality between $R$ and $C$ if the parent has to meet the needs of the shareholders. Further, if the corporate rate of taxation is lower in the parent country than the corporate rate of taxation in the host country, then it would be profitable for profits to be declared in the parent company and transfer pricing used for
transferring profits from the affiliate to the parent. That is to say, funds may be transferred from the affiliate to the parent, through the transfer pricing mechanism, even after \( R = C \) for the parent, because declaring profits in the parent company means a lower burden in terms of the corporate tax than what would obtain had the profits been declared in the affiliate. Any transfer of funds from the affiliate to the parent beyond \( R = C \), would be taxed as profits in the parent country since \( R \) now would exceed \( C \). If profits are required by the parent beyond its \( C \) needs then the cost of using transfer pricing as a means of transfer would be \( tX + rX - trX \). Ignoring the interest option for the moment the cost of using the dividend channel would be \( tX \). For transfer pricing to be profitable, 

\[
\begin{align*}
\frac{tX}{2} & > tX + rX - trX \\
\frac{1}{2} & \frac{2}{2} \\
\text{or } t & > \frac{t + r(1-t)}{2} \\
\frac{1}{2} & \frac{2}{2}
\end{align*}
\]

If the interest option is introduced then it would be preferred to transfer pricing because the tax cost in this case would be \( wX \) and this is less than \( tX \). The introduction of the net tariff cost would only reinforce this argument. To recall net tariff costs would always be positive as the tariff cost \( rX \) would always exceed \( trX \); \( t' \) being always less than 1 or less than 100%. If there is a need for declaring a minimum dividend then the profits in excess of this would be channelled through interest. If there is a ceiling on interest then transfer pricing would be used.
4.45 Assumption

i) \[ t_{1} > t_{2} > w \]

Upto the point of equality between \( R \) and \( C \) transfer pricing would be used for by now familiar reasons. Beyond \( R = C \), interest would be the most preferred channel because of the lowest tax cost implied by it at the rate \( w \), dividends would follow and transfer pricing would be the least preferred option. Transfer pricing would be the least preferred option because not only does it involve tax costs at the rate \( t \) which is higher than what dividends or interest would imply, but it would also involve net additional tariff costs. The net additional tariff cost is the tariff cost less the additional tax savings which accrue on account of reduced profits in the affiliate, consequent to the increased tariff cost arising in the event of transfer pricing.

So far, we have considered the possibility of substitution between different channels of remission to minimise global tax payments. The need for such a substitution arose because of inter-alia, restrictions on the use of particular channels. There might arise second order substitution namely in the debt-equity structure of

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8 Theoretically, the possibility \( t_{1} > w > t_{2} \) should be allowed, but this would not be considered in the analysis.
the company. In other words, if the restrictions on dividends make interest a profitable channel then, not only would the company charge a higher (than market) rate of interest but would also substitute loan funds for equity. If transfer pricing is more expensive than the use of either the dividend or interest channels, but if there are restrictions on both dividends and interest, the substitution of loan for equity could still take place as long as the ceiling on interest is at a level higher than that for dividends.

In the analysis carried out so far, the need for declaring a minimum dividend at the level of the affiliate arose, after the point of equality between R and C had been reached through resource transfers. But this need would exist if at all, even before such transfers take place. Consequently, profits can move from the affiliate through transfer pricing only after adequate provisions have been made for declaring a minimum dividend.

9 The substitution of loan for equity need not be restricted to the financial mode. Not only the interest on the loan by a parent to its affiliate provides a means for the transfer of profits but the loans could be tied to purchases which are overpriced. In India, where the rate of corporate taxation is high, the parent company may buy the plant equipment for one price and transfer it to the subsidiary at a premium partly against equity and the rest as loan to transfer some profits as interest. See Shoup (1974) p. 7.)
To sum up, as long as \( R - C < 0 \), transfer pricing would be profitable provided the tax savings it induces exceeds the net tariff cost. Once \( R = C \), then which of the three channels - interest, dividends and transfer pricing would be used would depend on the tax costs implied in each case as once \( R = C \), transfer pricing does not induce any tax savings.

4.5 **Differential tariff**

4.5.1 **Assumptions**

i) \( t_1 = t_2 = w \)

ii) \( r_1 > r_2 > 0 \) where \( r_1 \) and \( r_2 \) refer to the tariff rates prevailing in the host country on commodities 1 and 2 respectively.

Upto the point of equality between \( R \) and \( C \) transfer pricing would be pursued provided the tax savings it induces exceeds the net tariff costs on account of it. The effect of introducing differential tariffs into the argument is to create the need for decomposing the volume of profits remitted through the transfer prices of the two commodities. If \( X \) is the volume of profits which meets the \( R - C \) gap, then \( X = X_1 + X_2 \), where \( X_1 \) and \( X_2 \) are the profits transferred through the transfer prices of the commodities 1 and 2, respectively.

10 The tariff rates could also be viewed as being applicable to two classes of commodities rather than individual commodities.
The distribution between X\textsubscript{1} and X\textsubscript{2} would be determined by,

One, the differential rates of tariff:

Two, barring exceptions it would be reasonable to assume that the customs authorities will permit import prices within a range, even though this range may be quite large. This in effect would mean that there would be a ceiling transfer price for each commodity determined by the customs authorities. The restrictions imposed by the customs authorities on the transfer price of commodity 1 and commodity 2 would be one of the determinants of the distribution between X\textsubscript{1} and X\textsubscript{2}:

Three, the restriction on the transfer price arising out of the quantitative significance of various imports.

An aspect of the restriction on the freedom of transfer pricing is that imposed by the quantitative differentials in the imports of various commodities. The imports in quantitative terms are fixed by its requirements in production but their prices are free to vary within limits. Since there is a restriction on the freedom of transfer pricing of a particular commodity by the customs authorities, it follows that commodities which are imported in large quantities would be the target of transfer pricing by the firm since a small transfer price in the case of such commodities would enable the transfer of a large volume of profits which cannot be realized through transfer prices of commodities imported in small quantities, since this would require transfer prices of an order that may not be feasible. In the present exercise there are only two imports, viz., of commodity 1 and commodity 2. If commodity 1 is available in the international market at the same price as commodity 2, say Rs. 10 per Kg, but 2000 kgs of commodity 1 are imported by a particular firm, while only 10 kgs of commodity 2 are imported, then to transfer Rs. 10,000 through the transfer price of commodity 1 would require an overpricing of only 50%, whereas as to transfer
If there are no restrictions on the transfer price, then the entire profits would be transferred through the transfer price of commodity 2, since this involves a lower tariff.

\[ X = X^2 \]

If however there are restrictions on the transfer price of commodity 2, the profits in excess of the ceiling obtaining on the transfer price of commodity 2, would be channelled through the transfer price of 1. Transfer pricing would be pursued up to the point of equality between \( R \) and \( C \) if,

\[
\begin{align*}
&t X > r X - t r X + r X - t r X \\
&\quad \frac{1}{2} \quad \frac{1}{2} \quad \frac{2}{2} \quad \frac{2}{2} \quad \frac{2}{2} \\
\text{or} & \quad t X > r X (1 - t) + r X (1 - t) \\
&\quad \frac{1}{2} \quad \frac{2}{2} \quad \frac{2}{2} \quad \frac{2}{2} \quad \frac{2}{2}
\end{align*}
\]

The tax savings are being measured at the rate \( t \), because in the absence of transfer pricing, the funds would have been transferred through the dividend channel and would have been taxed at the rate \( t \). This kind of measurement of tax savings is akin to the opportunity cost concept. Beyond the point of equality between \( R \) and \( C \), transfer pricing by inviting both net tariff and tax costs, would be more expensive than the use of either the dividend or the through commodity 2, would require an overpricing of 10,000%. Where technological specificity obtains, the ceiling for transfer pricing would naturally be higher and if a package of inputs are involved, then the significance of quantitative differentials among them for transfer pricing would be correspondingly diluted.
interest channel but the firm would be indifferent between dividends and interest. Transfer pricing would invite positive net tariff costs, i.e., the tariff cost less the additional tax savings, would be positive because $t_2$, the corporate rate of taxation in the host country, would be less than 1 or less than 100%.

4.52 If $t_1 = t_2 > w$, transfer pricing would be pursued as long as the tax savings it induces exceeds net tariff costs which arise on account of it. As long as the net tax savings are positive transfer pricing would be pursued up to the point of equality between $R$ and $C$, because the alternative channel of interest would invite a positive cost $w$ and so would dividends at the rate $t$. But beyond this point of equality between $R$ and $C$, the firm would prefer the interest channel to dividends.

4.53 Assumptions

i) $t_1 > t_2 > w$ and

ii) the differential tariff conditions continues to hold.

For transfer pricing to be profitable up to the point of equality between $R$ and $C$ it would suffice if,

12 If $t_1 = t_2 < w$ then while the prospects of transfer pricing would be profitable until $R = C$, beyond this point dividends would be the most preferred channel. The interest channel would be the second best option unless $t_1 X + r_1 (1 - t_1) + r_2 X (1 - t_2) < wx$.  

13 $t_2 > w > t_1$ while a theoretical possibility would not be considered here.
\[ t X \geq r \frac{1}{2} (1 - t) + r \frac{2}{2} X (1 - t) \]

The other options of dividends or interest involve tax costs without producing any tax savings.

Once the equality between R and C has been reached interest would be the most preferred option. If there is a need for declaring a minimum dividend at the level of the subsidiary then the funds in excess of this would be channelled through interest. If there is a ceiling on interest then the firm would utilize the dividend channel in excess of the minimum dividend provided,

\[ t X + r \frac{1}{2} X (1 - t) + r \frac{2}{2} X (1 - t) \geq t X \]

The left hand side of the equation is composed of the cost elements implied in the transfer pricing channel, while the right hand side is an expression of the cost involved in using the dividend channel. Beyond \( R = C \), funds transferred through transfer pricing would be subject to the corporate tax, \( t \), and also subject to net tariff costs. If there is a ceiling on the rate of dividend then the firm would utilize the transfer pricing channel despite the costs.

4.54 Assumption

i) \( t > t > w \)

Until the point of equality between R and C is reached, the condition worked out in 4.53 would hold. Beyond this, interest would be the most preferred option followed by

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14 The possibility of \( t > w > t \), \( w \) will not be considered.
dividends. Transfer pricing would be the least preferred option as the tax cost it invites in itself exceeds the tax costs of alternative channels and the net tariff costs make the total tax cost differential between this and the alternative channels, only greater.

4.6 Multiaffiliate considerations

So far, the analysis has been carried out taking into account only the parent and a single affiliate. TNCs however have subsidiaries in several countries and sometimes more than one subsidiary in each country. So the capital would flow from each of these several subsidiaries to the parent. Unilever for instance has operations in as many as 53 countries. Not only does capital flow from one subsidiary to the parent but also among affiliates. The capital flows among affiliates would differ from the flow to the parent in as much as it cannot take the form of dividends unless of course it flows from a second or third tier subsidiary.

A distinction would be drawn between two different kinds of subsidiaries. The first kind of subsidiary is the manufacturing subsidiary and the second kind of subsidiary is the trading subsidiary. The trading subsidiary when located in a tax haven does not have the domestic market as its determinant but only the tax advantages of such location.

Further, a distinction needs to be made between different structures of intrafirm trade, which have a
bearing on transfer pricing, and capital flows. First, the parent may export to several subsidiaries without importing anything from the latter and there might not be any trade among the subsidiaries. Second, the parent may export the raw material to a subsidiary located in a particular country, which in turn may export the final product to an affiliate located in another country. This second structure of intrafirm trade provides the principal motivation for this section. This is because, this structure of intrafirm trade obtains for several TNCs in the drugs and pharmaceutical industry in India, which import the raw material or buck drugs from their parents (or affiliates) and export the formulations to Sri Lanka.

In the analysis which follows, two models would be discussed. One, involving a parent which exports to two affiliates, located in two different countries, and where the affiliates do not trade, with each other. Two, involving a parent exporting the raw material to an affiliate located in a particular country, which in turn exports the final product to an affiliate in another country.

Initially, two relatively simple theoretical formulations are discussed, which serve as a prelude to the principal case, which is relevant to the pattern of import

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15 The principles involved could be extended to any number of affiliates.
of raw material or bulk drugs by the TNCs in the drugs and pharmaceutical industry in India and subsequent export of formulations to Sri Lanka.

The case of exports being routed through several countries to realize higher prices through transfer pricing would be excluded from the analysis. The case of the parent reimporting from its foreign subsidiaries as is presently common with several U.S. TNCs, in the electronics industry where the parent exports the components to be assembled in a country with cheap labour costs and finally imports the end-products, would also be excluded.

4.6.1 Assumptions

i) \( t_1 = t_2 = t_3 = w_2 = w_3 \)

where \( t_1, t_2 \) and \( t_3 \) refer to the corporate tax rates in the country of the parent, the country of the manufacturing subsidiary and the country of the trading subsidiary, respectively. \( w_2 \) and \( w_3 \) are withholding taxes on the interest payments in the country of the manufacturing and the trading subsidiaries respectively. Where the analysis is conducted in terms of non-trading affiliates, \( t_2, t_3, w_2 \) and \( w_3 \) are the relevant taxes in the two countries.

ii) The tariffs are zero in both the countries of the manufacturing and the trading subsidiaries. The export duty is zero both in the parent country as well as in the country of the manufacturing subsidiary.
4.611 First, the case of non-trading affiliates would be considered, i.e., when the affiliates do not trade with each other and the parent exports directly to the concerned affiliates.

With $R - C < 0$ for the parent, transfer pricing would be pursued in both the affiliates and their respective profits transferred through the mechanism of over invoicing of imports, until $R = C$. Transfer pricing would self-evidently induce a tax saving while the alternative channels would invite tax costs.

4.612 Where the manufacturing affiliate exports to the trading affiliate, with $R - C < 0$ for the parent, the manufacturing affiliate would over invoice its imports from the parent for the same reason as above until $R = C$. The trading affiliate cannot transfer its profits to the parent through transfer pricing since it trades only with the manufacturing affiliate.

4.613 Beyond $R = C$, the TNC would be indifferent between the use of transfer pricing and other channels of remission, in the case of non-trading affiliates. The same result would hold for trading affiliates.

4.62 Assumptions

i) $t_1 = t_2 = t_3 = w_1 = w_2$ and

\[ r_1 > r_2 > r_1 > r_2 \]

ii) $r_2 > r_3 > r_2 > r_3$, where $r_1$ and $r_2$ are the ad valorem tariff rates on commodity 1 and commodity 2 in the country of the manufacturing subsidiary. In the case
of affiliates which do not trade with each other, it refers to the tariff rates on commodities 1 and 2, in the two countries respectively.

4.621 In the case of the affiliates which do not trade with each other, with \( R - C < 0 \) for the parent, transfer pricing would be pursued in each of the affiliates provided the tax savings it induces exceeds the net tariff costs.

Provided that the affiliate in the low tariff country has adequate profits to meet the \( R \) and \( C \) differential, the firm would exclusively use the transfer prices in this country for meeting the resource gap. This could be realized provided

\[
\frac{t}{2} X > \frac{r}{3} X - t \frac{r}{3} X + r \frac{X}{3} - t \frac{r}{3} X
\]

or

\[
\frac{t}{2} X > \frac{r}{3} (1 - t) + r \frac{X}{3} (1 - t)
\]

where \( X = R - C \) and \( t \) is the tax savings and \( X = X + X; \)

where \( X \) and \( X \) are the profits remitted through the two commodities in the low tariff country. The tax savings are being measured at the rate \( t \) because in the absence of transfer pricing the dividend channel would imply tax costs at that rate. The commodity 2, on which the tariff rate \( t \) applies may face restrictions on its transfer price which compel the use of the transfer price of commodity 1. \( \frac{r}{3} X \)

\( (1 - t) \) and \( \frac{r}{3} X (1 - t) \)' are the net tariff costs involved in transferring profits through the transfer prices of commodity 1 and 2 respectively, in the low tariff region. If the profits of the subsidiary in the low tariff region
are inadequate for meeting the $R - C$ gap, then the TNC would use transfer prices in the second affiliate provided,

$$t \frac{X}{1} > r X - t \frac{X}{1} - t \frac{X}{2} + r X - t \frac{X}{2}$$

or

$$t \frac{X}{2} > r X (1 - t) + r \frac{X}{2} (1 - t)$$

Where $X$ is the balance of profits supplied by the second subsidiary to meet the $R - C$ differential. Now,

$$\bar{X} - X = R - C \text{ and } \bar{X} = \bar{X} + X$$, where $\bar{X}$ and $\bar{X}$ are determined in a manner similar to $X$ and $X$ above.

$$r \frac{X}{1} (1 - t) \text{ and } r \frac{X}{2} (1 - t)$$ refer to the net tariff costs involved in transferring profits through transfer prices of commodity 1 and 2, respectively, in the relatively high tariff region. Beyond $R = C$, i.e., once the resource gap has been bridged, transfer pricing would cease to be an option and the firm would be indifferent between the interest and dividend channel. Beyond $R = C$, transfer pricing would invite tax on corporate profits at the rate $t_1$ and in addition a net tariff cost while dividends or interest would invite taxes at the same rate.

4.622 In the second model involving the affiliates which trade with each other, the manufacturing subsidiary would overinvoice its imports from the parent provided the tax savings induced by transfer pricing exceed the net tariff costs. Once the resource gap has been filled, transfer pricing would cease to be an option and the firm would be indifferent between the interest and the dividend channel. Transfer pricing would invite both a tax on corporate profits as well as net tariff costs while interest or dividends would be taxed at an equal lower rate.
4.63 **Assumptions**  

i) $t_2 > w_1 > t_3 > t_1 > w_3$ and $t_1 > t_2 > t_3 > t_2$  

ii) $r_2 > r_2 > r_3 > r_3$

4.63.1 With $R - C < 0$ for the parent, in the case of the affiliates which do not trade with each other transfer pricing would be pursued in both the affiliates provided the tax savings exceeds the net tariff costs. In other words, transfer pricing would be pursued in both the affiliates as long as there is net tax savings.

Once $R = C$, transfer pricing would invite taxation at the rate $t_1$, apart from net tariff costs, and therefore would be ruled out in the country where the corporate rate is lower than that of the parent country. Interest would be the most preferred channel and the actual mix between dividends and interest being determined by the various restrictions on them. Further, in the country where the corporate tax rate and the withholding tax rate are greater than the corporate tax rate in the parent country, transfer pricing would be pursued provided that the net tariff cost together with the tax on corporate profits which transfer pricing would invite is less than either the withholding tax or the corporate tax in the host country.

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16 The more realistic presentation of assumption (i) is perhaps as $t < t_2 > w$ and $t_1 > t > w_1$.

17 The argument could also be carried out in terms of a representative tariff. Consider only a parent and a single affiliate. Let $t_2 > t_1$ and $w_2 > t_1$. Further let $R = C$ for the parent. If $r$ is the average tariff rate.
The condition would be,
\[ t \cdot X + r \cdot X_1 (1 - t) + r \cdot X_2 (1 - t) < t \cdot X \text{ or } w \cdot X. \]
where \( X \) is the volume of profits sought to be transferred from the affiliate in the relatively high tax region, beyond \( R = C \) for the parent and \( X = X_1 + X_2 \), where \( X_1 \) and \( X_2 \) are the profits transferred through the transfer prices of commodities 1 and 2.

4.632 In the case of the manufacturing subsidiary, with \( R - C < 0 \) for the parent, overinvoicing of the imports by the manufacturing subsidiary would be carried out provided the tax savings are greater than the net tariff costs.

Beyond \( R = C \), the manufacturing subsidiary would underinvoice its exports to the trading subsidiary, which would remit the surpluses to the parent using first the interest channel and subsequently the dividend channel depending on the existence of a ceiling on interest. There is evidence of TNC units in the drugs and pharmaceutical industry in India, remitting surpluses to the parents, through their trading affiliates in Sri Lanka and Malaysia, by first underinvoicing the exports to the respective units in Sri Lanka and Malaysia and this is presented in the

\[ \bar{r} \cdot (1 - t) + t < t \text{ or } w. \]
following chapter. If a ceiling obtains on dividends as well, then the manufacturing subsidiary would activate its transfer pricing channel and remit part of the surpluses by over invoicing its imports from the parent provided the net tariff cost plus the tax on corporate profits in the parent country is less than either the tax on corporate profits or the withholding tax prevailing in the country of the manufacturing subsidiary.

If $X$ is that part of the surpluses which is sought to be remitted through the over invoicing of imports of the manufacturing subsidiary, in the event of a ceiling obtaining on the interest and dividend channels of the trading subsidiary, the transfer pricing condition becomes,

$$tX + r(1 - t) + rX(1 - t) < tX + wX$$

where $X = X_1 + X_2$ and $X_1$ and $X_2$ are the profits transferred through the transfer prices of commodity 1 and 2 respectively.

So far it has been assumed that the condition $R - C < 0$ obtains for the parent and the resource gap is met by surplus transfers from the affiliates. This condition could however obtain for any of the affiliates and the gap met either through transfers from the parent or from some other affiliate, involving transfer pricing or some channel.

18 If the resource gap pertains to second tier subsidiary which is receiving profits from a third tier subsidiary then dividends could naturally constitute one of the channels for resource transfer.
other than dividends. In other words, interest on inter-affiliate loans together with the transfer pricing of goods involved in trade between affiliates could serve as a means of bridging this gap. For any firm, the cost of using its own profits for investment where investment allowance provisions exist is zero, while external sources imply costs in terms of interest. When the profits of one subsidiary is desired to be used in another subsidiary either for meeting its working capital requirements or its investment requirements, and the profits are transferred through the transfer pricing mechanism, then the cost of transfer in terms of the net tariff costs would have to be taken into account.

We have considered resource flows within a TNC system involving more than a single affiliate to make the analysis more realistic. We have in particular considered the case where the affiliate underinvoiced its exports to another affiliate, while remitting surpluses.

19 An investment allowance is a prior charge before appropriation. See Sengupta, 1986. Further, depreciation could also be viewed as a fund available for investment, even though it is meant for replacement of assets, because rapid technological obsolescence means that no asset is replaced in the strict sense but a new asset embodying the latest technology is acquired. Further, since no firm keeps the depreciation funds idle it is available at least for meeting the working capital requirements, if not for additional investment. See in this connection, Choudhary, 1979b; Manser and Mantel 1975.
4.7 **Transfer pricing as an alternative source of finance**

An increase in production comes about either through increased utilisation of capacity or through additions to the capacity. An increase in the utilisation of capacity requires additional working capital to meet the expenses of labour and on account of raw materials. Additions to capacity require additional fixed capital in the form of plant and machinery. Transfer pricing could serve as a means of providing finance both for meeting the requirements of working capital and fixed capital. What this implies is a transfer of reserves from the parent or an affiliate to another affiliate where funds are needed for meeting the costs of working capital and/or fixed capital. This would be an alternative to borrowing either in the domestic capital market or from the international capital markets.

An alternative to transfer pricing to realize the inter-affiliate transfer of reserves exists within the TNC in the form of inter-affiliate loans.

A firm can raise resources from the banks and financial institutions or from the capital markets in the form of equity or debentures or use its own reserves for financing investment. The cost of using equity as a source of finance would be the dividend it will have to pay its shareholders, while the cost of borrowing from either the banks or the financial institutions or from the capital markets would be
the interest it would have to pay to the lenders. An alternative to transfer pricing by the firm, is using its own reserves, and where these reserves are held in the form of idle cash, then the cost of using these reserves would be zero to the firm. This is the reason why where a firm's reserves are adequate, these are largely employed to finance investment. Large TNCs operating in India finance their investment mostly by using their own reserves. Where however the profits are inadequate to finance investments, as is the case with smaller TNCs operating in India, the firms rely on outside resources for financing such investments (Choudhary 1979b).

For a particular affiliate or the parent transfer pricing could serve as an alternative instrument for financing its investments (Horst, 1977 and Kopits, 1976b). This essentially implies a global reallocation of profits within a TNC to meet the investment requirements of its various units. In other words, instead of a particular affiliate using its own reserves or profits to finance investments it uses the reserves or profits of some other affiliate to finance its investment. In the present analysis it is assumed that it is a wholly owned subsidiary. In other words, the parent owns the entire equity for

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20 The cost of using loans as a source of finance is reduced to the extent of the tax savings realized by deducting interest while computing taxable income.
investment in areas where even though the rate of return is lower, the conditions of demand in the market would dictate these investments. This apparent paradox of investment would be discussed in detail in a subsequent section. Alternatively, drastic changes in the tax burden arising out of changes in tax regimes, would alter the profitability of a given investment and where there is an increase in profitability arising out of lower tax burden, additional investment may follow with transfer pricing being used to finance such investments.

The reserves of a particular affiliate or the parent may be augmented in a planned manner through transfer pricing to meet investment outlays. Transfer pricing may be used to meet the cost of ongoing investment. Where an unforeseen escalation in the costs of investment has occurred due to inflation, then funds would be made available through transfer pricing to protect the planned real value of investment. This could be realized through the cash flows implied in the over invoicing of imports by an affiliate, in possession of the requisite surpluses and it purchasing goods from the firm requiring the surpluses to be used for meeting the unforeseen escalation in costs. Alternatively, provided again that the required surpluses are available with an affiliate it could under invoice its exports to the firm carrying out the investment. If a capital good is supplied by the affiliate at less than its price then this leads to a direct reduction in the cost of investment. Where raw materials or intermediate goods or
the final product itself is supplied by the affiliate at less than its price, then funds are released to a corresponding extent for the finance of investment.

For a TNC at the level of its subsidiary, equity would not normally be a source of finance for investment because of its implications on control. The manner in which foreign firms in India have resisted reduction in the foreign share in equity, that has followed from laws such as FERA in India, provides ample testimony to this point. The alternatives therefore would be borrowings from the banks and financial institutions or from the capital markets or inter-affiliate borrowings. There are several points to be noted here. If a loan were made by an affiliate in a free currency to a TNC unit in India, there would be no foreign exchange problem, however if one were to consider the TNC unit making a loan to its affiliate abroad there would be a foreign exchange problem. The withholding tax applies to the interest payments on the loan and not on the loan itself. It is assumed that the tax rates in the receiving country as well as the country from which the loans are made, are the same. If X is the sum of money required by a TNC unit, which it can receive either as a loan from an affiliate and the interest payments on it would be subject to a withholding tax w' or through the overinvoicing of imports by the affiliate supplying the required sum of money, and purchasing goods from the TNC unit in need of the sum X, and where the advalorem tariff rate is r' and t' is
the corporate rate of taxation in the country supplying the sum \( x \), transfer pricing would be pursued provided,

\[
\begin{align*}
    rX - trX &< wX \\
or\quad rX(1 - t) &< wX \\
or\quad r(1 - t) &< w
\end{align*}
\]

If \( P \) stands for the resources in money terms that a firm can raise for its planned investment outlay, \( I \), and \( P - I < 0 \) then, transfer pricing could be used to fill this gap, either by reducing \( I \), which would be the case where capital goods are supplied at less than their price or by increasing \( P \), by augmenting the firm's reserves. When the parent (or affiliate) receives profits from another affiliate to augment its reserves, it is in effect receiving a grant from its affiliate though it is not cost free for the TNC as a whole, in as much as either the contributing affiliate or both, have to bear costs in terms of tariff and corporate taxes.

Not all the cash surpluses of a firm would be idle and at least a part of it would be in deposits that earn a return. In India for instance units of the Unit Trust of India, are extremely popular with the corporate sector but this also because of the tax advantages flowing from it. However at least a part would remain as free cash surpluses. These cash surpluses could be transferred to an affiliate which is in need of it, through the mechanism of over-invoicing of imports provided,

\[
(1 + r)(1 - t) - 1 < i
\]
where, \( r' \) is the advalorem tariff rate in the country of the affiliate which is overinvoicing its imports, \( t' \) is the corporate rate of taxation in the same country and \( i' \) is the rate of interest of bank finance as well as the savings which can be raised in the capital market for the TNC unit which is in need of the cash surpluses. Suppose you are transferring a rupee. Import value is jacked up by a rupee. Domestic firm cost rises by \( 1 + r \), since \( r' \) is the advalorem tariff rate. Pretax profits therefore fall by \( 1 + r \). Post tax profits fall by \( (1 + r)(1 - t) \). This decline in post tax profits can be greater than \( 1 \) which is the amount transferred. The net cost associated with the transfer is \( (1 + r)(1 - t) - 1 \). The net cost associated with borrowing locally is simply \( i \), which is the interest cost \( 21 \). It is assumed that the tax rates are the same in both the countries. Further, if limited bank finance and savings are available, transfer pricing may be pursued even if, \( (1 + r)(1 - t) - 1 \leq i \).

Where the choice is between short term borrowings to finance working capital requirements and transfer pricing, the latter would be resorted to as long as the net tariff costs for the affiliate supplying the surpluses through overinvoicing of imports is less than the interest cost for

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21 One must note the inter-temporal nature of interest. Interest has to be paid in the next period, while the decline in profits takes place in this very period.
the firm in need of the finance, if it chose to go in for market borrowings. In other words, as long as the tariff cost less the tax savings which accrue on account of reduced profits for the affiliate which is supplying the surpluses, consequent to the tariff cost arising in the event of transfer pricing, is less than the rate of interest which the unit in need of surpluses faces for market borrowings, transfer pricing would be a profitable option. This would be the choice facing the firm that has got into cost overruns. Transfer pricing could be used to meet the investment costs of ongoing projects if the actual rate of inflation for instance exceeds the expected rate, resulting in an escalation of costs. In the case of the long term loan the aggregate interest cost is spread over a period of time. We assume however for our present purpose, that the loan is taken for one period only. Interest is paid at the end of the period whereas transfer pricing can be pursued during the period. For our present purpose, we ignore the distinction of flow of funds during the period and at the end of the period. We also assume that reserves are idle. Where the choice is between longterm borrowings to finance fixed capital and transfer pricing, the feasibility condition for the latter would be that the aggregate cost, made up of the net tariff cost and the cost on account of corporate taxation in the receiving country is less than the aggregate interest burden occuring during the life of the
Where investment allowances exist, only the net tariff cost need be reckoned while estimating the cost of transfer pricing.

If the structure of corporate taxation in the different countries in which the affiliates of a TNC are located changes, it would alter the relative post-tax profitability of investments in different affiliates and thereby affect the global distribution of surpluses assuming no changes in the market opportunities facing an affiliate. Such an event, would cause a global redistribution of surpluses for the purpose of declaring profits in the regions, with relatively lower rates of corporate taxation. However, the redistribution cannot be regarded as final, since even though surpluses may be declared as profits in a particular region to lower the tax burden, it may not be used as investment in that region if market opportunities do not warrant it.

22 Since interest would be a recurring cost, the aggregate interest cost would have to be calculated, in the case of the long term loan.

23 Since only overinvoicing of imports is by and large the rule in countries like India, the surpluses generated by TNCs in India are used for financing investment in the developed countries.
4.8 Exchange rate gains

There are three aspects to the relation between transfer pricing and foreign exchange.

One, when funds are desired to be placed in a relatively strong currency area, instead of retaining them in the weak currency area;

Two, speculation, and

Three, movements dictated by exchange controls.

A TNC could use transfer pricing to move out funds from a weak currency area to a strong currency area. If a particular currency is deemed stronger than another currency then it has an implicit premium, which would be revealed in the black market price of that currency. The possibility of a TNC engaging itself in the black market is not being considered but the possibility of a TNC holding its funds in a stronger currency area, is being allowed for. We assume ceteris paribus conditions. Transfer pricing would be pursued as long as the expected premium to be realized by transferring funds held in the weak currency area to the relatively strong currency area, by the TNC unit in the weak currency area over invoicing its imports from its affiliate in the relatively strong currency area, is greater than the net tariff costs incurred on account of the over invoicing of imports. The premium is only implicitly realized, and for it to be actually realized the TNC would have to enter the black market. If \( p_m \) is the premium to be realized in the black market through the sale of foreign exchange, \( r \) the
advalorem tariff rate in the weak currency area, \( t \) the corporate tax rate in the country in which the currency is relatively weak, and \( k \) the risk factor which would be subjectively determined, then transfer pricing would be used, as long as,

\[
p_m - k > (1 + r)(1 - t) - 1
\]

A TNC could move out its surplus funds in a particular area if it expects the currency in which such funds are held to depreciate in the future, to a currency area where appreciation is expected. The transfer pricing condition for this, would be similar to the one above and could be expressed algebraically as follows.

Let \( p \) be the price of foreign exchange in local currency, \( p' \) be the expected price after appreciation and \( S \) the surplus of funds in local currency available for speculation.

\[
\frac{1}{p} \cdot p' - p = \frac{X}{p} \times 100
\]

is an expression for appreciation in the price of foreign exchange in percentage terms.

\( S \) would be the available speculative surplus expressed in \( p \) units of foreign exchange.

If \( r \) is the advalorem tariff rate prevailing in the country in which the surpluses are available, and \( t \) is the corporate tax rate in the same country, then, the condition for transfer pricing becomes,
\[ X \left( \frac{S}{P} \right) \geq \left[ (1 + r) (1 - t) - 1 + K \right] \frac{S}{P} \]

or

\[ X \geq (1 + r) (1 - t) - 1 + K \]

Exchange controls could take the following forms (See Kopits, 1976b, p. 796).

One, limiting the outflow to a certain proportion of the earnings,

Two, unfavourable exchange rate for remittances,

Three, case by case, authorization, and

Four, total ban on remittances.

The effect of exchange controls is similar to the effect of restrictions on profitability and induces transfer pricing to enable movement of surpluses, with the conventional channels for transfer closed. Exchange controls imply that the currency is not freely convertible and render part or whole of the surpluses immobile and hence induce transfer pricing to enable the TNCs to hold funds in a freely convertible currency.

4.9 The paradox of investment

Investment, it is believed, is determined by the rate of profit or the return on investment. One of the paradoxes of foreign investment, of which an attempt is made in this section, to provide an explanation, is that while the rate of return on investments has been consistently higher in the

24 The permissible remittance could also be defined in terms of a certain proportion of the parent's investment in the affiliate.
less developed countries (LDCs), than in the developed countries, the investment flows have been directed mainly towards the latter. As will be seen below, the rates of return on investments in LDCs have been consistently higher than the returns in developed countries. Further, the ratio of the return in LDCs to that in the developed countries has only shown a tendency to increase over time. The average of the ratio of return on investment in LDCs to that in developed countries was 146% during the period 1945-48 and this increased to an average of 171.4% during 1980-81 (Table 4.1).

In other words, investments have not followed the higher rate of return. Between 1960 and 1979, the share of LDCs in the total direct foreign investment by TNCs, declined from 36% to 30% and the share of LDCs in the U.S. foreign investment stayed constant at 25% between 1966 and 1977 (Tables 4.2 and 4.3).

This paradox could perhaps be explained at an elementary level by considerably not only the rate of return as determining investments but the size of the markets as well. A more complex explanation would distinguish between average and marginal rates of return and also take into account the rate of growth of the size of the markets. The paradox is resolved here at an elementary level.
While the rate of return is higher in the LDCs, the size of the market and aggregate demand is much smaller in the LDCs than in the developed countries. Lower incomes, naturally means a smaller market. The size of the market in other words limits investment.

The low cost of labour in LDCs, could be considered as being central to the explanation, as it on the one hand explains the higher return on unit investment, and on the other hand, at least in part accounts for the low incomes and the small size of the market.

If the price of a particular commodity be the same in the developed countries as it is in the LDCs, and if it is also assumed that the scale of investment in the developed countries and the LDCs for producing this commodity is the same then with similar capacity utilizations, the output would be equal in both the developed countries and the LDCs. The profits in the respective countries would be given by aggregate proceeds, which is price into output, assuming all output is sold, less the wage cost and the non-wage cost. If, further, the non-wage costs are taken to be identical between the two sets of countries, the only distinguishing feature between the two sets of countries would be the wage costs. Self-evidently, the wage costs in LDCs would be lower than that in the developed countries and consequently, the profits in the LDCs would be larger than that in developed countries. For identical investment, the rate of return in LDCs would be greater than that in developed
countries (see also Bagchi, 1975). The rate of return would lead us to believe that all additional investments would flow into LDCs but if in absolute terms the flow into the developed countries is larger it is because the size of the market is small in LDCs relative to that in the developed countries. Further, the rate of growth of income in LDCs may be low, which means that the market size in LDCs would remain small relative to the size in the developed countries.

The demand for TNC products in the LDCs would come not only from the workers in the TNC sector but also from the workers in the non-TNC segment of the industrial sector and from the peasants in the agricultural sector. In an economy characterised by dualism, with a modern industrial sector dominated by TNCs and a backward agricultural sector, largely unaffected by capitalism, the demand of TNC products would mainly arise outside agriculture.

The higher degree of monopoly in LDCs would mean higher prices than what would prevail in developed countries, and this would only reinforce the effects of lower labour costs upon profits and profitability.
Table 4.1

Rates of return on U.S. direct foreign investment

<table>
<thead>
<tr>
<th>Developed Countries %</th>
<th>LDCs%</th>
<th>LDCs Developed Countries %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945 7.2</td>
<td>11.5</td>
<td>159.7</td>
</tr>
<tr>
<td>1946 10.1</td>
<td>14.3</td>
<td>141.6</td>
</tr>
<tr>
<td>1947 12.4</td>
<td>18.1</td>
<td>146</td>
</tr>
<tr>
<td>1948 14.2</td>
<td>19.8</td>
<td>139.4</td>
</tr>
<tr>
<td>1980 16.5</td>
<td>24.3</td>
<td>147.3</td>
</tr>
<tr>
<td>1981 11.5</td>
<td>22.5</td>
<td>195.6</td>
</tr>
<tr>
<td>1945-48 (average)</td>
<td></td>
<td>146</td>
</tr>
<tr>
<td>1980-81</td>
<td></td>
<td>171.4</td>
</tr>
</tbody>
</table>

Sources: For the period 1945-48, Sweezy, 1959, p. 214.
For the period 1980-81, SCB, 1982 b, p. 17.
Table 4.2

Flow of direct investment to LDCs as a percentage of the total flow from developed economies, 1960 - 1979.

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>36</td>
</tr>
<tr>
<td>1961</td>
<td>38</td>
</tr>
<tr>
<td>1962</td>
<td>25</td>
</tr>
<tr>
<td>1963</td>
<td>26</td>
</tr>
<tr>
<td>1964</td>
<td>26</td>
</tr>
<tr>
<td>1965</td>
<td>30</td>
</tr>
<tr>
<td>1966</td>
<td>25</td>
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<tr>
<td>1967</td>
<td>24</td>
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<tr>
<td>1968</td>
<td>31</td>
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<tr>
<td>1969</td>
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<td>1970</td>
<td>30</td>
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<tr>
<td>1971</td>
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<td>1972</td>
<td>29</td>
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<td>1973</td>
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<tr>
<td>1974</td>
<td>5</td>
</tr>
<tr>
<td>1975</td>
<td>41</td>
</tr>
<tr>
<td>1976</td>
<td>31</td>
</tr>
<tr>
<td>1977</td>
<td>36</td>
</tr>
<tr>
<td>1978</td>
<td>33</td>
</tr>
<tr>
<td>1979</td>
<td>30</td>
</tr>
</tbody>
</table>

An additional reason for both the larger and increasing share of the TNC investment in the developed countries would be political in as much as capital would be more secure in the developed countries which would make the TNCs prefer their asset acquisition there.

The choice before any TNC unit, say a subsidiary would be between investing an additional unit of profits in the country in which it is located or invest in another country by transferring profits through transfer pricing and other channels, where the investment would be governed not only by the rates of return but by the size of the market or conditions of aggregate demand.

Even though the markets in LDCs are relatively small compared to the markets in the developed countries, the higher return in the LDCs compared to that in the developed countries, also means that the contribution of LDCs to the total profits of TNCs from their overseas operations came significantly from the LDCs (see table 4.3 and 4.4 below). If these figures could be adjusted for transfer pricing, the share of LDCs would probably be larger.

To put the matter simply, with only a quarter of U.S. foreign investments located in the LDCs, well over a third of their overseas profits accrued from the LDCs.

In resolving the apparent paradox of investment, the relatively small size of the market was considered. The argument could have been extended to growth in demand which would bring in the accelerator hypothesis.
### Table 4.3

<table>
<thead>
<tr>
<th>Total assets of U.S. foreign affiliates millions of dollars</th>
<th>Distribution %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed countries</td>
<td>320,176</td>
</tr>
<tr>
<td>LDCs</td>
<td>108,705</td>
</tr>
</tbody>
</table>

Source: SBC, 1982a, p.36.

### Table 4.4

Total profits of TNCs from their operations in the developed countries and in LDCs and their distribution in 1977

<table>
<thead>
<tr>
<th>Total profits in millions of dollars</th>
<th>Share in Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>52829.04</td>
</tr>
<tr>
<td>LDCs</td>
<td>26415.31</td>
</tr>
</tbody>
</table>

Source: Calculated from tables 4.1 and 4.3; and 1980 returns are used.
In this chapter, first the concept of transfer pricing was examined. A definition of transfer pricing was attempted. Transfer pricing is essentially an instrument for transferring surpluses or the profits made during the course of any year. However, transfer pricing may be also used to finance unforeseen expenditure in some unit, located in a particular country, by transferring ready funds that may be available with some other unit, located in a different country. The various causes of transfer pricing were examined in this chapter. Surplus transfers could take place through any one of the conventional channels, such as dividends, or as it actually does through a combination of conventional channels and transfer pricing. The absolute level of surplus transfers would be determined by the surpluses available, net of what is retained for investment. However, the composition of surplus transfers would be determined by tax and other considerations. The determinants of the mix of three channels of remission, namely, transfer pricing, dividends and interest, which are in fact the three most important channels of remission of surpluses from India (RBI, 1974), were examined in this chapter. The arguments could apply to any of the other channels of remission as well. Differential tariffs were introduced into the argument and the case where more than just a single affiliate or a TNC subsidiary is involved in surplus transfers was considered. Both the considerations of differential tariffs and surplus transfers involving more than one affiliate, makes the analysis more realistic.
The pattern of surplus flows could in fact be quite complex, where the surpluses of a particular affiliate are mediated through another affiliate before reaching the parent. The manner in which transfer pricing could be a source for investment either by the parent or by an affiliate other than in which the surplus originates, was also examined. Finally, an apparent paradox of investment was resolved, which shows that capital or investment flows are not governed only by the rates of return. The following chapter deals with the empirical part of the thesis.