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"I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or a Diploma in any University or other institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text."

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Date: 06.05.2014

*Thesis submitted to the Department of Mathematics for the Degree of Master of Science in Financial Mathematics.*

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## **ACKNOWLEDGEMENT**

This is an outcome of a collection of long term perennial efforts.

It is a gigantic achievement in my life.

However,

My Dear Sirs,

**Mr.T.M.J.A.Cooray**

**Mr.S.Sivaragasingham**

**Mr.RohanaDisanayaka**

**&**

**Dr. M.M.Jayawardena**

You are the pillars of my achievement

Giving me

Enthusiasm, Encouragement, Supervision and Guidance.

Therefore,

This is the tribute to commemorate your paramount support given to me.

Since

This is never become an achievement in my life

Without your presence

## ABSTRACT

The relationship between economic growth and public expenditure has been debated in the literature of Macro Economics and Public Finance over the decades. When a country achieves a higher economic growth through the liberalization, modernization of economic policies it is crucial to understand the impact of the movement of government participation in the economy. Therefore, the relationship between economic growth and public expenditure is analyzed in this study, the Wagner's Law (1883) using annual real terms of public expenditure and GDP (Gross Domestic Product) data for the period of 1960 – 2011 in the Sri Lankan context.

The time series properties of each series are tested using the unit root test procedure. Then the series are tested for the long run relationship (Cointegration) using the Engle Granger method (EG Method). With the evidence of the long run relationship between GDP and various definitions of public expenditure, the Error Correction Model (ECM) is employed in order to check for short run dynamics of the relationship. Furthermore, Granger causality test is applied to check for the direction of causal relationship. The Granger causality test results of real terms of series show that there is no existence of Wagner's Law becoming consistent with earlier findings.

The evidence of the study with the aggregate data in real terms from the period 1960 - 2011 is proved that, although country leads to economic growth, government activities are not stimulated by the economic growth in Sri Lanka. Further, there is no validity of Wagner's Law which is positive causal relationship from GDP to public expenditure.

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## LIST OF ABBREVIATIONS

ADF	:	Augmented Dicky Fuller
AIC	:	Akaike Information Criteria
ARDL	:	Auto Regressive Distributed Lag
CEXP	:	Consumption Expenditure
DF	:	Dickey Fuller
EG	:	Engle Granger
ECM	:	Error Correction Method
EU	:	European Union
EXP	:	Expenditure
FPE	:	Final Prediction Error
GDP	:	Gross Domestic Product
GNP	:	Gross National Product
HQ	:	Hannan – Quinn
HDI	:	Human Development Index
IMF	:	International Monetary Fund

LR	:	Largrangian Ratio
NCEXP	:	Nominal Consumption Expenditure
NEXP	:	Nominal Expenditure
OECD	:	Organization of Economic Co – Operation and Development
PMG	:	Pooled Mean Group
PEXP	:	Per Capita Expenditure
PGDP	:	Per Capita Gross Domestic Product
PNEXP	:	Per Capita Nominal Expenditure
PP	:	Phillip Peron
REXP	:	Real Expenditure
RGDP	:	Real Gross Domestic Product
SIC	:	Schwarz Information Criteria



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