Profitability and Competitiveness of Manufacturing Companies in Sri Lanka and Major Asian Countries:

A Comparative Analysis

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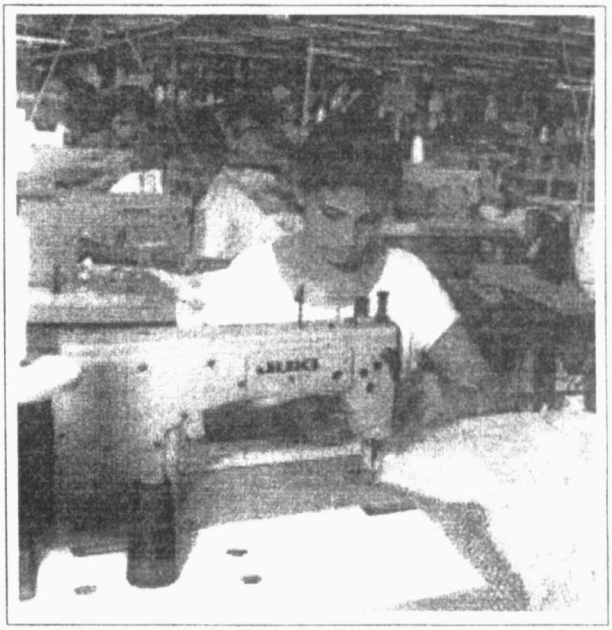
Profitability and competitiveness of manufacturing enterprises are crucially important to a country particularly when it adopts an export-oriented industrialisation policy within an open economic environment as a main strategy for its economic development. Several Asian countries through the adoption of such policies have achieved miraculous economic development and emerged as newly industrialised countries (NICs) in the recent past. Since Sri Lanka has also made significant progress in its industrialisation strategy through such a policy during the past two decades, it is important to examine how Sri Lankan manufacturing firms perform in terms of profitability and competitiveness when compared with their counterparts in other Asian countries. The results of such a study, while contributing to the literature, can be useful to both economic planners and manufacturing firms in Sri Lanka and the other countries concerned. As far as we are aware, no such a comparative study has been reported in the literature in the past. The purpose of our paper is to fill this gap. The paper is based on a study involving a sample of 570 manufacturing companies in Sri Lanka and ten other Asian countries.

Data and Methodology

The data for this study were obtained from three different sources. The summarised profit and loss statements and balance sheets given in the Handbook of Listed Companies (1997) published by the Colombo Stock Exchange (CSE) provided the data on Sri Lankan manufacturing companies. Similar data on manufacturing companies in the other Asian countries were obtained from the Asian Company Handbook (1998) and the Japan Company Handbook (Spring 1997) published by Toyo Keizai Inc. in Japan.

Since all the data used in our study are based on published company accounts, at the outset a few words of caution are warranted regarding their limitations. Published company accounts data are not completely reliable indicators of the 'profitability' 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). 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. Finally, there is the difficulty of comparing and interpreting balance 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. Therefore, it is difficult to assess and compare the profitability of firms in a realistic manner, particularly when those firms are from different countries. However, 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 manufacturing enterprises in different countries are largely based on available published data. Moreover, audited data given in company annual reports are considered more objective than empirically gathered data. As



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such, an analysis based on published data was considered relevant and useful for this study.

In accordance with the practice widely followed in the financial management literature, the principal measure of profitability used in this study is the return on investment (ROI), which is shown as net profit before taxes divided by total assets. 'Total assets' used in the denominator of this ratio represents the 'gross capital employed' which includes all types of funds used by a firm for earning its net income. Alternatively, some financial analysts prefer to use total assets less current liabilities as 'net capital employed' for calculating this ratio. Since a company's long-term capital does not include its current liabilities, 'net capital employed' is considered to represent investment more realistically in the practical sense. Accordingly, using 'net capital employed' would have been more appropriate for calculating this ratio. But, taking this alternative approach was not possible because the summarised balance sheets presented in the Asian Company Handbook did not show current liabilities as a separate item. Therefore, the value of total assets representing 'gross capital employed' in each company was used for computing ROI in this study.

'Net profit before taxes' was used in the numerator of this ratio for two reasons. First, it would improve comparability among firms by avoiding possible distortions that could be caused by differences in tax rates of different countries and also different types of tax holidays and exemptions applicable to some companies in the same country. Second, taxes are primarily charged on profits earned and are generally uncontrollable by management. Thus, the analysis of this study focused on the before-tax rate of return. Ideally, from an economic standpoint, the numerator of ROI should also include the interest paid by a firm in order to find the rate of return on the total capital employed including those based on borrowed funds (Wolf, 1975). Unfortunately, the information on interest charges was not available for such an adjustment.

In order to verify the validity of the results of ROI and assess the profitability from an alternative angle, we also used another widely accepted measure: Return on Equity (ROE). It is common knowledge that one of the primary reasons for operating a company is to generate income for the benefit of its ordinary shareholders who are the real risk-bearing owners of the business. From their point of view, the profitability of a company depends, to a great extent, on the profits available to them after paying preference share dividends and interests to other types of investors of the company. Therefore, ROE is widely used in the financial analysis literature to measure the ultimate profitability of the invest-

Table 1: Profile of the Sample Companies

Types of Industry	Sri Lanka	China	Hong Kong	India	Indonesia	Japan	Malaysia	Pakistan	Singapore	South Korea	Thailand	All Countries
	Percentage of Firms											
Food and Beverages	20	7	6	4	22	13	14	13	23	3	19	13
Chemicals and pharmaceuticals	20	7	6	31	24	13	11	30	7	19	12	16
Footwear and textiles	7	16	16	10	10	6	6	22	3	7	7	10
Rubber and Plastic	10	5	10	1	10	11	11	0	3	5	14	7
Electronic Equipment & household items	5	21	30	6	4	13	8	4	23	25	12	14
Metal industry	5	0	3	16	4	5	14	0	3	8	7	6
Cement, concrete and glass	10	7	7	9	10	11	11	13	10	8	10	10
Wood and paper products	5	5	0	4	6	7	11	4	0	2	5	5
Machinery and equipment	8	17	10	7	6	11	8	0	10	5	7	8
Other (including motor vehicles)	10	16	12	10	2	9	6	13	17	17	7	11
	100	100	100	100	100	100	100	100	100	100	100	100
Number of firms	60	58	69	68	49	76	36	23	30	59	42	570

Country	Total Assets (US$ millions)			Shareholders' Equity (US$ millions)			Before-tax Profits (US$ millions)		
	Min.	Max.	Ave.	Min.	Max.	Ave.	Min.	Max.	Ave.
Sri Lanka	0.4	57	12	0.3	29	6	0.002	13.4	1.4
China	16	560	161	10	288	72	0.12	36.4	13.0
Hong Kong	33	3134	529	21	1546	262	0.3	121.5	24.7
India	25	4993	390	18	1850	215	2.1	290.2	47.8
Indonesia	52	3730	669	36	1325	283	3.4	375.9	53.6
Japan	241	104270	13909	43	48878	4904	2.6	3131.3	351.8
Malaysia	107	12913	1388	78	6529	561	1.6	528.2	84.2
Pakistan	25	802	190	12	258	60	1.2	71.0	14.7
Singapore	60	4499	649	45	1825	310	6.4	318.4	46.8
South Korea	116	19688	2856	56	8272	837	1.2	952.2	55.7
Thailand	24	3971	437	13	1449	157	0.1	161.7	21.7

Sources: Handbook of Listed Companies (1997), Colombo Stock Exchange; Asian Company Handbook (1998) and Japan Company Handbook (Spring, 1997), Toyo Keizai Inc., Japan.

Notes: Data for Sri Lanka: 1994/95, Other countries: 1995/96.

ment to ordinary shareholders. The term 'Equity' as used in this ratio includes both the total ordinary share capital and the reserves of each company. Accordingly, ROE is shown in this study as net profit after preference share dividends and taxes divided by ordinary shareholders' equity. It should also be noted that although some analysts often prefer to use the average of the opening and closing balances of total assets or ordinary shareholders' equity to calculate ROI and ROE respectively, we have used the closing balances of accounts for this purpose for pragmatic reasons. For the purpose of comparison, however, it is not particularly important which of these two methods is used as long as it is applied consistently (Blaine, 1993). Similarly, although Return on Sales (ROS) is extensively used in the literature as another important measure of profitability it could not be used in this analysis due to the non-disclosure of sales revenue in the profit and loss statements presented in the Handbook of Listed Companies in Sri Lanka. Therefore, profitability measures used here were confined to ROI and ROE. Similarly, although using annual averages of data over a period of several years would have been more appropriate for calculating these ratios it was not possible as the data given in the Asian Company Handbook and the Japan Company Handbook covered only one financial year. As such, the calculation of both ROI and ROE for all countries other than Sri Lanka was based on the data for the 1995/96 financial year. In the case of Sri Lanka, the data for 1994/95 were utilised for this purpose because 1996 was an abnormal year for the entire economy. It has been reported that the severe drought persisted in Sri Lanka during1996 affected not only agriculture but also industry, as the water shortage impeded hydro-electric power generation leading to recurrent power outages (PriceWaterhouseCoopers, 1998).

Sample of Companies

All manufacturing firms used as the sample of companies in this study are public limited companies listed on the stock exchanges of Sri Lanka and ten other Asian economies - China, Hong Kong, India, Indonesia, Japan, Malaysia, Pakistan, Singapore, South Korea, and Thailand. The sample included a total of 570 companies, ranging from 23 to 76 companies for each country. In the case of Sri Lanka, there was a total of 60 manufacturing companies with profits (before and after tax) reported for 1994/95 in the Handbook of Listed Companies (1997). In addition to those classified under the category of 'manufacturing', a few firms listed under other categories such as 'food and beverages' and 'chemicals and pharmaccuticals' were also included in the Sri Lankan group of companies because 'manufacturing' had been stated under the nature of business. Similarly, all such companies listed in the Asian Company Handbook were included in the respective country groups. However, since the total number of companies reported in the above publication for some countries was not large enough and the majority of companies were non-manufacturing firms the sample size for Pakistan, Singapore, Malaysia, Thailand and Indonesia became considerably small. Nevertheless, as stated in the source publication, these firms can be regarded as the most representative listed companies operating in the manufacturing sector of each country. For Japan, however, since the Japan Company Handbook (1997) carried data and other information for over 2000 listed companies a sample of 76 manufacturing firms having the largest amounts of total assets in each industry category was selected as the country group.

Table 2: **Some indicators of demographic, economic and manufacturing performance in the sample countries**

Country	Population (Millions) (1998)	GNP per Capita (US$) (1998)	Average Annual Growth of GDP(%) (1990-97)	Market Capitalisation as % of (GDP(1997)	Value added in Manufacturing as % of GDP (1997)	Average Annual % growth of value added in manufacturing (1990-97)
Sri Lanka	19	810	5.3	13.9	17	8.8
China	1,239	750	11.6	22.9	37	9.5
Hong Kong	7	23,670	5.3	241.1	7	n.a.
India	980	430	6.0	33.7	19	8.0
Indonesia	204	680	7.5	13.5	26	10.8
Japan	126	32,380	1.5	52.9	24	0.5
Malaysia	22	3,600	8.6	95.1	34	13.1
Pakistan	132	480	4.2	17.8	17	5.1
Singapore	3	30,060	8.5	110.4	24	7.5
South Korea	46	7,970	7.2	n.a.	26	7.9
Thailand	61	2,200	7.4	15.3	29	9.3

Sources: World Development Report 1999/2000 and World Development Indicators 1999, World Bank.

A profile of the sample companies for all countries is displayed in Table 1. All these companies fall into ten industry categories. In the case of Sri Lanka, the number of companies in each industry category ranges from 5 to 21 per cent. This type of variations seems to be common to all countries in the sample. Yet, it is evident from the country averages that some industry groups such as chemicals and pharmaceuticals, electronic equipment and household items, and food and beverages are seen to be more attractive to manufacturers in most countries.

Table 1 also provides information on total assets, ordinary shareholders' equity and before-tax profits, giving an indication of the average size of companies in each country. What is

primarily apparent from this table is that the Sri Lankan companies, on average, are very much smaller in size than their counterparts in the other Asian countries in our sample. The average total assets of Sri Lankan companies were only $12 million by the end of 1994/95. Similarly, the maximum amount of assets held by any Sri Lanka manufacturing company was only $57 million. The minimum amount of assets in these companies was also as low as $0.4 million, placing Sri Lanka at the lowest point in the investment scale. Conversely, the highest levels of investment in assets were reported by manufacturing companies in Japan, South Korea and Malaysia with average total assets ranging from $1,388 million to $13,909 million. A similar situation is demonstrated by the ordinary shareholders' equity data shown in Table 1. Sri Lankan companies were at the lowest levels in respect of these data as well. While the average ordinary shareholders' equity of Sri Lankan companies amounted to only $6 million it was $60 million and $215 million respectively for Pakistan and India, which are the other two South Asian countries included in our sample. Same as in total investments, the highest levels of equity investment were also from the Japanese, South Korean and Malaysian companies. Being consistent with the relative size of investments, the average before-tax profits of Sri Lankan firms were also very much lower in absolute figures than those of other countries in the sample. These amounts ranged from $1.4 million to $351.8 million across countries. The maximum before-tax profits of $13.4 million reported by a Sri Lankan company also the lowest among all country groups. However, these absolute profit figures do not indicate the level of profitability of firms, because profitability cannot be determined on the amount of profits alone. To do so, profits must be measured in relation to investments. Accordingly, the next section of this paper attempts to assess the profitability of manufacturing firms in our sample in terms of their ROI and ROE as outlined in the preceding section.

Profitability: Sri Lanka versus Other Asian Countries

Before we turn to the analysis of manufacturing profitability in the sample countries it seems useful to make a brief overview of the overall economic and manufacturing performance of these countries in order to set the background for the subsequent comparative analysis. Since the countries included in the sample are from three different groups of economies – industrialised, newly industrialised and developing – it is important to take their differences into consideration when comparing the manufacturing profitability between these countries. Furthermore, as Sri Lanka is attempting to reach NIC status in the near future it is useful to see the place it currently occupies in the industrial development arena of the Asian region. Table 2 provides some useful information for this overview.

In terms of population, Sri Lanka is the third smallest nation among all Asian countries included in our sample. According to the GNP per capita, which is widely used as a basic indicator of economic performance of a country, Sri Lanka has performed better than a number of countries in the region. In 1998, Sri Lanka's GNP per capita of $810 has been higher than that of China, India, Indonesia and Pakistan. However, an economy's growth is primarily measured by the increase in value added produced by the individuals and enterprises operating in that economy (World Bank, 1999). This increase is shown in Table 2 as the average annual growth of GDP in each country. Over the period from 1990 to 1997, the average annual growth of GDP has ranged from 1.5 to 11.6 per cent across all countries. Within this scale, the 5.3 per cent growth of Sri Lanka can be regarded as a significant achievement when

Table 3: Key Profitability Measurers of Sri Lankan Companies: 1994/95

Company Name	ROI [%]	ROE [%]
Abans Electricals	16.0	23.9
ACL Cables	15.2	27.0
ACL Plastics	8.8	10.8
ACME Printing and Packaging	6.7	9.7
Asian Cotton Mills	2.9	6.4
Associated Electrical Corporation	18.1	16.6
Associated Motorways	7.7	7.9
Bata Shoe Company of Ceylon	10.6	15.5
Blue Diamonds Jewellery Worldwide	14.6	19.5
Ceylon Brewery	4.7	17.6
Ceylon Tobacco	25.6	32.2
Central Industries	15.2	33.6
Ceylon Cold stores	5.6	6.5
Ceylon Grain Elevators	11.7	15.8
Ceylon Nutritional Foods	10.3	17.5
Ceylon Oxygen	17.1	22.9
Chemanex	8.2	8.0
Chemical Industries Colombo	10.6	17.6
Dankotuwa Porcelain	16.4	27.9
Dipped Products	12.5	23.6
Diesel & Motor Engineering Company	22.6	26.3
Distilleries Company of Sri Lanka	25.5	33.9
Elastomeric Engineering Company	9.2	7.9
Glaxo Wellcome Ceylon	8.7	2.7
Harischandra Mills	18.2	20.5
Haycarb	7.5	9.5
Industrial Asphalts (Ceylon)	9.7	7.7
Keel food Products	3.1	3.4
Kelani Cables	5.6	4.4
Lanka Aluminum Industries	6.9	13.0
Lanka Ashok Leyland	9.4	30.6
Lanka Ceramic	6.5	3.9
Lanka Lubricants	31.7	36.2
Lanka Tiles	12.5	16.3
Lanka Walltile	9.6	8.7
Lankem Ceylon	9.5	24.7
Magpek Exports	2.9	4.3
Metal Packaging	4.9	11.4
Metal Recyclers Colombo	12.5	19.1
Metalix Engineering Company	1.6	0.7
Nestle Lanka	15.9	24.6
Printcare (Ceylon)	10.6	18.9
Pugoda Textile Lanka	2.2	6.1
Reckitt & Colman of Ceylon	30.7	28.2
Regnis Lanka	8.0	23.9
Richard Pieris & Company	10.5	11.3
Royal Ceramics Lanka	12.2	9.4
Samson International	6.3	8.1
Sathosa Motors	20.1	19.7
Sledles T.V. Industry	24.0	18.9
Singalanka standard chemicals	23.3	32.3
Singer Industries (Ceylon)	17.9	26.6
Soy Foods (F&W)	0.1	0.2
Statcon Rubber Company	12.5	9.6
Swadeshi Industrial Works	8.7	17.5
Tea Smallholder Factories	6.0	7.3
Tokyo Cement Co. Lanka	11.2	21.4
Union Carbide Lanka	8.2	13.6
Veyangoda Textile Mills	3.1	5.5
W.M. Mendis & Company	2.9	3.3
All companies	11.5	15.9

Source: Handbook of Listed Companies, CSE, 1997

the country's ongoing ethnic war is taken into consideration. However, the rates of growth of an economy must be interpreted carefully as high rates cannot be normally expected from economies which have already reached maturity in industrial and economic development. This is evident from the 1.5 per cent growth of Japan. Obviously, developing countries like Sri Lanka, India and Pakistan need to grow at much higher rates to be able to reach the development levels achieved by NICs in the sample. This requires them to achieve a high level of capital investments in manufacturing and other economic activities. However, the market capitalisation ratio given in Table 2 indicates a low level of capital formation in these countries. Indonesia and Sri Lanka have been at the bottom end of this process during 1997. Nevertheless, Sri Lanka has made a significant progress in the growth of manufacturing output as a percentage of GDP. Its manufacturing contribution has increased to 17 per cent of GDP, with an average annual growth of 8.8 per cent during 1990-97. It has been revealed that the outward-oriented industrialisation policy adopted after 1977 has been the main reason for this striking progress in the manufacturing sector of Sri Lanka.

All the Sri Lankan companies used in our study with their respective ROI and ROE percentages are listed in Table 3. As shown in this table, there were wide variations in profitability between individual firms in the Sri Lankan sample. For example, Lanka Lubricants achieved an annual average ROI and ROE as high as 31.7 and 36.2 per cent respectively during 1994-1995, while they were only 0.1 and 0.2 per cent respectively for Soy Foods (F&W). These

variations could be due to several internal or external factors specific to each company. Intensive investigation on individual basis is needed for identifying the specific causes of these variations. However, both the annual average ROI and ROE for the entire Sri Lankan sample were 11.5 and 15.9 per cent respectively, indicating a relatively high level of profitability.

Table 4 demonstrates the dispersion of profitability rates among Sri Lankan manufacturing companies during 1994/95. Fifty per cent of firms in the sample have been able to achieve an ROI greater than 10 per cent, with 28.3 per cent of firms reaching the range of 15 to 31.7 per cent. For 16.7 per cent of firms, this ratio was below 5 per cent. A similar situation was revealed by the ROE as well. For 53.3 per cent of firms in the sample, the ROE was above 15 per cent, with 31.6 per cent of firms earning a rate within the range of 20 to 36.2 per cent. Only 11.7 per cent of firms earned a return on equity lower than 5 per cent.

As stated previously, although the profitability ratios for other countries were based on the 1995/96 financial year they were calculated using 1994/95 data for Sri Lanka because 1996 was an abnormal year for its economy. Therefore, in order to verify the normality of the 1994/95 data for Sri Lanka we also calculated these ratios for three more years, including the annual averages for the four-years from 1991/92 to 1994/95. These annual ROI and ROE figures for the Sri Lankan manufacturing companies are presented in Table 5.

According to Table 5, the profitability rates have ranged from 11.5 to 13.6 per cent for ROI and from 15.9 to 19.8 per cent for ROE over the four years. The dispersion between years as well as the annual averages for the period are not abnormally large. This shows that the 1994/95 data used for calculating both ROI and ROE for Sri Lanka are well representative of the data for a normal year.

Table 4: Dispersion of Profitability among Sri Lankan Companies

Range of ROI (Percentages)	Companies Numbe	r%	Range of ROE (Percentages)	Companies Number	%
Below 5	10	16.7	Below 5	7	11.7
5-10	20	33.3	5-10	16	26.7
10-15	13	21.7	10-15	5	8.3
15-20	9	15.0	15-20	13	21.7
20-25	4	6.7	20-25	8	13.3
Above 25	4	6.6	25-30	5	8.3
	60	100.0	Above 30	6	10.0
				60	100.0

Source: Data in Table 3.

Table 5: Annual Profitability Indicators of Sri Lankan Companies : (1991/92 - 1994/95)

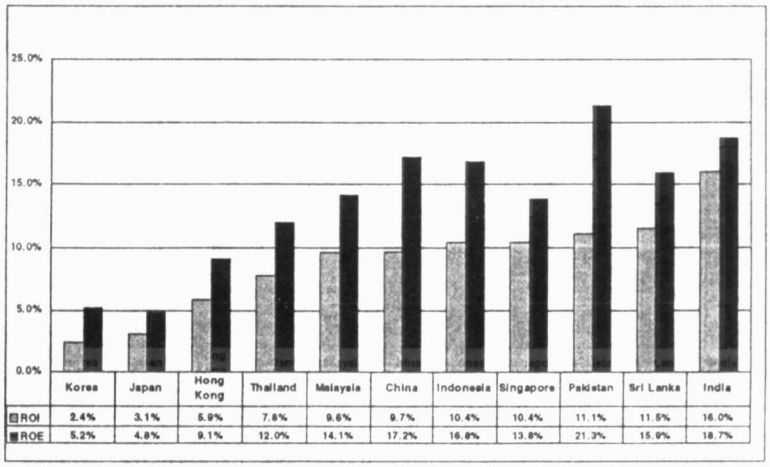
Financial Year	ROI (%)	ROE (%)
1991/92	13.6	19.8
1992/93	11.8	16.2
1993/94	12.2	17.8
1994/95	11.5	15.9
All years	12.3	17.4

Source: The Handbook of Listed Companies, CSE, 1997.

The comparative profitability indicators for all countries in the sample are demonstrated in Figure 1. What is primarily apparent from the ROI figures for all countries is that the manufacturing profitability of Sri Lanka was higher than that of all the other Asian countries except India. This ratio ranged from 2.4 to 16.0 per cent across countries in the sample, producing an 8.9 per cent average ROI for all countries. Thus, except South Korea, Japan, Hong Kong and Thailand, each of the other countries has earned an ROI greater than this country average. Among them, it is interesting to see that the three South Asian countries – India, Sri Lanka and Pakistan – with ROIs greater than 11 per cent have achieved the highest levels of profitability. However, the low profitability level of countries such as South Korea, Japan and Hong Kong cannot be regarded as an indication of low level of industrial development. These countries have already reached very high levels of industrial development. Moreover, it is evident from Table 1 that investments of manufacturing companies in these countries are very much higher than those of the South Asian countries. The market capitalisation ratios of the sample countries given in Table 2 also corroborates this view. Thus, the highest levels of profitability achieved by South Asian countries as well as their relatively low levels of investments indicate that they have much greater opportunities for further investments in manufacturing although such opportunities are yet to be exploited. This seems particularly true for Sri Lankan manufacturing companies with an average total investment as low as $12 million compared to $190 million of Pakistan and $390 million of India (Table 1).

The relatively low rates of profitability in some countries such as Japan, South Korea and Hong Kong seem to be due largely to country-specific reasons. For example, according to a study of 1,400 U.S. firms and 480 Japanese firms, the average annual return on assets was 7.4 per cent for the United States and 3.8 per cent for Japan during the late 1980s (Blaine, 1993). This study has shown several country-specific reasons for the low level of profitability in Japanese firms. The most important reason is that Japanese firms strive for revenue and market share while U.S. firms seek profits and rising stock prices. It has also been reported that the use of market share –not profitability- as a gauge of corporate prestige in Japan has encouraged firms to invest as much as possible in the firm's future growth (Doyle at al, 1992). This strategy seems to have enabled Japan to occupy a dominant role in the international market place and achieve miraculous industrial and economic development during the recent past. As such, the appropriateness of a certain level of profitability for a country can be determined only by taking into consideration the basic differences in its business strategies and corporate objectives.

Figure 1: Profitability of manufacturing companies in Asian countries



	Korea	Japan	Hong Kong	Thailand	Malaysia	China	Indonesia	Singapore	Pakistan	Sri Lanka	India
ROI	2.4%	3.1%	5.9%	7.8%	9.6%	9.7%	10.4%	10.4%	11.1%	11.5%	16.0%
ROE	5.2%	4.8%	9.1%	12.0%	14.1%	17.2%	16.8%	13.8%	21.3%	15.9%	18.7%

Sources and Notes: As for Table 1

The rates of ROE have ranged from 4.8 to 21.3 per cent across all countries with a country average of 13.5 per cent. Except Japan, South Korea, Hong Kong and Thailand, all the other countries have achieved above-average returns on ordinary shareholders' equity. Among them, Pakistan, India, China , Indonesia and Sri Lanka have reached the highest levels of ROE. In particular, Pakistani companies have recorded an exceptionally higher rate of ROE. However, the number of companies available for calculating this ratio for Pakistan was limited to only 23. The relatively high ROE levels achieved by the above countries are consistent with the situation demonstrated in Table 1 in respect of average investments in ordinary shareholders' equity. It is apparent from this table that the size of average equity investments in manufacturing companies of Sri Lanka, Pakistan and China was much lower than that of other countries. The low levels of equity investments in these countries seem to be attributable to several factors such as the relatively poor equity markets, the high interest rates available to non-equity investors, the greater fear for high-risk investments and the manufacturers' inadequate exploitation of further investment opportunities. However, the relatively very high rates of ROE in these countries indicate that they have much greater opportunities for equity investments in their manufacturing sectors. Obviously, increased investments are crucial for achieving industrial and economic growth in developing countries.

Profitability and Competitiveness

As defined by many writers, a nation's competitiveness refers to its ability to produce and distribute goods and services that can compete in international markets, and which simultaneously increase the real incomes and living standards of its citizens (Porter, 1990; Scott and Lodge, 1985; Blaine, 1993). Accordingly, in an export-oriented open economy like Sri Lanka, individual firms and industries can play a critical role in building and sustaining national competitiveness. Moreover, as pointed out by Porter (1990), "A nation's competitiveness depends on

the capacity of its industry to innovate and upgrade." Since the profitability gives a firm the strength and capacity to innovate and upgrade as well as to face negative market forces successfully and remain competitive there is a tacit assumption that the competitiveness of a country is synonymous with the profitability of its firms and industries.

However, it is also important to note that the high level of profitability in manufacturing enterprises of a country does not necessarily lead to a high level of competitiveness. Instead, the opposite may be true. For example, it has been widely documented that the ability of Japanese companies to sustain relatively low rates of profitability is a major competitive advantage for them, since they can justify investments that their Western competitors cannot (Abegglen and Stalk, 1985). On the other hand, it is quite possible for individual firms to earn high rates of return while their employees, the communities in which they operate, and their home country experience declining living standards and diminished competitiveness. As such, the link between profitability and competitiveness depends on the way in which profits influence firm strategy and managerial behaviour. If the desire for higher returns encourages firms to reduce investment, cut employment, and engage in financial gymnastics, then the end result is likely to be declining national competitiveness. Conversely, if profits are seen as a means to an end rather than an end in themselves, then firms may be encouraged to make the investments in new plant and equipment, product and process technology, R&D, and worker training that ultimately create a dynamic, competitive economy (Blaine, 1993).

The profitability of a firm depends, to a large extent, on its ability to keep costs at low levels while maintaining the high quality of products and services. This ability can provide a competitive advantage for the firm if it operates in a non-monopolistic environment. Since the manufacturing companies in Sri Lanka and other Asian countries included in this study operate in a highly competitive global market environment the relatively low cost of labour can be a substantial comparative advantage for some of those countries. Therefore, it is useful to compare the rates of manufacturing wages in these countries. The information needed for this comparison is provided in Table 6.

Table 6: Manufacturing Wages in Asian Countries
(Monthly averages during 1994)

Country	US$
India*	33
China	41
Sri Lanka	53
Pakistan*	53
Indonesia* *	72
Thailand	168
Malaysia	354
Hong Kong	747
South Korea	1273
Singapore	1307
Japan	2707

* For 1993; ** for 1989.
Source: ILO Year Book of Labour Statistics, 1997.

As shown in Table 6, monthly rates of manufacturing wages have ranged from $33 to $2,707, indicating a huge variation of wages between some countries in the region. Manufacturing wages of India, China, Sri Lanka, Pakistan and Indonesia are many times lower than those of the NICs and Japan. For example, the monthly rate of wages in Sri Lanka has been nearly 25 times lower than that of Singapore during 1994. This type of variations in manufacturing wages suggests that low wages act as a comparative advantage for Sri Lanka and other developing countries in our sample when their manufacturing firms are engaged in export-oriented labour-intensive activities. Furthermore, in a study by Athukorala and Rajapathirana (2000) it has been shown that despite modest productivity performance Sri Lanka has enjoyed a significant competitive edge in manufacturing owing to its real wage flexibility. As well illustrated in their study, in most years in the recent past, real manufacturing wages in Sri Lanka either remained stagnant or even recorded a mild decline. Their study also shows that the behaviour of both real wages and labour productivity have contributed to enhanced international competitiveness measured in terms of real wage-adjusted labour productivity growth.

Before concluding this discussion on the profitability and competitiveness in Sri Lankan manufacturing companies, it seems relevant to consider some of the findings of a recent study on Sri Lanka's competitiveness (Price Waterhouse Coopers, 1998). The team of researchers who conducted this study, focusing on various aspects of the economy including macro and micro-level manufacturing performance, has attempted to assess the competitiveness of Sri Lanka in an international perspective. Interestingly, the study has concluded that although the country's overall economic performance was above the Asian average with Sri Lanka scoring 80 against a score of 73 for Asia (excluding NICs and Japan) its international competitiveness index was much lower than the average for the same Asian group of countries with a score of only 34 for Sri Lanka against 45 for Asia. Since it is difficult for an outward-oriented open economy like Sri Lanka's to maintain a reasonably high rate of growth performance without demonstrating business competency in competition (Nanayakkara, 1999), the accuracy of this highly subjective competitiveness ranking seems to be questionable. However, in the analysis of industry and firm-level competitiveness the above study has identified several country-specific features that provide some measure of competitive advantage to several industries in Sri Lanka. Among them are the low cost of labour, highly trainable workforce, high literacy rate, ample land, free trade zone facilities and attractive export promotion incentives. Furthermore, this study has rightly pointed out that competitiveness requires firms that know how to increase productivity and capture greater value in the market place not just by being more efficient at work they do and improving quality but also choosing where to compete, and adding service dimensions and innovating with new product characteristics.

Conclusions

The data analysed in this paper reveal that during 1994/95 Sri Lankan manufacturing companies were considerably more profitable than their counterparts in most of the other countries in the Asian region. While achieving the second highest level of profitability in terms of ROI, Sri Lankan firms occupied the fifth highest position as a rate of ROE. Also, these profitability levels were well above the country averages. However, when both the levels of total investments (assets) and equity investments were taken into consideration Sri Lankan companies were found to be at the lowest end across all countries in the sample.

What is primarily observed from the high profitability levels is that the manufacturing sector in Sri Lanka has the capacity for penetrating into a much higher level of investments. Particularly when the relatively low rates of ROI in the high performing Asian economies are taken into consideration it is seen that Sri Lanaka's capacity for further investments is enormously high. However, it is evident from the data presented in this paper that Sri Lanka's relative position is extremely poor particularly in terms of equity investments in manufacturing. This weakness appears to be attributable to several factors such as the relatively poor equity market, the high interest rates available to non-equity investors, the excessive fear for high-risk investments, and the manufacturers' inadequate exploitation of appropriate investment opportunities. Nevertheless, a high level of equity investments is crucial for the Sri Lankan manufacturing sector to be successful in its endeavour to achieve the NIC status in the near future.

It is also seen that Sri Lankan manufacturing firms enjoy a considerable degree of competitive advantage in respect of several country-specific characteristics. For example, low manufacturing wages act as a comparative advantage for these firms when they are engaged in export-oriented labour-intensive activities. Further, despite modest productivity performance Sri Lanka has enjoyed a significant competitive edge in manufacturing owing to its real wage flexibility. However, the country's long-term competitiveness depends largely on the sustainable growth in productivity.

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