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## Profitability analysis of listed manufacturing companies in Sri Lanka and Malaysia: An empirical investigation

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### Abstract

This paper uses empirical data on 161 listed manufacturing companies in Sri Lanka and Malaysia over the period of 2006 to 2008, and compares the performance of these companies against two commonly used financial performance indicators: Return on Assets (ROA) and Return on Equity (ROE). The results indicate that during this period Sri Lankan manufacturing companies were considerably more profitable than their counterparts in Malaysia in terms of ROA but less profitable in terms of ROE. It also identifies a relatively weaker position of equity investments in the manufacturing sector of Sri Lankan companies and attributes this to a number of factors, including: a relatively poor equity market, high interest rates, and excessive fear of high-risk investment. A similar trend was observed when the profitability and equity of companies were analysed by industry.

### Keywords

Profitability, analysis, listed, manufacturing, companies, Sri, Lanka, Malaysia, empirical, investigation

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# PROFITABILITY ANALYSIS OF LISTED MANUFACTURING COMPANIES IN SRI LANKA AND MALAYSIA: AN EMPIRICAL INVESTIGATION

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## ABSTRACT

*This paper uses empirical data on 161 listed manufacturing companies in Sri Lanka and Malaysia over the period of 2006 to 2008, and compares the performance of these companies against two commonly used financial performance indicators: Return on Assets (ROA) and Return on Equity (ROE). The results indicate that during this period Sri Lankan manufacturing companies were considerably more profitable than their counterparts in Malaysia in terms of ROA but less profitable in terms of ROE. It also identifies a relatively weaker position of equity investments in the manufacturing sector of Sri Lankan companies and attributes this to a number of factors, including: a relatively poor equity market, high interest rates, and excessive fear of high-risk investment. A similar trend was observed when the profitability and equity of companies were analysed by industry.*

*Key Words: Profitability, Performance, Return on Assets, Return on Equity, Developing Countries.*

## INTRODUCTION

Sri Lanka and Malaysia had many things in common five decades ago. Both countries were British colonies and gained independence from Britain nine years apart – Sri Lanka in 1948 and Malaysia in 1957. Both countries started the post-independence period with a rich mix of resources, strong British legal and political institutions, and similar educational systems. In 1960, Malaysia had a Gross National Income (GNI) per capita of about \$280 and Sri Lanka had a GNI per capita of US\$152 in 1960. “As of 1970, Sri Lanka and Malaysia had similar living standards” (Sally, 2009, p1.). After five decades of independence, Malaysia is now far ahead of Sri Lanka in many fronts, including economic and industrial development. Today, “Malaysia is widely held as a great development success story in the developing world. Notwithstanding the massive economic contraction experienced during the 1997-98 financial crisis, Malaysia’s economic performance has been impressive throughout the post-independence period. Sustained high growth (averaging to nearly 6 per cent per annum for the past four decades) has been accompanied by rising living standards with a relatively equal distribution of income” (Athukorala, 2005, p.19).

On the other hand, Sri Lanka – which was a model British colony, well prepared for independence in 1948 – failed to live up to its potential for economic development despite possessing all of the right ingredients to be as successful as Malaysia. At the time Sri Lanka gained independence, it had a stable parliamentary democracy and was Asia’s second-wealthiest nation. Its per capita income was a fifth higher than the South-Asian average. Sri Lanka had golden economic prospects with a prospering plantation economy and well-developed infrastructure, an efficient public administration and judiciary system, and significant achievements in health and education.. However, apart from major liberalisation of the economy in the late 1970s, Sri Lanka failed to initiate any significant economic and industrial reforms. As in the case of Malaysia, the key to success would have been industrialisation, but again – apart from the emergence of the labour-intensive garments industry in the early 1980s – Sri Lanka failed to achieve any significant industrial development. Consequently, after five decades, Sri Lanka is a sad tale of what might have been. With peace, East-Asian style economic and industrial policies, openness to the world economy, and better government at home, Sri Lanka would be where Malaysia is

today (Sally, 2009): a high-income economy with \$6,540 GNI per capita in 2008, as against its current \$1,540 GNI per capita.

There are numerous reasons why Malaysia's development experience has been so different from that of Sri Lanka. Many of Malaysia's attributes have been seen as valuable contributors to this success story. Some of the noteworthy contributing factors were: Malaysia's open trade policy regime, a multi-sector market economy driven by manufactured exports (particularly electronics and semiconductors), the presence of an ethnically heterogeneous population, the creation of a large public sector in the 1970s, and the presence of significant natural resources (Athukorala, 2005; Sally, 2000; Snodgrass, 1995). Different sectors have contributed individually towards Malaysia's economic development. In financial year 2008, the contribution of different sectors towards Gross Domestic Product (GDP) was: the agricultural sector 9.7%; the industrial sector 44.6%; and the service sector 45.7% (World Development Report, 2009) Given the fact that 45% of Malaysia's GDP has been contributed by the industrial sector, there is no doubt that the manufacturing sector in Malaysia has a large influence on the country's economic success.

It is common knowledge that the performance of manufacturing companies is crucially important – as a main strategy for economic development – to any country adopting an export-oriented industrialisation policy within an open economic environment. Several Asian countries, including Malaysia, have been very successful in adopting such a policy. Since Sri Lanka has also made significant progress in its industrialisation strategy through such a policy during the past three decades, it is important to examine how Sri Lankan manufacturing companies are performing when compared with their counterparts in a country that has achieved greater development in the manufacturing sector. Therefore, the purpose of this paper is to assess the performance of Sri Lankan manufacturing companies, measured in terms of company profitability, and compare them with the performance of companies in Malaysia – a country with a higher level of economic and industrial achievements in the past five decades. It is hoped that this study, while contributing to the literature, will also be useful to both economic planners and manufacturing companies in Sri Lanka. The paper is based on a study involving a sample of 161 manufacturing companies in Sri Lanka and Malaysia.

## **DATA AND METHODOLOGY**

The data for this study were obtained from Bureau Van Dijk's OSIRIS Database which provides financial and other related data for over 34,000 listed companies in 130 countries. Since the main source of data used in this study for measuring the profitability of listed companies in Sri Lanka and Malaysia is published company accounts, the results of this study should be viewed with caution. Data disclosed in public accounts are generally inherited with some limitations, especially if used to compare the performance of companies in different countries. One of the major limitations is that profits determined in company accounts are based on company accounting practices which may vary from company to company. For example, items such as the amount of depreciation and the value of inventory 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. Profits calculated in the company accounts are also influenced by business and tax regulations which also vary between different countries. In the case of multinational companies, profit calculation may be liable to various manipulations through practices such as transfer pricing (Robbins and Stobaugh, 1974). Although compliance with International Financial Reporting Standards (IFRS) – which are used by more than 100 countries including Sri Lanka and Malaysia – facilitate comparability, there are still some inconsistencies in accounting practices which makes it difficult to assess and compare the profitability of firms in a realistic manner, particularly when those firms are from different countries.

However, despite these limitations, published company accounts serve as the prime source of data for obtaining information on the performance and financial status of companies. Moreover, numerous economic policies relating to the business sector and also the existing literature on the performance of manufacturing enterprises in different countries are both largely based on data obtained from published final accounts. Furthermore, when compared to empirically gathered data, data obtained from published

company accounts are considered to be more objective given the fact that final accounts are audited by qualified auditors. Therefore, the financial data obtained from the published company accounts of Sri Lankan and Malaysian companies are considered to be relevant, useful and sufficient for the purpose of this study.

The principal measure of profitability used in this study is the Return on Assets (ROA), which is shown as net profit before interest and 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. 'Net profit before taxes' was used in the numerator of this ratio for two reasons. First, it would improve comparability between firms by avoiding possible distortions that could be caused by differences in the tax rates of the two 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 (EBIT). Furthermore, since the numerator of ROA 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), 'Net profit before taxes' as well as interest was used as the numerator.

This study also attempts to analyse profitability from an alternative perspective by using another widely accepted performance measure: Return on Equity (ROE) as a measure of profitability. 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 dividends for preference shares 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 investment 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 dividends for preference shares and taxes divided by ordinary shareholders' equity.

## **SAMPLE OF COMPANIES**

The sample companies of this study are manufacturing companies listed on the Colombo Stock Exchange (CSE) and the Malaysia exchange (MYX), chosen from only the companies on the OSIRIS database with complete financial data for the three years from 2006 to 2008. A screening process was then applied to companies matching the above criteria. First, all remaining companies in the sample were classified by the Global Industry Classification Standard (GICS) codes to eliminate non-manufacturing companies as identified by their GICS codes. Second, since the main objective of this study is to examine the profitability of manufacturing companies of both countries, it was considered appropriate to eliminate companies with a negative average ROA for the past three years, since having such companies in the sample distorts the results of the analysis. This screening process left 62 manufacturing companies in the Sri Lankan sample. Third, the GICS codes of these 62 companies were then matched with the remaining Malaysian companies in the sample, eliminating the Malaysian companies that did not match the GICS codes of the companies in the Sri Lankan sample. This matching process left, 99 Malaysian companies, which were then selected as the sample of Malaysian companies.

Overall, the sample size of this study was 161 companies, consisting of 62 out of 236 listed companies in Sri Lanka, and 99 out of 986 listed companies in Malaysia. Although the sample of Sri Lankan companies represents 26% of all companies listed on the CSE and 83% of all manufacturing companies listed on the CSE, it still does not include companies from some manufacturing categories such as automobiles and heavy machinery. As a result, the manufacturing industry categories that were not included in the Sri Lankan sample had to be excluded from the Malaysian sample as well. Consequently, when the sample companies were classified under different types of industry groups using the GICS codes and commonly used industry categories they fell into just six industry categories. Table 1 below shows these six industry categories used in the study with a profile of the companies in the sample. As this table shows, the number of companies in each industry category ranges from 3% to 24% for Sri Lanka and from 2% to 29% for Malaysia. Although the textiles category represents just 3%

of the total sample, it is retained in the sample for analysis considering its economic significance to both countries.

**TABLE 1**  
**Profile of the Sample Companies**

Types of Industry	Sri Lanka		Malaysia	
	Count	%	Count	%
Food and beverage	15	24	29	29
Aluminium, metal, glass and ceramics	5	8	10	10
Electronic equipment and household items	10	16	18	18
Chemicals	12	19	14	14
Agricultural products and plantations	18	29	26	26
Textiles	2	3	2	2
Number of firms	62	100	99	100
	US\$ Millions in 2008			
	<b>Total Assets</b>		<b>Sales</b>	
	Sri Lanka	Malaysia	Sri Lanka	Malaysia
Mean	28	343	28	197
Minimum	2	8	0.19	3
Maximum	121	20605	136	7597
STD	26	2076	30	796
	<b>Shareholders' Equity</b>		<b>Profit before interest &amp; Tax</b>	
	Sri Lanka	Malaysia	Sri Lanka	Malaysia
Mean	11	153	2.98	21
Minimum	0.75	4	-0.99	-86
Maximum	43	7570	47	1148
STD	10	770	6	117

Table 1 also provides information on total assets, ordinary shareholders' equity, and sales and profit before interest and tax, 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 much smaller in size than the Malaysian companies in our sample. The average of total assets of Sri Lankan companies was only \$28 million for 2008 as against \$343 million for Malaysian companies. Similarly, the maximum amount of assets held by any Sri Lankan manufacturing company was only \$121 million as against a massive \$20,605 million for a Malaysian company. The minimum amount of assets in Sri Lankan companies was also as low as \$2 million whereas the smallest company in Malaysia had assets worth \$8 million.

A similar situation is demonstrated by the ordinary shareholders' equity data shown in Table 1. In comparison to \$11 million average shareholders' equity of Sri Lankan companies, Malaysian companies had \$153 million average shareholders' equity. Even the Sri Lankan company with the biggest shareholders' equity (\$43 million) was still a small company in comparison to the largest Malaysian company with \$7,570 million shareholders' equity. Both the sales and profit figures showed a similar inequality. The sales of Sri Lankan companies ranged from \$0.19 million to \$136 million with an average sales value of \$28 million per year. Conversely, the sales of Malaysian companies ranged from \$3 million to \$7,597 million with an average sales value of \$197 million, more than 7 times the average sales value of Sri Lankan companies. A similar situation is also found for profits. The average net profit before interest and tax (EBIT) of Malaysian companies was \$21 million, which is seven times higher than the average EBIT of Sri Lankan companies which was \$2.98 million. When these performance figures are viewed in absolute terms, the performance of Malaysian companies seems to be excessively superior to that of Sri Lankan companies. However, these absolute sales and 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 total investments represented by total assets. Accordingly, the next section of this paper attempts to assess the profitability of manufacturing firms in our sample in terms of their ROA and ROE as outlined in Section 2.

However, before presenting the analysis of manufacturing profitability of manufacturing companies in Sri Lanka and Malaysia it seems useful to make a brief overview of the overall economic and manufacturing performance of these two countries in order to set the background for the subsequent comparative analysis.

## **ECONOMY: SRI LANKA VERSUS MALAYSIA**

Both Sri Lanka and Malaysia are located in Asia which hosts 60% of the world's population. The two regions, Eastern Asia where Malaysia is located and Southern Asia where Sri Lanka is located, also account for 30% of the world's population. However, in comparison to some countries in Asia such as China and India with enormous populations, the population of these two countries, Sri Lanka (20 million) and Malaysia (27 million) is relatively small as they account for less than 1% of the total Asian population. Table 2 below provides some useful information about the economic performance of the two countries in the last 5 decades.

**TABLE 2**  
**Some indicators of demographic and development in Sri Lanka and Malaysia**

	1960			2007		
	SL	MAL	%	SL	MAL	%
Population, total (millions)	10	8.1	81	20.0	26.6	133
GNI per capita (\$)	152	280	184	1,540	6,540	425
GDP (\$ in billions)	1.5	2.3	153	32.4	186.7	577
GDP growth (annual %)	4.6	6.5	141	6.8	6.3	93
Agriculture, value added (% of GDP)	32	36	113	12	10	83
Industry, value added (% of GDP)	20	18	90	30	48	160
Services value added (% of GDP)	48	46	96	58	42	72

Table 2 clearly shows that during the period from 1960 to 2007 the gap between the two countries on some important economic indicators has widened. Like the GNI per capita –widely used as a basic indicator of economic performance of a country – Sri Lanka lagged far behind Malaysia in 2007 with its GNI per capita income of \$1,540 in comparison to Malaysia's \$6,540. In 1960 Malaysia's GNI per capita income was just 1.84 times Sri Lanka's GNI per capita income but by 2007 this gap widened to 4.25 times Sri Lanka's GNI per capita income. A similar situation is observed for the GDP between the two countries. In 1960, Malaysia's GDP of \$2.3 billion is just 1.53 times Sri Lanka's GDP of \$1.5 billion. However, by 2007 Malaysia's GDP has increased to a massive \$186.7 billion, which is almost 6 times Sri Lanka's GDP of \$32.4 billion in 2007. Another noteworthy difference between the two countries is that both countries have proportionately decreased their agricultural output while increasing their industrial output significantly between the two periods. Strikingly through, in 1960 Sri Lanka's industrial output (20% of GDP) is about 10%t higher than that of Malaysia. However, while Sri Lanka has made significant progress in the growth of industrial output by increasing its contribution from 20% of GDP in 1960 to 30% of GDP in 2007 (an increase of 50%), Malaysia has increased its industrial output from 18% of GDP in 1960 to 48% of GDP in 2007 (an increase of 167%). Overall, the above data clearly shows that over this period Malaysia has out-performed Sri Lanka in terms of economic and industrial development by a significant margin.

## **PROFITABILITY: SRI LANKA VERSUS MALAYSIA**

### ***Return on Assets (ROA)***

Table 3 demonstrates the dispersion of profitability rates, as measured by ROA, among Sri Lankan and Malaysian manufacturing companies from 2006 to 2008, together with the average ROA for the three year period. As Table 3 shows, the average profitability of Sri Lankan companies for the period from

2006 to 2008 ranged from 10% to 11.4% with a 3 year average of 10.9%. Overall, 49% of the sample companies have been able to achieve an ROA greater than 10% over the 3 year period. While 16% of the companies have achieved poor results of less than 5% of ROA, 23% of the companies have achieved an average ROA of above 15% over the 3 year period.

The average profitability of Malaysian companies varied from 7.5% to 8.7% during the 3 year period with an overall average of 7.7%. A closer look at the dispersion of 3 year average profitability reveals that 25% of the 99 Malaysian companies achieved more than 10% ROA while only 9% of the companies have been able to achieve ROA of higher than 15%. The companies with relatively low profitability of below 5% accounted for 30% of all Malaysian companies.

**TABLE 3**  
**Dispersion of Return on Assets (ROA)**

ROA Range	Sri Lanka				Malaysia			
	2006 %	2007 %	2008 %	Average %	2006 %	2007 %	2008 %	Average %
Below 5	27	16	29	16	32	31	35	30
5 - 10	15	23	39	35	41	38	32	44
10 - 15	27	35	15	26	15	12	20	16
15 - 20	23	18	8	18	7	12	8	5
20 - 25	6	8	6	3	1	3	3	3
Above 25	2	0	3	2	3	3	1	1
Total	100	100	100	100	100	100	100	100
No of Companies	62	62	62	62	99	99	99	99
<b>Statistics</b>								
Mean	10.9	11.4	10.0	10.9	7.5	8.7	7.6	7.7
Minimum	-4.5	-0.3	-5.4	0.3	-9.3	-4.6	-7.9	-3.1
Maximum	46.0	23.1	93.3	46.8	32.8	29.7	27.8	26.8
STD	8.1	5.9	12.7	7.1	6.6	6.7	6.2	5.5

What is primarily apparent from the ROA figures between the two countries is that the manufacturing profitability of Sri Lanka is relatively higher than that of all of the Malaysian manufacturing companies. More specifically, the ROA of Sri Lankan companies over the three year period was in the range of 10% to 11% with an overall average of 10.9%. Contrarily, the ROA of Malaysian companies for the same period was in the range of 7% to 9% with an overall average of 7.7%. This is 72% of the ROA of Sri Lankan companies and a difference of 42% in favour of Sri Lankan companies. A closer look at the dispersion of the ROA between the two countries also reveals that Sri Lankan manufacturing companies have fared better than Malaysian manufacturing companies in terms of achieving higher profitability. From the lower end, only 16% of the Sri Lankan companies have achieved less than 5% of ROA as against 30% of Malaysian companies achieving similar results. The situation is also similar for the top end of the scale. While 23% of the Sri Lankan companies have achieved more than 15% ROA, only 9% of Malaysian companies were able to achieve this result. A previous study that examined the profitability of manufacturing companies in Asia also revealed that the profitability of manufacturing companies in Sri Lanka was higher than that of some Asian countries including Japan, Hong Kong, Thailand, South Korea, Malaysia, China, Indonesia, Singapore and Pakistan. According to this study, the ROA of these countries in 1995 ranged from 2.4% (South Korea) to 11.1% (Pakistan). The ROA of Malaysian manufacturing companies was found to be 9.6% (Wijewardena and De Zoysa, 2000).

However, it must be noted that while having a high profitability helps companies to achieve a healthy financial position and attract equity investment, a low profitability level does not necessarily mean a low level of industrial development. Although manufacturing companies in countries such as South Korea, Japan, and Hong Kong have recorded low levels of profitability, these countries have already reached very high levels of industrial development. Akyuz and Gore (1996) argue that “corporate profits and other profit-related incomes were the main source of investment in the most successful East Asian economies”. Consequently, investment in manufacturing companies in these countries is



considerably higher than in the other developing South Asian countries. However, the higher level of profitability in manufacturing companies in Sri Lanka as well as its relatively low levels of investment indicates that Sri Lanka has much greater opportunities for further investment in the manufacturing sector although such opportunities are yet to be exploited.

Traditionally, companies in some countries are recording a lower level of profitability but yet been able to achieve a higher level of industrial development. Companies in countries such as Japan, South Korea and Hong Kong have recorded a relatively low level of profitability, but these countries have already achieved a higher level of industrial development. Although relatively little is known about the reasons for a low level of company profitability in these countries, it is believed that the main reasons are country-specific. For example, according to a study of 1,400 U.S. firms and 480 Japanese firms, the average ROA was 7.4% for the U.S. and 3.8% 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 the Japanese firms were striving for revenue and market share while the U.S. firms were seeking higher 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 et al, 1992). This strategy seems to have enabled Japan to occupy a dominant role in the international marketplace and achieve miraculous industrial and economic development in several decades. 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.

### ***Return on Equity (ROE)***

Another important measure of performance is Return on Equity (ROE), a performance measure closely monitored by many investors to decide whether the company is creating an adequate return for their investment. By measuring how much profit a company can generate from assets financed by equity capital, ROE offers a superior measure of companies’ profit-generating efficiency. This helps investors to determine companies’ ability to generate profit from their operations through competitive advantages. In this respect, ROE analysis across countries provides valuable information for potential investors to assess the attractiveness of a particular country for equity investment opportunities. The analysis of ROE among Sri Lankan and Malaysian companies from 2006 to 2008 together with the average ROE for the three year period is shown in Table 4.

**TABLE 4**  
**Dispersion of Return on Equity (ROE)**

	Sri Lanka				Malaysia			
	2006 %	2007 %	2008 %	Average %	2006 %	2007 %	2008 %	Average %
Below 5	32	21	39	26	32	29	33	29
5 - 10	13	15	16	16	22	26	25	30
10 - 15	10	11	23	16	27	21	24	27
15 - 20	13	15	10	21	11	14	10	5
20 - 25	11	19	8	11	2	2	4	4
Above 25	21	19	5	10	5	7	3	4
Total	100	100	100	100	100	100	100	100
No of firms	62	62	62	62	99	99	99	99
<b>Statistics</b>								
Mean	3.6	15.5	7.0	8.7	8.8	10.4	7.9	9.0
Minimum	-522.1	-15.0	-56.8	-151.4	-44.6	-20.8	-28.2	-17.9
Maximum	148.5	53.8	95.2	50.8	95.6	66.1	66.1	53.1
STD	74.1	12.1	17.8	25.2	14.2	11.3	11.2	9.6

As Table 4 shows, the average ROE of Sri Lankan companies for the period from 2006 to 2008 ranged from 3.6% to 15.5% with a 3 year average of 8.7%. Overall, 58% of the sample companies achieved a ROE greater than 10% over the 3 year period. While 26% of the companies achieved results of less than 5% of ROE, 21% of the companies achieved a ROE greater than 20% on average over this period. On the other hand, the average ROE of Malaysian companies varied from 7.9% to 10.4% during the 3 year period with an overall average of 9%. The data in Table 4 also shows that 29% of Malaysian companies achieved a relatively poor ROE of less than 5% while only 8% of the Malaysian companies were star performers with greater than 20% ROE.

A closer look at the dispersion of ROE between the two countries reveals that the ROE of Sri Lankan companies varied considerably over the three year period, ranging from 3.6 to 15.5%, while ROE of Malaysian companies was relatively stable with a minor variation ranging from 7.8% to 10.4%. Interestingly, although the average profitability of Sri Lankan manufacturing companies in terms of ROA is higher than that of Malaysian counterparts, the average ROE of Sri Lankan companies is slightly lower than that of Malaysian companies. This is not a positive outcome for companies in Sri Lanka as it discourages potential investors to invest in Sri Lankan companies due to the lower return on their investment. If manufacturing companies in Sri Lanka can provide a much higher ROE for their investors, then they have much greater opportunities for increasing equity investment in their manufacturing sector. Obviously, increased investment is crucial for achieving industrial and economic growth in developing countries as the size of average equity investment in manufacturing companies in many developing countries is generally lower than that of developed countries. The low levels of equity investment seem to be due to several factors, such as the relatively poor equity markets, the high interest rates available to non-equity investors, the greater fear of high-risk investment and the manufacturers' inadequate exploitation of further investment opportunities. An analysis of the size of equity capital of the manufacturing companies in Sri Lanka and Malaysia revealed a similar trend with equity capital of Malaysia's manufacturing companies –on average 60% of the total assets – being higher than that of Sri Lankan manufacturing companies, where only 46% of the total assets of Sri Lankan companies have been financed by equity capital.

### ***Inter-Industry Profitability and Equity Analysis***

So far in this paper the analysis of profitability has concentrated on country-level performance. As a result, the performance of various industries are mixed together to calculate the overall average performance indicators for a country. However, as Soliman (2003) indicates an analysis based on industry benchmarks provides more realistic and meaningful ratios for comparative purposes. Therefore, average profitability and equity to total assets ratio were analysed under the six industry categories used in the study. The result of this analysis is shown in Table 5.

**TABLE 5**  
**Industry-wise Profitability and Equity Analysis**

Industry Category	Return on Assets		Return on Equity		Equity/Total Assets	
	SL %	MAL %	SL %	MAL %	SL %	MAL %
Food and beverage	10.4	8.3	9.9	9.1	48.1	55.3
Aluminium, metal, glass and ceramics	13.9	7.0	13.2	9.8	44.0	56.5
Electric, Household products and appliances	16.1	8.3	15.4	9.3	50.7	54.6
Chemicals	10.9	8.2	10.9	7.7	46.2	64.5
Agricultural products and plantations	7.7	6.9	0.4	9.6	43.1	68.3
Textiles	10.7	4.4	16.3	5.0	41.3	63.0
Overall average	10.9	7.7	8.7	9.0	46.2	60.2

As Table 5 shows companies in each of the six industries have outperformed their Malaysian counterparts on the ROA indicator. The lowest variation was in the agricultural products and plantations sector where the ROA of Sri Lankan companies was 12% higher than that of their counterparts. The highest variation was evident in the textiles sector where the ROA of Sri Lankan companies was 143% more than their Malaysian counterparts. Contrarily, the inter-industry results of ROE are mixed. Although the overall ROE of Malaysian companies is slightly higher than that of Sri Lankan companies, an inter-industry analysis showed that except for the agricultural products and plantations sector in Sri Lanka all of the other manufacturing sectors performed better than their counterparts in Malaysia. In particular, the textiles sector recorded a massive 16.3% of ROE as against a mere 5% for Malaysian companies. The extremely poor ROE of the agricultural products and plantations sector in Sri Lanka has resulted in the overall ROE in favour of Malaysia. As for the equity to total assets ratio, a similar trend was observed in Malaysian companies where they have a relatively higher equity capital than Sri Lankan companies across all six industry categories. The variation between various sectors in both countries was fairly even as Sri Lanka's equity ratio ranged from 41% to 51% while that of Malaysia ranged from 55% to 68%.

## CONCLUSIONS

The major objective of this paper was to assess the performance of Sri Lankan manufacturing companies in comparison to that of Malaysian manufacturing companies to obtain some insights into improving their current level of performance. In order to achieve this objective, this study analysed the financial data of 161 manufacturing companies consisting of 62 Sri Lankan companies and 99 Malaysian companies selected from the OSIRIS Database. The data used in the study cover a three-year period from 2006 to 2008. Using this financial data of the sample companies two commonly used performance measures, ROA and ROE, were calculated and analysed.

This analysis revealed that during the period from 2006 to 2008 Sri Lankan manufacturing companies were considerably more profitable than their counterparts in Malaysia, indicating a positive result for Sri Lanka. When profitability was analysed by industry, it was revealed that all of the six industries in Sri Lanka recorded a relatively higher ROA than their counterparts in Malaysia. The primary observation from a high profitability level for manufacturing companies in Sri Lanka is that this has the capacity to penetrate into a greater level of investment in the future.

On the contrary to ROA, Malaysian companies have overall performed slightly better than Sri Lankan companies in terms of ROE. However, inter-industry analysis shows that except in the agricultural products and plantations sector, all other manufacturing sectors in Sri Lanka have individually achieved a higher ROE than their Malaysian counterparts. Nevertheless, there still seems to be the need and the opportunity for companies in Sri Lanka to improve their ROE. Increasing the level of ROE is vital for Sri Lanka if it is to attract increased equity investment into its manufacturing sector.

Another major finding of this study is that Sri Lanka's relative position is poor – particularly in terms of equity investment in manufacturing – as the equity capital of Sri Lankan companies is only 46% compared to 60% for Malaysian companies. A similar trend is observed in all six industries in both countries when the equity levels are analysed by industry. The reason for the lower level of equity capital in Sri Lankan companies can be attributed to several factors such as: the relatively poor equity market, the high interest rates available to non-equity investors, the excessive fear of high-risk investment, and the manufacturers' inadequate exploitation of appropriate investment opportunities. Nevertheless, a high level of equity investment is crucial for the Sri Lankan manufacturing sector to be successful in its endeavour to achieve higher economic and industrial development. Future research in this area also needs to examine the impact of various factors – such as size, age, location, exports, asset and capital structure, labour costs, employee productivity and managerial efficiency, etc. – on company profitability of Sri Lankan companies. For this reason, a longitudinal analysis with a larger sample is desirable.

## REFERENCES

- Akyüz, Y and Gore, C. (1996). "The investment-profits nexus in East Asian industrialisation". *World Development*, Volume 24, Issue 3, pp. 461-470.
- Athukorala, P. (2005). "Trade Policy in Malaysia: Liberalisation process, structure of protection, and reform agenda" *ASEAN Economic Bulletin*, Vol.22, No.1.pp.19-34.
- Athukorala, P. and S. Rajapathirana. (2000). *Liberalisation and Industrial Transformation: Sri Lanka in International Perspective*. London: Oxford University Press.
- Blaine, M. (1993). "Profitability and Competitiveness: Lessons from Japanese and American Firms in the 1980s". *California Management Review*, Fall.
- Doyle, P., J. Saunders and V. Wong. (1992). "Competition in Global Markets". *Journal of International Business Studies*. <http://www.hks.harvard.edu/cid/hiid/503.pdf>
- Robbins, S.M. and R.B. Stobaugh (1974). *Money in the Multinational Enterprise: A Study of Financial Policy*. London: Longman..
- Sally, R. (2009). "Like Malaysia Ceylonese Economy Relied on Its Productive Minorities and Not Majority Ethnic Group". (29 September 09). [http://transcurrents.com/tc/2009/09/like\\_malaysia\\_ceylonese\\_econom.html](http://transcurrents.com/tc/2009/09/like_malaysia_ceylonese_econom.html)
- Snodgrass, D.R. (1995), "Successful Economic Development in a Multi-Ethnic Society: The Malaysian Case" *Development Discussion Paper No. 503*, 26, Harvard Institute for International Development, Harvard University, Cambridge MA.
- Soliman, M. (2003). Using Industry Adjusted DuPont Analysis to predict Future Profitability and Returns. Published PhD Thesis. AnnArbor: UMI.
- Wijewardena, H and De Zoysa, A. (2000). "Profitability and Competitiveness of Manufacturing Companies in Sri Lanka and Major Asian Countries: A Comparative Analysis". *Economic Review*, Vol. 26, pp. 2-9.
- Wolf, B.N. (1975) "Size and Profitability among US Manufacturing Firms: Multinational versus Domestic Firms". *Journal of Economics and Business*, Fall.
- World Bank. (2009). *World Development Report 2009*.