

VALUE ADDED TAX (VAT), GROSS DOMESTIC PRODUCTION (GDP) AND BUDGET DEFICIT (BD): A CASE STUDY IN SRI LANKA.

Anojan, V

ABSTRACT

The focus of this study is to find out the impact of Value Added Tax (VAT) on Gross Domestic Production (GDP) and Budget Deficit (BD) of the country and also identify the association among value added tax, gross domestic production and budget deficit in Sri Lanka. Every country needs adequate tax revenue for their successful economic activities of their country. The tax revenue can be divided into two major categories such as direct and indirect tax revenue. Imposing the tax revenue is directly link with gross domestic production and budget deficit of the country. The indirect taxes generally impose on production, turnover, distribution of goods and services so indirect taxes directly link with gross domestic production of the country. Value added tax is one of the major indirect tax revenue of the Sri Lanka which was introduced in 2002 (Central Bank Report). Regression and correlation analysis were performed in this study with the help of SPSS latest version. Regression results confirmed that there is ($R^2 = 0.866$) significant impact of value added tax on gross domestic production of the country and also there is ($R^2 = 0.705$) significant impact of value added tax on budget deficit. Correlation results confirmed that there is ($P = 0.000$) significant association between value added tax and gross domestic production and also there is ($P = 0.002$) significant association between value added tax and budget deficit of the country. It implies that the Sri Lankan Government should give key focus on amending and implementation of VAT because the county is facing the budget deficit continuously and here the gross domestic production impact by VAT same time VAT impact on BD of the country. Also the high level of GDP needs for every country to improve the BD of the country so the government has to handle the value added tax very carefully for the economic success of the country.

Keywords: Budget Deficit, Gross Domestic Production, Sri Lanka and Value Added Tax,

1. INTRODUCTION

Government revenue generally can be divided into two major revenues such as tax revenue and non-tax revenue. Tax revenue plays an important role in the tax revenue of the country especially more than 85% revenue of the country comes from the tax revenue in Sri Lanka. This study covers value added tax, gross domestic production and budget deficit of the country. Value added tax is one of indirect tax in Sri Lanka which was introduced in 2nd August 2002, due to this purpose goods and service tax abolished on the same date.

Taxation is one of the important elements in managing national income, especially in developed countries tax revenue is playing an important role in civilized societies since their birth thousands years ago (Lymer and Oats, 2009).

Lymer and Oats (2009) stated that tax is defined as a compulsory levy or payment, imposed by government or other tax raising body on income, expenditure, or capital assets, for which the taxpayer receives nothing specific in return. However tax payers are enjoying some advantages as indirectly such as free health, free education, nation defense, infrastructure facilities, etc... Income tax was introduced very firstly in England (UK) in 1799. In Sri Lanka income tax was introduced under colonial system in 1932. The first year of assessment (Y/A) was started from 1931. 1931/1932 is the first year of assessment in Sri Lankan tax system. Sri Lankan tax revenue can be

divided into two major categories such as direct tax revenue and indirect tax revenue. Tax revenue contributes more than 85% to total revenue of the country. More than 80% of tax revenue comes from indirect tax revenue and the remaining part contributes by the direct tax revenue. Here the Value Added Tax (VAT) is one of the major tax under the direct tax revenue as well as Income Tax (IT) is the major tax under direct tax revenue of the country. Singh (1999), Shanmugam (2003), Lymer and Oats (2009) pointed in their study that the main objective of imposing certain taxes on the public is to generate revenues for the government for public expenditure. However Lymer and Oats (2009) suggested, taxes are needed to reduce inequalities through a policy of redistribution of income and wealth so that income gap between the rich and the poor is not as significant.

Tax systems are also designed for social purposes, such as discouraging certain activities which are considered undesirable and protecting the environment. For instance, the excise taxes on alcohol and tobacco are (at least partly) exercised to decrease consumption and thus encourage a healthier lifestyle. Taxes are also expected to ensure economic goals through the ability of the taxation system to influence the allocation of resources including transferring resources from the private sector to the government to finance the public investment programme, the direction of private investment into desired channels

through such measures as regulation of tax rates and the granting of tax incentives. In addition, import duties could be used to protect local industries from foreign competition. This has the effect of transferring a certain amount of demand from imported goods to domestically produced goods. Sri Lankan government is often doing various changes in value added tax policy in the budgets according to the economic needs of the country. Especially government announced value added tax' registration threshold as 15 million LKR turnover or production from 1st January 2015 and the government has reduced value added tax rate to 11% as well.

2. STATEMENT OF THE PROBLEM

There is a problem in Sri Lanka which is, Sri Lanka is facing the budget deficit continuously also the government is doing several actions to reduce the budget deficit through increasing tax revenue, increasing gross domestic production of the country however they are unable to reduce the budget deficit. Sri Lanka had budget deficit 488,967 million LKR as well tax revenue 845,297 million LKR (Central Bank Report 2012) in 2012. Here proportion of the tax revenue and budget deficit is 1:0.578, it is not good shine for any country and especially to Sri Lanka because it is one of the developing country. The government has to take necessary steps to improve gross domestic production and tax revenue of the country to reduce the budget deficit of Sri Lanka.

Research Questions

- RQ₁: Does VAT impact on GDP of the Sri Lanka?
- RQ₂: Does VAT impact on BD of the Sri Lanka?
- RQ₃: Is there any association among VAT, GDP and BD of the Sri Lanka?

3. SIGNIFICANCE OF THE STUDY

This research attempted to evaluate and analyze the impact of VAT on GDP and BD. Every government has to increase government revenue and try to reduce unnecessary government's expenses to reduce the budget deficit here tax revenue plays a vital role in government revenue. Specially value added tax contributes very highly to tax revenue. Further the government can be able to reduce the budget deficit through increasing gross domestic production of the country. Even though value added tax directly imposing production of the goods and services and turnover so government has to consider when they imposing value added tax on productions and turnover to manage the value added tax revenue and gross domestic production of the country because both are key important elements in economic position of the country.

4. RESEARCH OBJECTIVES

The main objective of the research was, to find out the impact of value added tax on gross domestic production of Sri Lanka, the following objectives were considered as sub objectives.

- To reveal the impact of value added tax on budget deficit of the country.
- To find out the relationship between value added tax, gross domestic production and budget deficit of Sri Lanka.
- To suggest the possible recommendations to government of Sri Lanka.

5. SCOPE OF THE RESEARCH

The researcher considered value added tax revenue, gross domestic production and budget deficit of the Sri Lanka. The research aims to analyze and find out impact of value added tax revenue and its impact on gross domestic production and budget deficit of Sri Lanka. The past ten years central bank reports (CBR) from 2004 to 2013 of the Sri Lanka used in this research to collect necessary data for the study.

6. LITERATURE REVIEW

There are very few studies which have been conducted in the field of taxation however there are some of the relevant related studies with regard to the subject matter were reviewed below. Expert of group United Nations (2000) stated that there is the need to streamline a nation tax system so as to ensure the realization of optimal tax revenue through equitable and fair distribution of the tax burden. The stark reality in most developing countries is that whilst there is severe budgetary pressure as a result of ever increasing demand for government expenditure, there is a limited

scope for raising extra tax revenues, as a result of Non-compliance with corporate persons result from technicalities and tax avoidance, poor record keeping and cash transactions. Keen and Mansour (2010) pointed that in analyzing the revenue mobilization in sub-Saharan-Africa seen that, within sub-Saharan Africa, revenue performed more strongly in resource-rich countries. Desai, Foley and Hines (2004) noted that governments have at their disposal many tax instruments that could be used to finance their activities such as recurrent and capital expenditure. These tax alternatives include changes in tax policy by the way of changes in personal and corporate income taxes, taxes on sales and services as well as manufacturing, value added taxes, capital gain taxes and others. It is not uncommon for a country to impose all of these taxes evenly. Lim (1983) in this study of instability of government revenue and expenditure in less developed countries observed that tax revenues instability was the major cause of expenditure instability in less developed countries in the period going from 1965 to 1973. Bleaney, Gemmel and Greenaway (1995) also stated tax revenue instability, with particular reference to sub-Saharan Africa analyzed the sources and the consequences of revenues instability in developing countries. They found that tax revenue instability is more common in poor, more open and more inflationary economies. One of the earlier studies by Marsden (1983) stated that change in tax policy will affect the economic planning and Gober and Burns (1997) pointed a countries economy may be

affect differently due to any tax policy changes in each tax components. Mahdavi (2008) revealed that the effect of rises in total tax revenue will reduce the growth in developing countries. Due to by the fiscal crisis and tax policy changes in the past several decades, several developing countries had to revive its economy by changing the level of taxes through tax policy changes. Early studies by Hinrich (1966) and Musgrave (1969) stated the relationship between the ratios of tax revenue to GDP and found that it was relatively low in the developing countries. One of the studies that shows on African countries by Leuthold (1991) were stated the effect of (TAX/GDP) from 1973 to 1981 which used the OLS estimation method. From his study, the share of agriculture will impact the level of taxation and robust the relationship of total tax revenue into direct taxes as well indirect taxes. Ghura (1998) stated the level of taxes will give the different effect to growth and other indicators due to the macroeconomic variables such as extent of corruption and adversely affected by the inflation rate in nine African countries from 1985-1996. Ogbonna and Ebimobowei (2012) noted the most comprehensive assessment of the impact tax revenue on economic growth. In his he disaggregated tax revenue into its various components that means varies taxes such as; excise duties, personal income tax, petroleum profit tax, companies' income tax, value added tax and education tax.

7. HYPOTHESES

- H₁: There is a significant relationship among value added tax, gross domestic production and budget deficit.
- H₂: There is a significant impact of value added tax on gross domestic production of the country.
- H₃: Value added tax is significantly impact on budget deficit of the country.

8. CONCEPTUAL MODEL

Based on the literature review, following conceptual model was formulated to depict the relationship among value added tax, gross domestic production and budget deficit of the country.

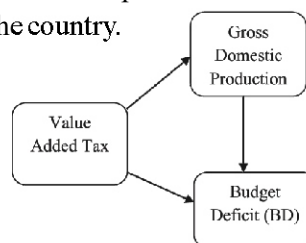


Figure -1: Conceptual model

9. OPERATIONALIZATION

Table 1: Operationalization

Concept	Variables	Indicators	Measures
Value Added Tax (VAT)	The amount of VAT	VAT Collections of the Country	Total value added tax revenue of every sector in Sri Lanka.
Gross Domestic Production (GDP)	The amount of Gross Domestic Production	Gross Domestic Production of the Country	Present year amount of GDP at Current Prices
Budget Deficit (BD)	The amount of Budget Deficit	Budget Deficit of the Country	Present year amount of BD

10. RESEARCH METHODOLOGY

This study aims to analyze the impact of value added tax on gross domestic production and budget deficit of Sri Lanka and find out the relationship among value added tax, gross domestic production and budget deficit of the Sri Lanka. Researcher ensures that here the data be true and fair because all data was extracted from central bank reports and publication & official website of Inland Revenue - Sri Lanka which are the ultimate organizations of the country and also which are come under high authority of the country.

a) Data Sources

Secondary data were used in this study those secondary data collected from central bank reports of Sri Lanka from 2004 to 2013, Publications of Inland Revenue, text book, journals, magazines and local news papers.

b) Research Design

This study used exploring research design for collecting, analyzing and evaluating quantitative data in the research process to understand the research problem more completely. In this study the priority of the design was given to the quantitative methods because the quantitative research study can only used to answer the research questions as “Do value added tax impact on gross domestic production and budget deficit” and “Is there any relationship among value added tax, gross domestic production and budget deficit” as well answer to the hypothesis of the study.

c) Sampling Frame Work

The secondary data used for the purpose of collecting the main data for the study from the Central Bank of Sri Lanka. The study was considered whole of the Sri Lanka not only for one specific area. Through the judgmental sampling the researcher considered the period from 2004 to 2013 which covers 10 years in the study with very recent period.

d) Reliability and Validity of the Data

The secondary data used in this data, all the relevant data value added tax revenue, gross domestic production and budget deficit from 2004 to 2013 collected from the central bank reports, Sri Lanka. The central bank is the highest authority organization in Sri Lanka to publishing the economical data in Sri Lanka due to that the collected data are reliability and validity data in this study.

e) Methods and Measures

In the quantitative approach, various statistical methods were employed to compare the collected data from the Central Bank Reports. These methods included inferential statistics, which involved in drawing conclusions about a population based only on sample data. It included correlation analysis and single regression analysis.

Descriptive Statistics were carried out to verify the sample characteristics. In a way, Mean, and Standard deviation are used to describe the variables.

Correlation Analysis was used to find out the significant relationship among value added tax, gross domestic production and budget deficit of Sri Lanka.

Regression Analysis was used to find out the significant impact of value added tax on gross domestic production and budget deficit of Sri Lanka. And also the data analysis for the proposed research was performed with the help of the latest SPSS computer package.

11. RESULTS AND INTERPRETATION

a) Descriptive Analysis

Table 2: Descriptive Statistics in Rupees Million

	Range	Maximum	Mean	Std. Deviation	Variance
VAT	130375	250757	191,241.4	42,287.601	1.788E9
GDP	6614039	8673870	4,863,014	2,228,880.55	4.968E12
Budget Deficit	3.58E5	5.16E5	346,919.7	142,896.5	2.042E10

Based on the Descriptive analysis, the Sri Lankan economy had 191,241.4 million LKR value added tax revenue, 4,863,014 million LKR gross domestic production and 346,919.7 million approximately for recent ten years. Due to that, we have to think that whether these achievements are in the effective or not, According to the economic perspective. Sri Lanka is one of the developing countries in south Asian region so Sri Lanka has to

consider south Asian countries' value added tax revenue, gross domestic production, budget deficit, their economic policy on increasing government's revenue, increasing gross domestic production and other macro economic variables such as unemployment rate, inflation rate, per capita income, money supply, economic growth rate and exchange rate for the Sri Lankans stability economic growth. Meanwhile, In terms of economic growth rate, 5 percentage growth level has been achieved by the Sri Lankan economy last recent ten years approximately.

b) Correlation Analysis

Table 3: Correlation Analysis

		VAT	GDP	Budget Deficit
VAT	Pearson Correlation	1	.930**	.839**
	Sig. (2-tailed)		.000	.002
GDP	Pearson Correlation	.930**	1	.925**
	Sig. (2-tailed)	.000		.000
Budget Deficit	Pearson Correlation	.839**	.925**	1
	Sig. (2-tailed)	.002	.000	

Table 3 shows the correlation analysis, according to the correlation analysis it can be seen that value added tax revenue significantly correlated with gross domestic production and budget deficit of the country ($P < 0.01$). Hence the H_1 is accepted.

c) Regression Analysis

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.930 ^a	.866	.849	866033.643	1.471
a. Predictors: (Constant), VAT					
b. Dependent Variable: GDP					

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.871E13	1	3.871E13	51.614	.000 ^a
	Residual	6.000E12	8	7.500E11		
	Total	4.471E13	9			
a. Predictors: (Constant), VAT						
b. Dependent Variable: GDP						

Table 6: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients ^t	Sig.
	B	Std. Error		
1 (Constant)	-4.516E6	1.334E6		-3.386 .010
VAT	49.044	6.827	.930	7.184 .000
a. Dependent Variable: GDP				

According to the table 4, Model Summary adjusted R square (R^2) is 0.849. It means that there is 84.9% impact of the independent variable (value added tax

revenue) on the dependent variable (gross domestic production) and other remaining part did not explain in this study. Above table 5 ANOVA table in the regression analysis which is significant here P value is 0.000. It is below than the level 0.01 or 1%. Therefore, we can conclude that 1% of the impact is in the significant level. From the table 6 coefficients in the regression analysis, beta value between value added tax revenue and gross domestic production of Sri Lanka is 0.930 which is significant at 0.01 levels ($P < 0.01$). Finally, In terms of the Regression analysis, we can come to the conclusion that value added tax revenue is significantly impact on gross domestic production of Sri Lanka. Hence the H_2 is accepted.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.839 ^a	.705	.668	82355.57304	1.855
a. Predictors: (Constant), VAT					
b. Dependent Variable: Budget Deficit					

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.295E11	1	1.295E11	19.095	.002 ^a
	Residual	5.426E10	8	6.782E9		
	Total	1.838E11	9			
a. Predictors: (Constant), VAT						
b. Dependent Variable: Budget Deficit						

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	-195585.85	126850.43		-1.542	.162
	VAT	2.837	.649	.839	4.370	.002

a. Dependent Variable: Budget Deficit

According to the table 7, Model Summary adjusted R square (R^2) is 0.668. It means that there is 66.8% impact of the independent variable (value added tax revenue) on the dependent variable (budget deficit). Above table 8 ANOVA test in the regression analysis which is significant here P value is 0.002. It is below than the level 0.01 or 1%. Therefore, we can conclude that 1% of the impact is in the significant level. From the table 9 coefficients in the regression analysis, Beta value between tax policy changes and tax revenue of Sri Lanka is 0.704 which is significant at 0.01 levels ($P < 0.01$). Finally, In terms of the Regression analysis, we can come to the conclusion that value added tax revenue significantly impact on budget deficit of Sri Lanka. Therefore the H_3 is accepted.

12. CONCLUSION AND RECOMMENDATIONAS

Based on the study value added tax revenue significantly impact on gross domestic production and budget deficit of

Sri Lanka and which are in the significant level. And also, there is significant relationship among value added tax revenue, gross domestic production and budget deficit in the Sri Lanka. Currently budget deficit, instability of the political situation, instability of the price, instability of the nature, economic crisis, unemployment and low gross domestic production are the major issues in many countries. Also Sri Lanka is facing the budget deficit continuously due to that it is one of the major economical problem in the country. Budget deficit of the country mainly depends on two major things such as total government revenue and total government expenses of the country. Here any government cannot avoid its basic expenditure of the country it may be capital expenditure and current expenditure even though some capital expenditures much be needed for the future development of the country as well some current expenditure much be needed for the current survival of the country so the government has to find out the unnecessary capital and current expenditure and take action if it is avoidable, this is one way to reduce budget deficit of the country.

The government also can focus to increase the total revenue of the country to reduce the budget deficit or avoid the budget deficit. There two pars under the government revenue such as tax revenue and non-tax revenue here tax revenue plays a major role in the total government revenue especially indirect tax revenue contribute very high level to the total tax revenue. Under the

indirect tax revenue value added tax revenue is the major one in Sri Lanka. Value added tax is tax on domestic consumption of goods and services. Here high level of the value added tax charging may reduce the gross domestic production of the country. Low domestic production will lead to the low level of value added tax revenue. According to the results of the study value added tax revenue is significantly impact on gross domestic production and the budget deficit of the country. So according to this finding the fiscal policy makers can make effective fiscal policy to increase the tax revenue and budget deficit of the country. Nation building tax (NBT) and economic service charge (ESC) are practicing like same as value added tax so the government fiscal policy makers have to think about these kind of number of tax practice in Sri Lanka because this practices are creating problems under the charging of value added tax, nation building tax and economic service charge. From this study one can be clearly seen that through the effective policy of value added tax, the government can make changes in the gross domestic production as well budget deficit of the country. Furthermore the government should consider the effective functions of the Inland Revenue and try to establish its branches in the every district and take actions to fulfill the available vacancies in the Department of Inland Revenue to increase the tax revenue of the country.

13. FUTURE RESEARCHES

This research has focused only value added tax from tax revenue and gross

domestic production and budget deficit from economic indicators of Sri Lanka from 2004 to 2012.

Therefore further researcher can take the period from the introduction of the value added taxation in Sri Lanka up to the current period for the analysis which study can bring the ultimate findings on the topic of the research as well as researcher may consider other economic indicators of the country for the development of the country.

As much interest researcher in the field of taxation and economy of the country, there are very few research studies in the field of taxation in Sri Lanka which related study much needed for the country especially for developing country due to that the further researcher can do their study in the field of taxation to contribute to the country.

The future researches they may consider the same research topic with similar country as comparative study.

The future researches can do the research in the same heading in other countries to enhance the knowledge in the field.

REFERENCES

Agbeyegbe, Terence, Stotsky J. G. & Wolde M. A. (2004). Trade liberalization, exchange rate changes and tax revenue in sub-Saharan Africal. IMF Working Paper WP/04/178 Washington D.C.: International Monetary Fund. Central Bank of Sri Lanka. Annual Report. Sri

- Lanka: Central Bank of Sri Lanka. (2013).
- Dessai, M.A., Foley, C.F. & Hines, J.R. (2004). Foreign Direct Investment in a World of Multiple Taxl. *Journal of Public Economics*, 88, (pp 2727-2744).
- Economic and Social Statistics of Sri Lanka: Central Bank of Sri Lanka. 2014.
- Eriksen, K. & Fallan, L. (1996). Tax knowledge and attitudes towards taxation: A report on a quasi experimentl. *Journal of Economic Psychology*, 17, (pp387402).
- Glomm,G., & Ravikumar B. (1998). Taxes government spending on education and growthl. *Review of Economic Dynamics* 1, (pp306325).
- Gober J.R. & Burns J.O. (1997). The Relationship between Tax Structures and Economic Indicatorsl. *Journal of International Accounting, Auditing & Taxation*, 6, (pp1-24).
- Hinrich H.H. (1966). A general theory of tax structure change during economic developmentl. Harvard Law School International Tax Program Development.
- Lim, D. (1983). Instability of Government Revenue and Expenditure in Less Developed Countriesl. *World Development*, 11(5), (pp447-450).
- Lymer, A. & Oats, L. (2009). *Taxation: Policy and Practice*, 16th ed. Birmingham: Fiscal Publications.
- Mahdavi S. (2008). The level and composition of tax revenue in developing countries: Evidence from unbalanced panel data. *International Review of Economics and Finance* 17, (pp607617).
- Marsden, K. (1983). Links between taxes and economic growthl. World Bank Staff Working Paper Number 605, the World Bank, Washington.
- McKerchar, M. (2007). Tax complexity and its impact on tax compliance and tax administration in Australial 2007 IRS Research Conference, June 13 and 14, Georgetown University Law Center.

DIVIDEND PAYOUT AND FIRM PERFORMANCE: A STUDY OF LISTED MANUFACTURING COMPANIES IN COLOMBO STOCK EXCHANGE, SRI LANKA

Revathan, T., Madhuwanthi, W.M.D., Aspara,J., Dharmadasa,M.S.P ., Justin
Shanthan, J., Kawitha, V., Nilushan, P.,Priyadarshani,N.R.N.,Pirathap, A.,
Pankajarani,V., &SapesanS.

ABSTRACT

Several theories have been documented on the relevance and irrelevance of dividend policy. The main purpose of this study is to establish the relationship between dividend payout and firm performance among listed manufacturing firms in the Colombo Stock Exchange (CSE). The correlation analysis carried out to find out the relationship of dividend payout and the profitability ($r = 0.487$) and the results of the regression analysis exposed identity the impact of dividend payout on profitability ($R^2 = 0.237$). Consequently their relationship was also moderate and positive. The findings indicated that dividend payout was a crucial factor affecting firm performance. Managers should offer tolerable time in designing a dividend payout that will enhance firm performance.

Keywords: *Dividend Payout, Firm Performance, Colombo Stock Exchange.*

1. INTRODUCTION

The dividend payment is one of the most important decisions in any organization in order to achieve efficient performance, and the issue of dividend policy is a very important one in the current business environment.

Dividend policy is therefore, considered to be one of the most important financial decisions that corporate managers encounter (Baker and Powell, 1999). It has

potential implications for share prices and hence returns to investors, the financing of internal growth and the equity base through retentions together with its gearing and leverage Omran&Pointon, (2004). Frankfurtet&McGoun (2000) concluded that the dividend puzzle, both as a share value-enhancing feature and as a matter of policy is one of the most challenging topics of modern financial economics. Mizuno (2007) agrees to the fact that a firm ought to pay dividends to shareholders if it cannot

identify suitable investments which would bring higher returns than those expected by the shareholders.

Researchers have different views about whether dividend payout materially affects the long term share prices. Dhanani, (2005) who used a survey approach to capture managerial views and attitudes of corporate managers regarding dividend policy found that dividend policy serves to enhance corporate market value. However, Farsio, Geary & Moser(2004) argues that empirical studies that conclude a causal relationship exists between earnings and dividends are based on short periods of time and are therefore misleading to potential investors. Therefore, dividends have no explanatory power to predict future earnings. This research therefore tries to establish whether a relationship exists between dividend payout and firm performance.

The signaling theory proposes that dividend policy can be used as a device to communicate information about a firm's future prospects to investors. Cash dividend announcements convey valuable information, which shareholders do not have, about management's assessment of a firm's future profitability thus reducing information asymmetry. Investors may therefore use this information in assessing a firm's share price. Dividend policy under this model is therefore relevant Al-Kuwari(2009).

A company's dividend policy has implications for many parties such as managers, investors, lenders and other

stakeholders. Through dividends investors can value a company and for them it is a regular income whether declare today or at some future date. Dividend policy also has implications for managers because when they distribute dividends they will have fewer funds available to invest in projects, thus their investment decision depends on dividend policy. For lenders the more a company declares dividends the fewer amounts will remain for lenders claim. Generally the study is planned to find out the association between dividend payout and firm performance.

2. RESEARCH PROBLEM

Despite the numerous studies Arnott&Asness 2003; Farsio et al 2004 and Nissim&Ziv(2001) that have been done, dividend policy remains an unresolved issue in corporate finance. Several theories have been proposed to explain the relevance of dividend policy and whether it affects firm value, but there has not been a universal agreement Stulz, 2000; Pandey, 2003; DeAngelo&DeAngelo (2006). Researchers Amidu (2007), Lie (2005), Zhou & Ruland (2006), Howatt et al. (2009), continue to come up with different findings about the relationship between dividend payout and firm performance. A study by Amidu (2007) revealed that dividend policy affects firm performance as measured by its profitability. The results showed a positive and significant relationship between return on assets, return on equity, growth in sales and dividend policy. Howatt et al. (2009) also concluded

that positive changes in dividends are associated with positive future changes in earnings per share. In contrast, Lie (2005) argues that there is limited evidence that dividend paying firms experience subsequent performance improvements.

A number of studies Arnott&Asness 2003; Farsio Geary, A., & Moser, J. (2004) and Nissim&Ziv(2001) have been done with regard to dividend policy and firm performance, especially in developed economies. Can the findings of those studies Aivazian, Booth & Clearly (2003) and Al-Haddad, et al., (2011) be replicated in developing countries? In Sri Lanka, few empirical studies have been done to establish the relationship between dividend payout and firm profitability. This study therefore comes in to fill the gap by establishing whether there is a relationship between dividend payout and firm profitability among listed manufacturing companies in Sri Lanka.

3. RESEARCH QUESTIONS

The research was guided by the following research questions;

1. What relationship exists between dividend payout and firm performance among listed manufacturing companies in Sri Lanka?
2. What is the extent of the relationship between dividend payout and firm performance?

4. RESEARCH OBJECTIVES

The general objective of the research was to establish the relationship between dividend payout and firm performance among listed companies in Sri Lanka. The following specific research objective is;

1. To identify the impact of dividend payout on firm performance.

5. REVIEW OF LITERATURE

This chapter focuses on previous studies done by various authors in relation to dividend policy and firm performance. The chapter is divided into three sections. The first section gives a definition for dividends and dividend policy. The second section discusses the key theoretical considerations from previous studies to inform the general and specific objectives developed for this study, that is, dividend policy and firm performance; extend of their relationship; factors that affect dividend policy and forms of dividend policy used by listed firms. The third section gives a brief description of the research methodologies used by previous studies in attaining their objectives.

5.1. Theoretical Framework

5.1.1. Bird-in-the-hand theory

The "Bird in Hand" theory of Gordon (1962) argues that outside shareholders prefer a higher dividend policy. They prefer a dividend today to a highly uncertain capital gain from a questionable future investment.

A number of studies demonstrate that this mode fails if it is posited in a complete and perfect market with investors who behave according to notions of rational behavior (Miller and Modigliani, 1961; Bhattacharya, 1979).

5.1.2. Agency theory

Even if a firm does not have free cash flow, dividend payments can still be useful for the shareholders in order to control the overinvestment problem. Easterbrook (1984) argues that dividends reduce the over investment problem because the payment of dividends increases the frequency with which firms have to go to equity markets in order to raise additional capital. In the process of attracting new equity, firms subject themselves to the monitoring and disciplining of these markets. This lowers agency cost.

5.2. Empirical studies

Arnott & Asness (2003) suggested that the positive relationship between current dividend payout and future earnings growth is based on the free cash flow theory. Low dividend resulting in low growth may be as a result of suboptimal investment and less than ideal projects by managers'with excess free cash flows at their disposal. This is prominent for firms with limited growth opportunities or a tendency towards overinvestment. Paying substantial dividends which in turn would require managers to raise funds from issuance of shares, may subject management to more scrutiny, reduce conflicts of interest and thus curtail

suboptimal investment (Arnott&Asness, 2003).This is based on the assumption that suboptimal investments lays the foundation for poor earnings growth in the future whereas discipline and a minimization of conflicts will enhance growth of future earnings through carefully chosen projects. Therefore, paying dividends to reduce the free cash flows enhances the performance of a company since managers will have less cash flow thus avoiding suboptimal investments. This is also consistent with the agency cost theory.

Another explanation by Arnott & Asness (2003) for the positive relationship between dividend payout and growth in future earnings is that managers are reluctant to cut dividends. A high payout ratio indicates management's confidence in the stability and growth of future earnings and allows payout ratio suggests that management is not confident of the stability of earnings or sustainability of earnings growth (Arnott&Asness, 2003). Managers therefore pay low dividends to avoid dividend cuts when earnings drop. The positive relationship is also driven by sticky dividends combined with mean reversion in more volatile earnings (Arnott&Asness, 2003). The temporary increases and decreases in earnings subsequently reversed cause the payout ratio to be positively correlated with future earnings growth. Their robustness check for the mean reversion of earnings suggested that earnings seem to revert to the mean but may revert most strongly in terms of their ratio to dividends.

Velnampy (2006) examined the financial position of the companies and the relationship between financial position and profitability with the sample of 25 public quoted companies in Sri Lanka by using the Altman Original Bankruptcy Forecasting Model. His findings suggest that, out of 25 companies only 4 companies are in the condition of going to bankrupt in the near future. He also found that, earning/total assets ratio, market value of total equity/book value of debt ratio and sales/total assets in times are the most significant ratios in determining the financial position of the quoted companies.

Velnampy (2013) in his study of corporate governance and firm performance” with the samples of 28 manufacturing companies using the data representing the periods of 2007/2011 found that determinants of corporate governance are not correlated to the performance measures of the organization. Regression model showed that corporate governance doesn't affect companies' ROE and ROA.

Nissim & Ziv (2001) showed that dividend increases were directly related to future increases in earnings in each of the two years after the dividend change. Likewise, Zeckhauser & Pound (1990) in a related study found out that there is no significant difference among dividend payouts with or without large block shareholders.

Velnampy and Nimalathasan (2009) investigated the association between organizational growth and profitability of

Commercial bank Ltd in Sri Lanka over the period of 10 years from 1997 to 2006. They found that, sales are positively associated with profitability ratios except operating profit, return on equity and number of depositors are negatively correlated to the profitability ratios except operating profit and return on equity. Likewise, number of advances is also negatively correlated to the return on average shareholders' funds.

A firm's dividend policy is seen as a major determinant for a firm's performance Brigham (1995). Similarly, Zakaria and Tan (2007) also stressed the fact that investments made by firms influence the future earnings and future dividends Potential.

Miller & Modigliani (1961) argued that under certain simplifying assumptions, the dividend decision does not affect the value of a firm and is, hence, unimportant. Yet, traditional wisdom with changed postulations advocates that a properly managed dividend policy is vital to shareholders because it can affect share prices and shareholder's wealth. This argument is based upon two assumptions that there is no tax disadvantage to an investor to receiving dividends, and the second is that firms can raise funds in capital markets for new investments without bearing significant issuance costs. The proponents of the second school feel that dividends are bad for the average stockholder because of the tax disadvantage they create, which results in lower value. Finally, there are those in a third group who

argued that dividends are clearly good because stockholders like them.

Thus, despite voluminous research on dividends, corporate managers and financial economists still face what Black (1976) once described as a dividend enigma with pieces that just don't seem to fit.

Mehdi, Hassan and Abouzar () pointed the impact of corporate governance on dividend policy within the context of Iran. A sample of 85 firms has been selected from all Iranian firms listed on the Tehran Stock Exchange during is significant and positive but the relationship between ownership concentration and dividend payout did not find.

Samuel KwakuAgyei, Edward Marfo-Yiadom (2011) examined the relationship between dividend policy and performance of banks in Ghana. The study used panel data constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. These financial statements were obtained from the Banking Supervision department of Bank of Ghana. STATA was used for the data analysis. Indicate that banks pay dividend increase their performance. Generally, the result is shown that dividend policy has an effect on firm value.

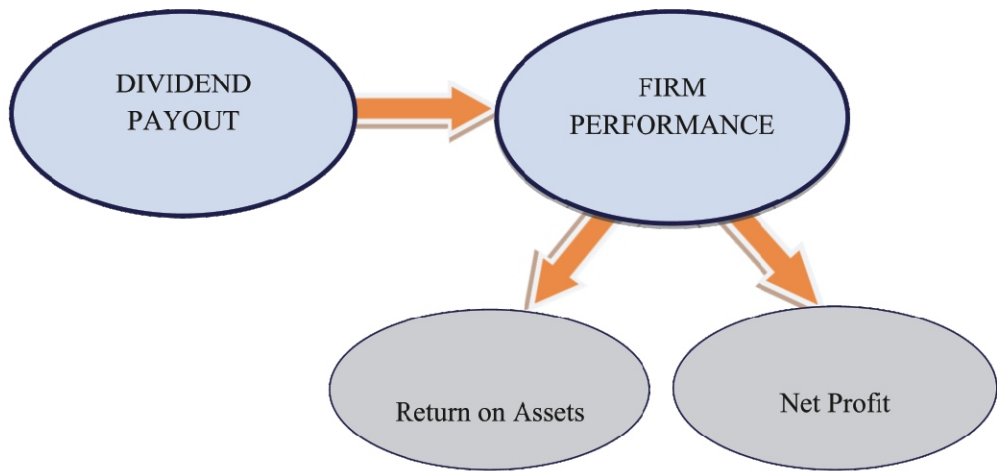
A study by Amidu (2007) revealed that

dividend policy affects firm performance as measured by its profitability. The results showed a positive and significant relationship between return on assets, return on equity, growth in sales and dividend policy.

Zeckhauser& Pound (1990) revealed that found out that there is no significant difference among dividend payouts with or without large block shareholders. In addition, Kouki & Guizani (2009), and Kumar (2006) also observed in their study that managerial ownership appears to have a visible and significant effect on dividend payout.

Oskar, Ivan, Oleksandr, Diw (2007) Investigated that two perspectives. First, explore the determinants of the dividend policy in Poland. Second, test whether corporate governance practices determine the dividend policy in the non- financial companies listed on Warsaw Stock Exchange. The findings are based on the period 1998-2004. Quantitative measures on the quality of the corporate governance for 110 non-financial listed companies. These results suggest that dividends may signal the severity of conflicts between controlling owners and minority shareholders. Those dividends in Poland have less of a signaling role than in the developed capital markets.

CONCEPTUAL FRAME WORK



Source: Developed by researcher

Figure-1 : Conceptual frame work

5. HYPOTHESES OF THE STUDY

The following hypotheses were taken for the study

- H₁:** There is significant relationship between the dividend payout and firm performance.
- H_{1a}:** There is significant relationship between the dividend payout and return on assets.
- H_{1b}:** There is significant relationship between the dividend payout and net profit.
- H₂:** There is a significant impact of dividend payout on firm performance.
- H_{2a}:** There is a significant impact of dividend payout on return on assets.
- H_{2b}:** There is a significant impact of dividend payout on net profit.

6. METHODOLOGY

The present study used secondary data for the analysis. The data utilized in this study is extracted from the comprehensive income statements, cash flow statement and financial position of the sample listed manufacturing companies in Colombo Stock Exchange (CSE) database.

6.1. Sampling Design

Sampling design is a definite plan for obtaining a sample from a given population. The sample of this study consists of 12 listed manufacturing companies in Colombo Stock Exchange (CSE).

6.2. Mode of Analysis

In the present study, we analysed our data by employing correlation; multiple regressions & descriptive statistics. For the study, entire analysis is done by personal computer. A well-known statistical package like 'Statistical Package for Social Sciences'

(SPSS) 16.0 Version and Microsoft excel 2010 was used in order to analyze the data. The following liquidity and profitability ratios are taken into accounts which are given below.

Table 6.1: Calculations of Dependent and Independent variables

Dependent Variable	
Net Profit (NPT)	=Net Profit After Tax (NPT) / Total Revenue (TR)*100
Return on Assets (ROA)	=Net Profit After Tax (NPT)/Total Assets(TA)*100
Independent Variable	
Dividend Payout (DIVP)	= Total Amount of Dividend Paid during the Particular Period

Source: Developed by researcher

Multiple regression analysis was performed to investigate the impact of dividend payout on firm performance. Which the model used for the study is given below.

$$ROA = f(DIVP)$$

$$NPT = f(DIVP)$$

It is important to note that the Return on Assets (ROA) depends upon Dividend Payout (DIVP) and Net Profit (NPT) depends upon Dividend Payout (DIVP). The following model is formulated to measure the impact of dividend payout on Profitability.

$$ROA = \alpha_0 + \alpha_1 DIVP + e \text{----- (1)}$$

$$NPT = \alpha_0 + \alpha_1 DIVP + e \text{----- (2)}$$

Where,

- ROA Return on Assets
- DIVP Dividend Payout
- NPT Net Profit
- Regression Co-efficient
- Error Margin

7. RESULTS & ANALYSIS

7.1. Correlation, Regression and Reliability Analysis

Table 7.1. Correlation, Regression and Reliability Value

	DIVP	ROA	NPT
DIVP Pearson Correlation Sig. (2-tailed)	1		
ROA Pearson Correlation Sig. (2-tailed)	.487**	1	
NPT Pearson Correlation Sig. (2-tailed)	.394**	.793**	1

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

Source: SPSS output

The above mentioned table indicates the relationship between the independent and various dependent variables used in the study. As it is observed in the table, the correlation values were found to be positive between the variables. Return on assets and net profit have 48.7% and 39.4% relation (moderate positive) with dividend payout respectively. Which are significant at 1 percent level of significance.

8. REGRESSION

Table 8.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487 ^a	.237	.224	6.77983

a. Predictors: (Constant), DIVP

source: SPSS output

Regression analysis is used to test the impact of dividend payout on firm performance of the listed manufacturing companies in CSE. As we mentioned in mode of analysis, a model was formulated and the results are summarized in the above Table-10.1.

The specification of the variable ROA in the above model revealed the ability to predict firm performance ($R^2 = 0.237$). In this model R^2 value of above mentioned profitability measures denote that 23.7 % to the observed variability it can be explained by the differences in independent variability namely dividend payout. The remaining 76.3

% are not explained, because the remaining part of the variance in firm performance is related to other variables which are not depicted in the model.

An examination of the model summary in conjunction with ANOVA (Fvalue) indicates that the model explains the most possible combination of predictor variable that could contribute to the relationship with the dependent variables. Model created by the researcher is significant at 5% level of significance. F value is 18.010 and respective P value is 0.000 which is statistically significant at 5 percent level of significance. In this case it reveals that only DIVP has a significant impact on ROA at 5 percent level of significance. However, it should be noted here that there may be some other variables which can have an impact on firm performance, which need to be studied. In addition to the above analysis Durbin-Watson test also carried out to check the auto correlation among the dependent variables.

Table 8.2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.394 ^a	.155	.140	20.03611

a. Predictors: (Constant), DIVP

source: SPSS output

Regression analysis is used to test the impact of dividend payout on firm performance of the listed manufacturing

companies in CSE. As we mentioned in mode of analysis, a model was formulated and the results are summarized in the above Table-8.2

The specification of the variable ROA in the above model revealed the ability to predict firm performance ($R^2 = 0.155$). In this model R^2 value of above mentioned profitability measures denote that 15.5 % to the observed variability it can be explained by the differences in independent variability namely dividend payout. The remaining 84.5 % are not explained, because the remaining part of the variance in firm performance is related to other variables which are not depicted in the model.

An examination of the model summary in conjunction with ANOVA (Fvalue) indicates that the model explains the most possible combination of predictor variable that could contribute to the relationship with the dependent variables. Model created by the researcher is significant at 5% level of significance. F value is 10.636 and respective P value is 0.002 which is statistically significant at 5 percent level of significance. In this case it reveals that only DIVP has a significant impact on ROA at 5 percent level of significance. However, it should be noted here that there may be some other variables which can have an impact on firm performance, which need to be studied. In addition to the above analysis Durbin-Watson test also carried out to check the auto correlation among the independent variables.

9. HYPOTHESES TESTING

Table 9.1: Testing of Hypotheses

NO	Hypotheses	Results	Tools
H ₁	There is significant relationship between the dividend payout and firm performance.	Accepted	Correlation
H ₂	There is a significant impact of dividend payout on firm performance.	Accepted	Regression

Source: Developed by researcher

10. CONCLUSION

This study basically looked at dividend payout and firm performance in Sri Lanka. The study came up with findings that are of salient importance to scholars investigating dividend issues in the Sri Lankan context. Based on the hypotheses, the study observed that dividend payout has a significant impact on the firm performance of listed firms in Sri Lanka. That is, an increase in the financial welfare of a firm inclines to positively affect the dividend payout level of firms. Findings from these hypotheses assure that there is a significant positive relationship between dividend payout and the firm performance. Also second hypothesis say that dividend payout has significant impact on firm performance of the listed manufacturing

firms in the Colombo Stock Exchange (CSE).

11. LIMITATIONS & SCOPE FOR FURTHER RESEARCH

The study suffers from certain limitations which are mentioned below.

1. As the study is purely based on listed manufacturing companies in Sri Lanka.
2. Furthermore, data representing the period of 5 years were used for the study.

An important limitation to this paper is the period for which the data is sampled. The sample horizon for this study is short compared to other samples in the literature. To address this limitation, future research can increase the sample size. Finally, it would be of interest if future research can investigate how profitability and dividend policy will be affected by changes in tax policy, pattern of past dividends, legal rules, financial leverage, opportunities, growth stage and capital structure. Other factors such as ownership structure, shareholder's expectations, tax position of shareholders, industry practice growth stage capital structure and access to capital markets can also be considered in designing a dividend policy though they affect dividend to a moderate extent.

REFERENCES

Al-Haddad, W. et al. (2011). The effect of dividend policy stability on the Performance of banking sector.

International Journal of Humanities and Social Science, 5(1).

Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana stock Exchange. *Investment Management and Financial Innovations*, 4(2), 104-112.

Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana stock Exchange. *Investment Management and Financial Innovations*, 4(2), 104-112.

Arnott, D. R., & Asness, S. C. (2003). Surprise higher dividends are higher earnings growth. *Financial Analysts Journal*, 70-87.

Baker, H. K., & Powell, G. E. (1999). How corporate managers view Dividend policy? *Quarterly European Scientific Journal* May edition vol. 8, No.9 ISSN: 1857-7881 (Print) e - ISSN 1857-7431-214.

Miller, M. H., and Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares, *Journal of Business* 34, 411-433. Doi: 10.1086/294442, <http://dx.doi.org/10.1086/29444>.

Nissim, D. & Ziv, D. (2001) "Dividend changes and future profitability", *Journal of Finance*, vol. 56 (6): 2111-2133.

- Nissim, D. & Ziv, D. (2001) "Dividend changes and future profitability", *Journal of Finance*, vol. 56 (6): 2111-2133.
- Samuel Kwaku Agyei, Edward Marfo-Yiadom (2011) Dividend Policy and Bank Performance in Ghana, *International Journal of Economics and Finance* Vol. 3, No. 4; September 2011.
- Velnampy, T. (2005). A Study on Investment Appraisal and Profitability. *Journal of Business Studies*, 2, 23-35.
- Velnampy, T. (2013). Corporate Governance and Firm Performance: A Study of Sri Lankan Manufacturing Companies. *Journal of Economics and Sustainable Development*, 4(3), 228-235.
- Velnampy, T., & Nimalathasan, B. (2008). An association between organizational growth and profitability: A study of commercial bank of Ceylon LTD Sri Lanka. *Annals of University of Bucharest, Economic and Administrative Series*, (2), 46-57.
- Zeckhouser R.J. & Pound, J. (1990) "Are large shareholders effective monitors? An investigation of share ownership and corporate performance", in Hubbard, R.G. (ed.), *Asymmetric information, corporate finance and investment*, Chicago: The University of Chicago Press.

IMPACT OF CAPITAL STRUCTURE ON FIRM VALUE: EVIDENCE FROM LISTED MANUFACTURING COMPANIES ON COLOMBO STOCK EXCHANGE (CSE) IN SRILANKA

Mathanika .T, Virginia Vinothini. A.G, & Paviththira.R

ABSTRACT

Capital structure is most significant discipline of company's operations. This study is an attempt to investigate the impact of capital structure on a firm's value of listed manufacturing companies on Colombo Stock Exchange (CSE) in Sri Lanka. We used secondary data from 15 manufacturing companies on using Random sampling method. Correlation and multiple regression analysis techniques were used to analyses the impact of capital structure on firm value. Debts to equity ratio have significant influence on firm value but debts to total assets have not significantly associated with firm value. The study finding leads to the conclusion that the equity ratio, and debt ratio have significant impact on Firm Value of the Companies. The researcher proved that these findings are supported the prior empirical findings.

Keywords: *Capital Structure, Firm Value, Colombo Stock Exchange (CSE).*

1. INTRODUCTION

A company applies its assets in its business to generate a stream of operating cash flows. The capital structure of a firm is actually a mix of different securities. In general, a firm can choose among alternative capital structures. After paying taxes, the firm makes distributions to the providers of its capital and retains the balance for use in its business. If a company has equity capital the entire after-tax Operating cash flow for

each period accrues to the benefit of its shareholders (in the form of dividend and retained earnings). If instead the company has borrowed a portion of its capital, it must dedicate a portion of the cash flow stream to service this debt. Moreover, debt holders have the senior claim to a company's cash flow; shareholders are only entitled to the residual. The company's choice of capital structure determines the allocation of its operating cash flow each period between

Students Department of Financial Management University of Jaffna, Sri Lanka.

E mail: tmathanika@gmail.com, virginiaanton2@gmail.com, paviththirarajendram@gmail.com