

## **Note**

# **Relative Profitability of Multinational Enterprises in a Developing Host Country: The Sri Lankan Experience**

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Empirical evidence on the profitability of multinational enterprises *vis-à-vis* local firms in developing countries appears to be sparse and contradictory. This paper attempts to shed some light on this aspect through an analysis of the balance sheet data of a sample of manufacturing firms in Sri Lanka. The analysis does not support the generally-held view that multinational enterprises are more profitable than their local counterparts. It suggests that profitability cannot be explained by either origin (MNE/local firm) or sector, or age.

## **1. INTRODUCTION**

One of the striking developments in the economic activities of the developing countries (DCs) from about the turn of this century has been the growing importance of the participation of multinational enterprises (MNEs).<sup>1</sup> Originally, they were concentrated largely in the primary sector.<sup>2</sup> The rapid industrial development that took place after World War II brought about an unprecedented expansion of MNE activity and the most rapidly growing sector of this activity in the DCs was manufacturing. Many DCs followed import substitution policies in the 1950s and 1960s, and often a major beneficiary of these policies was the multinational enterprise. In the late 1960s and in 1970s, a number of developing countries adopted more export-oriented industrialisation strategies, the manifestation of which was the mushrooming of export processing zones around the world [Jenkins (1987), p. 7]. Enticing MNE participation in export production was again a prime objective of such a strategy. Consequently, by 1985 about one-fourth of the overseas investment by the MNEs was concentrated in the developing countries [UNCTC (1988), p. 25].

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<sup>1</sup>In line with usual practice in this area of study, the multinational enterprise (MNE) is defined here as an enterprise that owns or controls income-generating assets in one or more countries other than the one in which it is based.

<sup>2</sup>By the outbreak of World War I, over 60 percent of all direct foreign investment was located in developing countries, 55 percent of it in the primary sector [Dunning (1983), p. 89].

There is a sizeable body of literature on the MNE activity in the developing countries. Empirical evidence on some crucial aspects of the MNE activity, however, is still sparse. One such aspect is the profitability of the MNEs *vis-à-vis* indigenous enterprises. There is a need for more empirical investigations covering a wider spectrum of individual country situations in order to broaden our understanding of this aspect of the MNE operations. Such investigations can be useful to investors and planners of policies on direct foreign investment in the developing countries. The present study is an attempt in this direction.

## 2. REVIEW OF PREVIOUS WORK

A generally-held view regarding the operations of the MNEs in both the developed and the developing host countries is that they are more profitable than their local counterparts. So far as this author is aware of it, the only comprehensive empirical investigation to verify this view on the developing countries is an UNCTAD study by Lall and Streeten (1977) which examines for 1968-69 the operation of 109 transnational corporations (TNCs)<sup>3</sup> in India and Colombia. This study, however, comes up with conflicting results in respect of the relative profitability of firms. In the Indian sample, the TNCs as a whole are more profitable than the non-TNCs, whereas the Colombian sample shows exactly the opposite in terms of every measure employed. Further, the authors report that when the data of the above two countries are combined with those of four other developing countries (Jamaica, Kenya, Iran, and Malaysia), the overall result fails to indicate any significant difference of profitability between the TNCs and the non-TNCs in the developing countries. Based on a study of a sample of 33 pairs of industrial firms in Costa Rica in 1971, [Willmore (1976), p. 509] also reports that there is no significant difference between the foreign and local firms in Central America.

In a more recent ESCAP study on the operations of the transnational trading corporations (TTCs) in Sri Lanka, [Athukorala and Lakshman (1985), p. 344] find that the TTCs stand out as being more profitable compared with their local counterparts. The test of profitability in their study is based on trading firms and no attempt has been made to measure the performance of the MNE affiliates operating in the manufacturing sector.

The evidence available from the industrial countries is also mixed. According to a study by [Safarian (1969), Ch. 6], there has not been a significant overall difference in profitability between these two sets of firms in Canadian manufacturing. Conversely, [Dunning (1988), Ch. 10] reports that from 1962 the profitability of the UK firms abroad has been rising relative to that of the UK firms in the UK, while

<sup>3</sup>The term "transnational" is used in the UN publications as a preferred substitute to "multinational".

that of foreign affiliates in the UK manufacturing sector has continued to outpace that of their indigenous competitors.

### 3. MULTINATIONAL ENTERPRISE INVOLVEMENT IN SRI LANKAN MANUFACTURING

As in many other developing countries, import control was the major factor which triggered the entry of direct foreign investment into Sri Lankan manufacturing [Athukorala and Jayasuriya (1988), p. 411]. In the early 1960s, in response to a severe balance-of-payments crisis, Sri Lanka moved rapidly to a regime of stringent import and exchange restrictions, placing a heavy emphasis on an import substitution strategy. When their market shares were threatened by import controls, many foreign firms set up affiliates within Sri Lanka to undertake the domestic production and/or assembly of product lines which had hitherto been supplied from their overseas production centres. During the 1960s, facilitated by a favourable government policy stance, the MNE role expanded in the domestic manufacturing sector. By the end of the decade, there were 51 MNE affiliates in operation, and they accounted for about 28 percent (38 percent if the public sector is excluded) of the total manufacturing output [Fernando (1971), p. 84].

As it is evident from Table 1, the period from 1970 to 1977 witnessed a notable reduction in the tempo of direct foreign capital participation in the economy. The commitment to socialism by the government in power during this period led to

Table 1

<i>The MNEs in Sri Lankan Manufacturing</i>	
Period of Establishment	Total Number of Affiliates
Prior to 1950	3
1950-1959	8
1960-1969	40
1970-1977	20
1978-1985 <sup>a</sup>	222
Total	293

Source: Athukorala and Jayasuriya (1988), Table 1.

<sup>a</sup> Figures in this period include firms in trial production and firms under construction.

the introduction of a new industrialisation policy aimed at expanding the role of the public sector by setting up new public corporations and nationalising some of the privately-owned enterprises [Betancourt (1981), p. 33]. This policy apparently had considerable adverse effect on the expansion of the MNE activity in the economy. The change in political leadership in 1977 brought about a liberalised economic environment, with a marked shift in the industrialisation policy. The promotion of foreign capital participation in manufacturing, notably in export-oriented industries, was a pivotal element of the development strategy of the new "right-of-centre" government [Lal and Rajapatirana (1988), p. 45]. The setting up of an export processing zone (the Katunayaka Investment Promotion Zone) in 1978 was one of the major steps taken in this direction. Despite the political uncertainty that resulted from the worsening of the country's ethnic conflict since 1983, the new policy orientation proved to be very attractive to foreign investors over the post-liberalisation period (Table 1).

#### 4. DATA AND METHODOLOGY

Against this background, we proceed to examine in this section the profitability of the MNE affiliates *vis-à-vis* the local firms operating in the manufacturing sector of Sri Lanka. This is done through a comparative analysis of their balance-sheets and profit-and-loss statements. The sample firms used for this analysis consist of 10 MNE affiliates and 10 local firms<sup>4</sup> operating in the manufacturing sector. All these firms are public limited companies listed in the Colombo Stock Exchange. To avoid distortion from possible random variations, the analysis is based on average figures for the three years from 1987 to 1989.

The data for the analysis comes from the Sri Lanka Equity Guide 1991. At the outset, a few words of caution are warranted regarding the limitations of published accounts. Published company accounts data are not completely reliable indicators of the "performance" of firms, and much less so when some of the "values" are determined directly by the firms concerned. Profit figures, particularly in the case of multinational companies, may be liable to various manipulations through practices such as transfer pricing [Robbins and Stobaugh (1974), p. 91]. Some items, such as the amount of depreciation and the value of inventories, are subject to arbitrary valuation within a fairly wide range. Moreover, particularly in respect of fixed assets, accounting figures based on the historical cost concept may not represent realistic values in a period of inflation. There are also the basic conceptual problems of defining items such as "capital employed" and "current liabilities". Finally, there is the difficulty of comparing and interpreting balance-

<sup>4</sup>The number of sample firms was limited to 20 due to the lack of comparable manufacturing firms.

sheet data, which represent the financial position at one particular point in time of the lives of firms having different ages and facing different market conditions. There is little one can do to resolve these problems which pervade all studies of this type. In any case, economic policies relating to the business sector and also the existing literature on the performance of the MNEs are largely based on the available published data. As such, an analysis based on published accounts is considered relevant and useful particularly in a developing-country context.

The principal measure of profitability used in this study is the return on investment (ROI), which is shown as net income before taxes divided by capital employed. "Capital employed" may be defined in a number of ways, and the two most widely accepted definitions are "gross capital employed" and "net capital employed". Gross capital employed usually represents total assets, while net capital employed comprises total assets less current liabilities. "Net capital employed" is used in this study because it represents investment more realistically in the practical sense. However, it is important to note that "net capital employed" used here is slightly different from the usual definition. The definition adopted here is "total assets less current liabilities other than short-term bank borrowings". The argument here is that short-term bank borrowings are rolled over continuously from year to year and, therefore, should in reality be treated as long-term loans [Lall and Streeten (1977), p. 106].

"Net profit before taxes" is used in the numerator for several reasons. First, it would improve comparability among firms by avoiding possible distortions that could be caused by company tax deductions, particularly because some companies enjoy different types of tax holidays and exemptions. Second, taxes are primarily charged on profits earned and are generally uncontrollable by management. Third, there is some evidence that parents of the MNEs generally use before-tax rates of return in evaluating affiliates.<sup>5</sup> For these reasons, the analysis of this study focuses mainly on the before-tax rate of return.

Ideally, from an economic standpoint, the numerator of ROI should also include the interest paid by firms in order to find the rate of return on the net total capital employed including those based on borrowed funds [Wolf (1975), p. 18]. Unfortunately, the necessary data is not available for such an adjustment.

In order to verify the validity of the results of ROI by looking at profitability from alternative angles, we have also used four more measures based on net sales, net fixed assets, and net worth, as shown in Table 2. One of these additional measures (the return on net worth) has been calculated taking profit on both the before-tax and after-tax bases to highlight the impact of taxation on profitability.

<sup>5</sup>See Sydney M. Robbins and Robert B. Stobaugh (1973) *Money in the Multinational Enterprise*. New York: Basic Books, p. 143.

Table 2

*Profit Performance of the MNE Affiliates and the  
Local Firms, 1987-89*

Firm	Years in Operation	(Percentages)				
		NPBT <sup>a</sup> CE	NPBT <sup>b</sup> NS	NPBT <sup>c</sup> NFA	NPBT <sup>d</sup> NW	NPAT <sup>e</sup> NW
<b>MNE Affiliates (Weighted Average)</b>		<b>21.01</b>	<b>7.69</b>	<b>55.26</b>	<b>29.80</b>	<b>17.73</b>
Acme Aluminium	40	20.41	11.92	45.47	27.08	23.22
Bata Shoes	39	23.80	10.46	42.86	30.07	16.14
Ceylon Match	71	4.15	3.37	4.55	7.20	4.47
Ceylon Tobacco	71	21.68	6.22	42.17	39.25	23.63
Chemical Industries	25	32.16	6.75	178.47	49.79	27.13
Glaxo Ceylon	33	23.80	7.78	58.48	30.93	15.76
Lankem Ceylon	25	3.72	2.25	9.43	8.52	3.40
Nestlé Lanka	12	8.48	5.55	11.78	9.32	9.32
Reckitt & Colman	27	54.08	16.88	106.90	58.33	31.89
Singer Industries	25	17.79	5.71	52.52	37.48	22.32
<b>Local Firms (Weighted Average)</b>		<b>21.35</b>	<b>11.90</b>	<b>55.27</b>	<b>31.87</b>	<b>24.08</b>
Associated Cables	27	14.78	7.48	37.58	44.62	30.14
Associated Electricals	27	33.29	13.71	117.90	37.76	19.24
Chemanex	15	10.29	4.61	44.44	18.18	10.97
Dipped Products	13	28.11	30.49	79.21	41.13	41.13
Haycarb	16	31.32	29.45	109.46	41.78	37.32
Industrial Asphalts	25	9.39	3.75	10.63	11.72	10.37
Keels Food Products	7	26.20	9.87	34.92	26.55	24.23
Kelani Cables	20	28.99	9.26	56.12	46.04	29.67
Pure Beverages	34	3.69	2.01	4.09	9.23	6.30
Richard Peiris	66	27.41	8.41	58.30	41.71	31.46

Source: Compiled on the basis of data in *Sri Lanka Equity Guide*, February 1991.

Notes: <sup>a</sup>Return on investment = Net profit before tax/capital employed.

<sup>b</sup>Return on sales = Net profit before tax/net sales.

<sup>c</sup>Return on fixed assets = Net profit before tax/net fixed assets.

<sup>d</sup>Return (before tax) on net worth = Net profit before tax/net worth.

<sup>e</sup>Return (after tax) on net worth = Net profit after tax/net worth.

## 5. RESULTS

In terms of sales, the MNEs in the sample appear to be more than four times larger than the local firms. The main reason for this exceptionally large difference is that Ceylon Tobacco, which is one of the most well-established MNE affiliates in Sri Lanka, accounts for nearly 53 percent of the total sales in the sample. Even when this extreme case is excluded, the sales volume of the MNEs, on average, still remains significantly larger than that of the local firms. When the relative sizes of firms are measured in terms of the capital employed, the MNEs are seen, on average, to be about two-and-a-half times larger than the local firms. This size difference in the Sri Lankan sample is quite consistent with the one reported by Lall and Streeten (1977) in the Indian sample. Also, it is reported in the literature that there is much stronger confirmation of this pattern in more developed economies. For example, Parry (1974), on comparing 223 TNC subsidiaries to 757 non-TNC subsidiaries in the Australian manufacturing sector in 1971, found that, on average, the former were 3.7 times larger than the latter.

As Table 2 shows, the MNEs as a whole are not more profitable than the local firms in terms of ROI and all the other measures employed. As anticipated, the results of ROI are reinforced by those of the additional four measures. The average rate of return on investment for the MNEs was 21.01 percent as compared with 21.35 percent for the local firms. Their profit performance appears to be significantly weaker when viewed as a return on net sales, which is only 7.69 percent for the MNEs, whereas the local firms have achieved a rate of 11.9 percent. Similarly, their performance appears to be much lower and disadvantageous particularly for equity owners when measured as an after-tax rate of return on net worth. This ratio is only 17.73 percent for the MNEs whereas it is 24.08 percent for their local counterparts. However, the before-tax rate of return on net worth is 29.8 percent and 31.87 percent, respectively, indicating a very small difference. The reason for this seems to be that taxes paid by the MNEs have been considerably higher as a percentage of net profit (35 percent) than those paid by the local firms (19 percent). As pointed out earlier, such differences of taxation are obvious given the tax holidays and exemptions enjoyed by some firms.

The above situation on the profitability of the manufacturing MNEs as a whole is quite unexpected since the trading MNEs in Sri Lanka have been reported to be significantly more profitable than their local counterparts [Athukorala and Lakshman (1985), p. 344]. Furthermore, the situation demonstrated by our data is exactly the opposite of the experience reported by Lall and Streeten (1977) on the manufacturing MNEs in India, where the rate of return on investment (NPBT/CE) is 23.3 percent for the MNEs and 13.9 percent for the non-MNEs. However, our finding is compatible with the experience in Colombia, where the same ratio is 23.5

percent for the MNEs and 25.7 percent for the non-MNEs [Lall and Streeten (1977), p. 121].

Within each group, however, there are vast differences of profitability between individual firms. Among the MNE group, for example, Reckitt and Colman as well as Chemical Industries show rates of return on investment as high as 54.08 percent and 32.16 percent, respectively, while those of Lankem and Ceylon Match are as low as 3.72 percent and 4.15 percent, respectively. A similar pattern is seen in the local group as well. For example, Haycarb and Dipped Products show high profitability, being well above the group averages by all measures employed, while Pure Beverages is at the other extreme. This suggests that the "product-specific" factors are important in explaining relative profitability of individual firms. In order to shed further light on this aspect, we calculated ROI<sup>6</sup> for the sample firms according to industry (Table 3). It should be noted that the classification of industries in this table has been limited to only for groups because of the small number of firms in the sample.

Table 3

*The Return on Investment of Sample Firms, by Industry, 1987-89<sup>a</sup>*

Industry	Pairs of Firms	Rate of Return <sup>b</sup>		
		MNEs	Local Firms	All Firms
Food, Beverages and Tobacco	2	15.08	14.95	15.02
Chemical and Rubber Products	4	28.44	18.80	23.62
Fabricated Metal Products	2	19.10	21.89	20.50
Other	2	13.98	32.31	23.15
All Industries	10	21.01	21.35	21.18

Source: Table 2.

Notes: <sup>a</sup>Annual averages.

<sup>b</sup>Net profit before taxes/capital employed (percentage).

Table 3 shows that the profitability of the sample firms varies significantly between industries within each group of firms. For example, the rate of return within the MNE group varies from 13.98 percent in the other industries category to 28.44 percent in the chemical and rubber products, while it varies in the opposite direction (from 32.31 percent to 18.8 percent) within the local firms between these

<sup>6</sup>As all profitability measures in Table 2 indicate a similar pattern, and for considerations of space, subsequent analysis is based on ROI only.



two categories of industries. Furthermore, it is seen in Table 2 that the profitability of the sample firms varies greatly even within the same sector of industries. For instance, as for the MNEs in the food, beverages and tobacco sector, Ceylon Tobacco has an ROI of 21.68 percent whereas it is only 8.48 percent for Nestlé Lanka. Similarly, among the local firms in the same sector, Keels Food Products has an ROI of 26.2 percent as against only 3.69 percent of Pure Beverages. These variations in profitability might be attributable to a variety of factors, such as the nature of products subject to different production and market situations, and the differences in managerial and operational capabilities of the companies concerned. As a whole, however, in the food, beverages and tobacco sector, and in the chemical and rubber products sector, the MNEs seem to have achieved a higher level of profitability than that of the local firms. Nonetheless, in the fabricated metal products sector, and the other industries sector, which comprises a mix of industries such as footwear, electrical appliances and safety matches, the MNEs have been less profitable than the local firms.

Two other factors often considered to be correlated with profitability are the age and size of firms.<sup>7</sup> To examine the impact of age, the sample firms were divided into two age groups: up to 25 years<sup>8</sup> and over 25 years respectively. As shown in Table 4, the profitability of the sample firms seems to vary, to some extent, between the MNEs and the local firms according to their age. Among the older firms, the MNEs indicate a higher degree of profitability than the local firms. Contrary to this, however, the same group accounts for a lower level of profitability for the local firms. The reason for this situation is not clear from the available information. Moreover, the validity of this finding diminishes to some extent due to the smallness

Table 4

<i>The Return on Investment of Sample Firms, by Age, 1987-89<sup>a</sup></i>			
Age of Firms	Rate of Return <sup>b</sup>		
	MNEs	Local Firms	All Firms
Up to 25 Years <sup>c</sup>	15.54	22.38	19.64
Over 25 Years	24.65	19.79	22.71
All Groups	21.01	21.35	21.18

Source: Table 2.

Notes: <sup>a</sup>Annual averages.

<sup>b</sup>Net profit before taxes/capital employed (percentage).

<sup>c</sup>Consists of 4 MNE affiliates and 6 local firms.

<sup>7</sup>See Leftwich (1974) for some evidence on the impact of both these factors on profitability.

<sup>8</sup>Since only one firm among the MNEs has been in operation for a period less than 25 years (see Table 2), it is not possible to make the upper-age limit shorter than this.

of the sample and the excessively high upper-age limit of the younger group.

It is not possible to make a valid assessment of the impact of firm size on profitability because the smallness of the sample precludes any meaningful classification of firms into size classes. Nevertheless, it is noteworthy that a considerable number of smaller firms, such as Reckitt and Colman, Kelani Cables, and Keels Food Products, with relatively lower capital investments, have recorded markedly higher profit rates than most of the larger ones. Some of the other factors that have caused the profitability differences between the MNE affiliates and the local firms in our sample may include the differences in the policies of individual firms with regard to depreciation and valuation of assets and their overall efficiencies in managing resources. However, no conclusion on such factors can be reached without detailed case-studies on individual firms.

## 6. CONCLUSION

The empirical analysis of this study does not support the generally-held view that the MNEs are more profitable than their local counterparts. In other words, it reveals that indigenous manufacturing firms in Sri Lanka are not inferior to their multinational counterparts in terms of profitability. As such, it suggests that profitability cannot be explained by either origin (MNE/local firm) or sector, or age.

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