

**IMPACT OF FINANCIAL DEVELOPMENT ON  
ECONOMIC GROWTH:  
CAUSAL EVIDENCE FROM SRI LANKA**

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(07/8505)



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Degree of Master of Science

Department of Mathematics

University of Moratuwa

Sri Lanka

November 2012



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## Abstract

At the end of a civil war which has lasted over three decades in Sri Lanka, economy of the country has started to improve. Therefore, it would be interesting for the policy makers to identify how the economic growth has reacted to the financial development indicators. Economic growth was represented by Nominal Per Capita Gross Domestic Product (*GDP*) and the financial development indicators were represented by Ratio of Narrow Money to Nominal Per Capita GDP (*MNSPI*), Ratio of Broad Money to Narrow Money (*M2M<sub>1</sub>*), Ratio of Private Sector Credit to Nominal Per Capita GDP (*PSCR*) and Ratio of Private Sector Credit to Total Domestic Credit (*PCTC*). Various econometric tests were used to identify the nature of both long and short term impact on GDP using annual data of the corresponding variables from 1977 to 2010.

Augmented Dickey-Fuller and Phillips-Perron unit root tests confirmed that none of the series is stationary at level zero. This confirms that there is short-term and long-term relationship among financial indicators as well financial indicators with GDP. Johansen's Multivariate Cointegration and Vector Error Correction Modelling (VECM) indicated that the selected financial development indicators significantly impact either short or long term on the GDP of the country. The Ratio of Private Sector Credit to Nominal Per Capita GDP and the Ratio of Private Sector Credit to Total Domestic Credit showed strong significant negative impacts on Per Capita Gross Domestic Product. The Ratio of Narrow Money Supply on Nominal Per Capita GDP showed significantly negative impact on Per Capita Gross Domestic Product. The results would be useful how business and industry played on the economy of the country since 1977 and also to Central Bank to maintain low inflation and a low level of unemployment in the country without artificially influencing the demand for goods by increasing or decreasing the nation's money supply.

**Keywords:** *Economic Growth, Financial Development, Unit roots, Cointegration, Vector Error Correction Model, Variance Decomposition, Impulse Response Functions, Causality*

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## LIST OF ABBREVIATIONS

Abbreviation	Description
ADF	Augmented Dickey-Fuller
CV	Coefficient of Variation
DLNGDP	First difference of GDP
DLNMNSP1	First difference of MNSP1
DLNM2M1	First difference of M2M1
DLNPSCR	First difference of PSCR
DLNPCTC	First difference of PCTC
FDI	Foreign Direct Investment
GDP	Nominal Per Capita Gross Domestic Product
IRF	Impulse Response Function
LNGDP	Natural logarithm of GDP
LN MNSP1	Natural logarithm of MNSP1
LN M2M1	Natural logarithm of M2M1
LN PSCR	Natural logarithm of PSCR
LN PCTC	Natural logarithm of PCTC
MNSP1	Ratio of Narrow Money ( $M_1$ ) to Nominal Per Capita GDP
M2M1	Ratio of Broad Money ( $M_2$ ) to Narrow Money ( $M_1$ )
OLS	Ordinary Least Squares
PCTC	Ratio of Private Sector Credit to Total Domestic Credit
PP	Phillips-Perron
PSCR	Ratio of Private Sector Credit to Nominal Per Capita GDP
SIC	Schwarz Information Criterion
USD	United States Dollar
VAR	Vector Autoregression
VDC	Varaince Decomposition
VECM	Vector Error Correction Model



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