Study of the Relationship between Construction Sector and Economic Growth in Sri Lanka

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This is dedicated

to

The Department of Building Economics

For the

Valuable opportunity given

Declaration

I hereby declare that this submission is my own work, and that to the best of my knowledge and belief, it contains neither materials previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institute of higher studies, except where an acknowledgement is made in the text.

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Lists of Abbreviations

GDP	Gross Domestic Product
GDFCF	Gross Domestic Fixed Capital Formation
CGDFCF	Construction Gross Domestic Fixed Capital Formation
GR	Growth Rate
R	Regime
IO	Input-Output
VA	Value Added
CVA	Construction Value Added
IMF	International Monetary Fund
SL	Sri Lanka
USA	United States of America
ISA	Import Substitution in Agriculture
ISI	Import Substitution in Industry

Abstract

Many researchers have found that the construction industry is always been closely related to the national economy. This study investigates the relationship between construction sector and the economy of Sri Lanka in three different ways as follows; the causal relationship, change of economic policies, and linkages using data from Sri Lanka over the period of 1950-2004. The relationships were primarily found through secondary data analysis using Granger causality, Policy archetypes, and Input–output analysis.

The results of the Granger causality test shows that the construction in capital formation causes GDP and not vice versa. This could be justified for a developing country like Sri Lanka as it is essential to have high rate of investment for rapid economic growth, and as construction constitutes around 50% of this investment, it is expected that if there is a growth it must be accompanied by a rapid expansion of activity in the construction sector. Further, the results show that construction leads GDP by one year as in general construction product takes one to two years to procure.

Further, the study proves that the relationship between the policy regimes and the economic growth and construction growth is significant. When policies are "interventionist cluster" type it showed less economic growth and construction growth. That is when the government involvement is high in economic activities, they neither supported construction sector nor the overall economy. On the other hand, Non-interventionist general type could be attributed to high performance in both construction sector and economy. This is true because when government influence on taxes, regulatory measures are loses, it attracts private sector investors and thereby it favoured construction sector and the overall economy. In Sri Lankan economy the period of 1956-1965, and 1970-1977 characterized as interventionist cluster type caused very low growth in construction. The period of 1965-1970 showed highest growth in both construction and economy due to implementation of major developments. In addition, increase loan limit, number of land acquisitions also caused increased growth. The period of 1948-1956 agriculture based economy with less government involvement (non-interventionist sector) recorded high growth in

construction due to the significant amount of public investment in irrigation, colonization schemes, government buildings such as schools, hospitals and other projects related to development of economic and social infrastructure.

The research reveals that the construction sector indicates an above average, significant backward and forward linkage in the forty-eight sector economy of year 2000. In Sri Lanka, the backward linkage indicator ranges between 0.364-0.457 during the period of 1970-2000 while output multiplier ranges between 1.496-1.641 indicating that the "pull effect'' of the Sri Lankan construction sector. The "push effect" has been very insignificant until 1995. However, in year 2000, it significantly increased indicating the development of repair and maintenance sub sector. An aggregated sectoral analysis reveals high dependence of construction on manufacturing followed by services. The trend analysis shows an increasing dependence of construction on the services sector. The direct and total inputs from manufacturing and services have increased over time.

Keywords: National Economy, Granger causality, Input–output Analysis, Construction Sector, Backward and Forward Linkages, Linkages, Sri Lanka