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Impact of Financial, Operating Leverage on the Financial Performance: Special Reference to Lanka Orix Leasing Company Plc in Sri-Lanka

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Abstract

Financial leverage refers to the use of debt in a firm's capital structure is called Financial Leverage. Using financial leverage is like a double edged sword because it can magnify the firm's potential gains and losses. Operating leverage refers to the percentage of fixed costs in a company's cost structure. Generally, the higher the operating leverage, the more a company's income is affected by fluctuation in sales volume. In this context, the aim of this research is to identify the Impact of Financial, operating leverage on the financial performance of the Lanka ORIX Leasing Company plc in Sri-Lanka. Analyses of the data indicated that only operating leverage has a significant on the financial performance of LOLC plc in Sri-Lanka. The findings further revealed that no significant difference was found between financial leverage and financial performance. LOLC PLC is recommended to inject the specific amount of equity to improve the capital structure along with leverage ratios in addition to focusing on matching of liabilities with the type of assets they own.

Keywords: *Financial Leverage, Operating leverage and financial performance.*

1. Introduction

Background of the study:

This study examines the impact of financial, operating leverage on the financial performance of Lanka orix leasing company plc in srilanka (During the year 2001-2010). Financial leverage refers to the use of debt in a firm's capital structure. It measures the amount of debt in a firm's capital structure. Using financial leverage is like a double edged sword because it can magnify the firm's potential gains and losses. It can increase the returns for shareholders but also eliminate profits in rough times. Further, Operating leverage refers to the percentage of fixed costs in a company's cost structure**.** Generally, the higher the operating leverage, the more a company's income is affected by fluctuation in sales volume. The higher income vs. sales ratio results from a smaller portion of variable costs, which means that company does not have to pay as much additional money for each unit produced or sold. The more significant the volume of sales, the more beneficial the investment in fixed costs becomes. If a high percentage of total costs are fixed. Then the firm is said to have a high degree of Operating leverage. In physics, leverage implies the use of a lever to raise a heavy object with a small force. In politics, if people have leverage, their smallest word or action can accomplish a lot. In business terminology, a high degree of operating leverage, other factors held constant, implies that a relatively small change in sales results in a large change in ROE. Strength of financial position of an organization is called financial performance. Financial analysis is the process of identifying the financial strengths & weakness of the firm by properly establishing relationship between the item of the balance sheet and the profit & loss account. In financial analysis a ratio is used as a bench mark for evaluating the financial position & performance of a firm. In this study, Gross profit, Net profit, ROCE, ROE, ROA ratios are used to measure the financial performance of the LOLC plc in SL(During the year 2001-2010).

Lanka ORIX Leasing Company PLC was incorporated in March 1980. LOLC (as it is known) was the pioneering leasing company in the Country. Established as a result of an initiative by the Government of Sri Lanka, LOLC had as one of its first shareholders the premier leasing company in Japan. Today, nearly three decades later, ORIX Corporation remains one of LOLC's main shareholders. Two of her senior officers are on the LOLC Board of Directors, and ORIX still provides technical support and knowledge sharing. As a company registered to engage in leasing, LOLC is regulated by the Central Bank of Sri Lanka. As a company, listed on the Colombo Stock Exchange (CSE), LOLC is regulated by the CSE and also the Securities and Exchange Commission. As LOLC has enjoyed an unblemished reputation with all regulators, LOLC stakeholders can be assured that the Company's activities are carried out in accordance with all applicable rules and regulations. In this way, finally, the main problem of this study is to find out how the Financial, operating leverage negatively/positively influences on signaling in the LOLC’s financial performance (During the year 2001-2010).

2. Objectives of the study

This research will attempt to achieve following objectives;

- To identify the interrelationship between Financial, operating leverage & financial performance of the LOLC plc in SL
- To investigate the impact of financial & operating leverage on financial performance of the LOLC plc in SL
- To find out the major factors to determine the financial, operating leverage of the LOLC plc in SL
- To find out the major factors to determine the financial performance of the LOLC plc in SL
- To suggest the LOLC plc in SL to increase the profit potential through the better financial and operating leverage management.

3. Literature Review

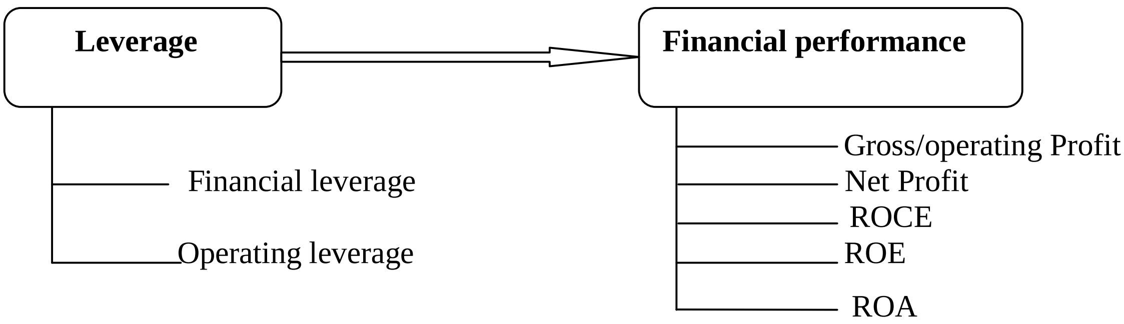
Empirical evidence is a fancy way of describing facts that can be experienced and tested only through the senses. Experimental evidence is much more reliable as naturalistic observations are vulnerable to researcher bias. In this context, According to the Smith (2002), Leverage is commonly explained as the use of borrowed money to make an investment and return on that investment. It is more risky for a company to have a high ration of financial leverage. It has also been noticed that on the outcome of financial leverage: if the level or point of financial leverage is high, the more rise is anticipated profit on company's equity. Thus, financial leverage is utilized in various circumstances as a means of altering the cash flow and financial position of a company. There are four positions which show a relationship with the level of financial leverage. First, is the relation of equity and debt. Second is the influence on business production & cycle of financial leverage , the company's industry and branch whole financial leverage level and also the correlation between the current financial leverage ratio of the company and the middle leverage level. Lastly, the conformity of company's mission and philosophy with the situation connected to the relation of financial leverage. The outcome of the financial leverage can also be utilized to boost income and growth however, it is much common for business industries in the phase of the young and teens. Financial leverage ratio is relative to variability of profit and contrary to stability. Company's profits with high rate leverage level differ with the same condition as with the company's profits with lesser leverage level.
In another way, financial leverage results from the difference between the rate of return the company earn on investment in its own asset and the rate of return the company must pay its creditors (Garrison et al., 2004). Considerable effort has been expended to explain the relationship between a firm's real asset

risk and the riskiness of its equity. Theoretical and empirical justification exists for relating stock risk to leverage. Percival (1974) explored the fixed-variable cost relationship and the theory related to Degree of operating leverage, suggesting weaknesses in this measure. This study is criticized by Gahlon (1981), who shows that, in general, a firm's systematic risk should increase with increases in its Degree of operating leverage. Further, Hamada (1972) and Rubinstein (1973) demonstrated that a firm's beta should increase if the firm finances more heavily with debt. These theories are extension of the pre-CAPM work of Modigliani and Miller (1969), who show that use of debt increases equity return variability. In the analysis of market risk, Hamada has concluded that 21 percent to 24 percent of a firm's systematic risk could be explained by the nature of its financing. Later papers by Hill and Stone (1980) and Chance (1982) extend Hamada's risk decomposition approach. Furthermore, Gahlon and Gentry (1982) analyzed the relationship between firm's real asset risk and their market risk. There is vast literature available that examines relationship of financial & operating leverage and performance of firms in developed nations but very less tested empirically for developing and emerging economies. As compared to the developed markets like Europe, America etc. it is found by the Eldomiaty (2007) that capital markets are less efficient and suffers from higher level of asymmetry in terms of information in emerging and developing markets than capital markets in developed countries. So researchers decided to take SriLanka as sample of emerging market and evaluate performance of firms against capital structure.

4. Conceptualization

In this Conceptualization, the every researcher attempt to develop an argument or working theory about the research problem. The pattern of relationship between the key concepts of variables could be shown the conceptual frame work on better framework of the leveraging strategy on firm performance.

Conceptual Frame Work



Developed by Researcher

The above frame work shows the relationship between the key variables (Key variables of independent and dependent). Firm financial performance is considered as dependent variables. It is depended on the financial and operating leverage.

5. Operationalization

Table: 1. Operationalization

Concept	Variable	Indicator	Measurement
Leverage	Financial leverage	Debt equity ratio	Total Debt / Total Equity
		Debt asset ratio	Total debt / Total Assets
		Interest earned ratio	PBIT / Interest
	Operating leverage	Fixed cost: Total cost	Fixed Cost / Total Cost
		Fixed cost: Variable cost	Fixed Cost / Variable Cost
Financial performance	operating profit margin	operating profit ratio	Profit before operating expenses *100 / Total revenue
	Net profit margin	Net profit ratio	Net Profit after tax*100 / Total revenue
	Return on asset	ROA ratio	Profit After Tax / Total Assets
	Return on equity	ROE ratio	Profit After Tax / Share Holder Capital

The above operationaliation frame work is a detailed sketch derived from variables and structure of conceptualization. This operationalization frame work also describes the indicators selected for testing on each variable and what are the decided measurements for each indicator.

6. Hypotheses of the Study

Hypotheses are the assumption that guides the research activity towards the ultimate finding based on the hypotheses. The researcher will be going through the research activity includes data collection, analyses and then researcher will be attained and ultimate conclusion. This research has also some hypotheses relating to the leveraging strategy on firm performance of the organization. This research also conducted based on the centralized hypotheses. The précised hypotheses formed for this particular research are as follows.

H1: There is a significant positive relationship between operating leverage and financial performance of a LOLC plc

H2: There is a significant positive relationship between financial leverage and financial performance of a LOLC plc

H3: The financial leverage has a significant impact on financial performance of a LOLC plc

H4: The operating leverage has a significant impact on financial performance of a LOLC plc

7. Methodology

7.1. Data Collection

Secondary data are used for this study; they are collected from annual reports, texts, journals and magazines. Further, Data related to the financial & operating leverage and financial performance of lanka orix leasing company plc in srilanka (During the year 2001-2010) have been extracted from annual reports in the systematic way.

7.2. Data analysis method

Various statistical methods have been employed to compare the data collected from lanka orix leasing company plc in srilanka (During the year 2001-2010). These methods include (1) Ratio analysis which involves to measure the financial & operating leverage and financial performance of lanka orix leasing company plc in srilanka. (2) Inferencial statistics which involves in drawing conclusions about a population based only on sample data. It includes multiple regression analysis and Correlation analysis to find out the influences and relationship between key variables in the study.

8. Results and Analysis

8.1. Correlation analysis

For the purpose of identifying the pattern of relationship between Operational, Financial Leverage and firm performance, correlation analysis has been used. Further, Correlation analysis is very efficient method to analysis the relationship between two or more than two variables.

8.2. Results of Correlation analysis

Table No 2: Results of Correlation analysis

		Financial leverage	Operational Leverage	Financial performance
Financial leverage	Pearson Correlation	1	-.197	.039
	Sig. (2-tailed)		.586	.915
	N	10	10	10
Operational Leverage	Pearson Correlation	-.197	1	.802**
	Sig. (2-tailed)	.586		.005
	N	10	10	10
Financial performance	Pearson Correlation	.039	.802**	1
	Sig. (2-tailed)	.915	.005	
	N	10	10	10

****. Correlation is significant at the 0.01 level (2-tailed).**

According to the above table no 2, Results of correlation analysis, there is a positive relationship between Operational leverage and financial performance, which is significant at 0.01 level ($P < 0.01$) .Therefore **H1, is accepted.** And also there is a positive relationship between financial leverage and financial performance, which is not significant at 0.01 levels ($P > 0.01$). **Hence, H2 is rejected.**

8.3. Regression analysis

Regression analysis is a mathematical method to measure the impact of variable on another variable. In this part, the researcher has analyzed the impact of Financial, operational leverage on financial performance.

8.4. Results of Regression analysis

Operating, Financial leverage Vs Financial performance

Table No 3. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.827[a]	.683	.593	3.66163

a. Predictors: (Constant), Operational Leverage, Financial leverage

Table No 4. Anova in the Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	202.336	2	101.168	7.546	.018[a]
	Residual	93.853	7	13.408		
	Total	296.188	9			

a. Predictors: (Constant), Operational Leverage, Financial leverage

b. Dependent Variable: Financial performance

Table No 5. Coefficients in the Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.614	8.520		.189	.855
	Financial leverage	2.773	2.942	.205	.943	.377
	Operational Leverage	32.903	8.479	.842	3.880	.006

a. Dependent Variable: Financial performance

According to the model summary, Adj R square is 0.593.It means that there is the 59.3 percentage of the impact of independent variable on the dependent variable.

From the ANOVA table, Significant P value is 0.018. It is less than significant level 0.05. Therefore we can conclude that 59.3 percentage of impact is significant in this case.

From the coefficient table significant P value is 0.377 (Between financial leverage and financial performance). It is greater than the significant level 0.05. Therefore **H3 should be rejected.** But there is significant impact of operating leverage on financial performance, which is significant at 0.05 levels ($P < 0.05$). Hence, **H4 should be accepted.**

9. Hypotheses testing

NO	Hypotheses	Results	Tools
H1	**There is a significant positive relationship between operating leverage and financial performance of a LOLC plc**	Accepted	Correlation
H2	**There is a significant positive relationship between financial leverage and financial performance of a LOLC plc**	Rejected	Correlation
H3	**The financial leverage has a significant impact on financial performance of a LOLC plc**	Rejected	Regression
H4	**The operating leverage has a significant impact on financial performance of a LOLC plc**	Accepted	Regression

10. **Conclusion and recommendation**

Dividend declaration is so important in some economies that firms are even forced to pay dividends through external finances. Another point of view of some different nature was attributed to Nakamura (1985) that firms in India pay dividends by borrowings mainly from banks at subsidized rates rather than their own profit.

Similarly, our study also support the work of Higgins (1972) and McCabe (1979) who suggested that debt has a negative influence on the amount of dividends paid. This is because firms with higher fixed charges pay lower dividends in order to avoid the costs of external finance. Our results are also closer to Pakistani researchers that is, Nishat (1992) who had checked the relationship of leverage with stock returns and return volatility. He was in the view that the leverage at industry level has been historically high in Pakistan and he checked the relationship of leverage and returns. His findings were that there is negative and significant relationships between return and volatility change. In most cases, highly levered industries had a stronger negative relationship between return and volatility change than the less levered industries. Our findings are also consistent with Hafeez and Attiya, 2009, who studied the dynamics and determinants of dividend payout policy of 320 non-financial firms listed in KSE during the period of 2001 to 2006 by using model of Litner (1956) and its extended version. They found that Pakistani listed nonfinancial firms rely on both current earnings per share and past dividend per share to set their dividend payments. However, the dividend tends to be more sensitive to current earnings than prior dividends. They were also of the view that besides the investment opportunities, leverage has the negative impact on dividend payout policy.

There should be strategies to improve the company's debt management system to minimize the risk. It is also found that firms are not setting target capital structure which they have to follow to avoid risk of default. Dividends are treated as the rewards to the stockholders for the assumption of the risks, distribution of surplus earning or, sometimes, capital stock, paid out to the stock holders. It is not liked, rather illegal in some laws, to pay the dividends out of the invested capital stock or excess received over stock par value. LOLC PLC IN SRILANKA are recommended to inject the specific amount of equity to improve the capital structure along with leverage ratios in addition to focusing on matching of liabilities with the type of assets they own (that is, short term borrowing to be obtained solely for working capital purpose).

11. Suggestions for further studies

This research has been completed with some shortfall due to some unavoidable reasons but anyone who wants to do research in this field can do more widely with some added aspects. With the experience gained through this research the researcher has given some suggestion for the researchers who have more willingness in doing research in the fields.
This research has been done in only one company so we can do researches with including more to identify more details of leverage effect of firms.

- Secondary data have been used in this research but this is no evidence that this is actual financial figure of company so we can use primary data in our future researches by visiting to company.
- In this research, the researcher has used on debt equity, debt asset, interest coverage ratio as leverage but too many factors or measures have impact on performance of company. So the result will be further valuable when researcher considers varies kinds of measures.
- Only some methods are used to test hypothesis such as correlation & regression. Further the researcher can add much variety of techniques to test their findings such as ANOVA, descriptive statistics and etc.

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