

## CHAPTER-11

### SUMMARY AND CONCLUSION

#### 11.1 Introduction:

The relationship between economic growth and export growth has been studied for the economy of Sri Lanka over the period 1970-2005 in chapter-4 through chapter-10. A summary of the main findings on different aspects of such relationship is being presented below.

#### 11.2 Stationarity:

It has been observed in chapter-4 that

(i) both income growth ( $Y_t$ ) and export growth ( $X_t$ ) series are stationary at level. So  $Y_t \sim I(0)$  and  $X_t \sim I(0)$ .

(ii) both the series are free from any deterministic trend, and

(iii) both the series do not contain any structural shift.

#### 11.3 Long-Run Relationship:

Income growth ( $Y_t$ ) and export growth ( $X_t$ ) being stationary, there did exist long-run relationship between them.

#### 11.4 Stability of the Lon-Run Relationship:

It has been observed in chapter-5 that in the economy of Sri Lanka over the period 1970-2005.

(i) *the long-run relationship, that economic growth maintained with export growth, was stable. The shocks, transmitted through income growth channel, had no significant dis-stabilizing impact on the long-run relationship. Consequently, the short-run dynamics of income growth defined an 'equilibrium' process.*

(ii) *the long-run relationship, that export growth maintained with income growth, was stable. The shocks, transmitted through export growth channel,*

*failed to exert any appreciable impact on the long-run relationship. Consequently, the short-run dynamics of export growth defined a 'stable equilibrium process'.*

*(iii) there did exist 'Uni-directional' short-run Granger Causality running from export growth to income growth.*

*(iv) income growth, consequently, failed to Granger cause export growth in the short-run. Income growth emerged as an exogenous variable in the equation (5.2) for export growth.*

### **11.5 Causal Relation:**

The findings in our study with the VAR Model in Chapter 6 indicate that in the economy of Sri Lanka over the period of study

*(i) economic growth Granger Caused export growth,*

*(ii) export growth failed to Granger Cause economic growth.*

*Consequently, the economy of Sri Lanka was marked by the presence of 'Uni-directional Causality' running from economic growth to export growth over the period 1970-2004.*

### **11.6 Findings from the Study of Impulse Response Functions :**

It is observed from the findings in Sec. 7.3- 7.9 that

*(i) export shocks were the predominant cause behind the short-run variations in export growth.*

*(ii) export shocks generated significant short-run variations in income growth*

*(iii) the shocks, transmitted through export growth seemed to distort the equilibrium base of economic growth. Consequently, export shocks were long-lived for economic growth.*

*(iv) shocks transmitted through the channels of economic growth and export growth failed to change the equilibrium base of export growth. Consequently, for export growth both these shocks were short-lived.*

### **11.7 Findings from the Study of Variance Decomposition:**

It is observed in Secs 8.3-8.5 that

(i) export shocks were more important than income shocks in accounting for short-run variations in export-growth

(ii) export shocks were less important than income shocks in accounting for short-run variations in income growth.

These two observations also testify for no causal relationship between export growth and income growth in the economy of Sri Lanka over the period 2006-2025.

### **11.8 Findings from the Study of Spectral Analysis:**

In the 'Spectral Analysis

*(i) 'Univariate Periodograms' for Y and X, confirm that Y and X are 'Stationary' i.e,  $Y \sim I(0)$  and  $X \sim I(0)$*

*(ii) 'Univariate Spectra' confirm absence of periodicity in Y and X across all frequency levels and the incidence of statistically insignificant auto-regressive structure for the endogenous variables in the VAR model studied in chapter-5*

*(iii) the 'Cospectrum' for Y and X exhibit 'periodicity' at frequency 0.25; This confirms that Y and X are 'Cointegrated' and the long-run relationship between Y and X is 'Stable'*

*(iv) the 'Coherence Spectrum' for Y and X confirms that there did exist strong 'Coherence' in their comovements over the period of study*

*(v) the 'Gain Spectrum' for the variables confirms the existence of 'Unidirectional Granger Causality' from Export Growth to Economic Growth over the period of study.*

*(vi) the 'Phase Spectrum' for the variables further confirms that Export Growth 'Granger Caused' Economic Growth in the economy of Sri Lanka over the period of study.*

### 11.9 Concluding Remarks:

The study confirms 'Unidirectional Causality' running from economic growth to export growth in the economy of Sri Lanka over the period 1970-2005. The Impulse Response Functions study also testifies for the fact that responses of economic growth to impulses, transmitted through export growth, were significant. Moreover, export shocks also exert significant impact on the long-run equilibrium value of economic growth. All these observations highlight the importance of export growth in the matter of economic growth in the economy of Sri Lanka over the period 1970-2005.

The Variance Decomposition study shows that economic growth is expected to cause variation in export growth in years to come. In Variance Decomposition analysis we have a 20 period ahead forecast. Consequently, we get the forecast error variance for next twenty years. Export shocks have been found to account for declining proportion of such variance with the passage of time. By 2025 export shocks would account for 21% of total variations in income growth. By 2025 income shocks would account for 12% of total variations in export growth. This hints at low importance of export growth and low importance of economic growth for each other in the economy of Sri Lanka in future.

The South Asian developing country Sri Lanka has promoted export as a means for enhancing economic growth, in course of its a struggle for reforming domestic economy, removing or simplifying import restrictions, ensuring political stability, encouraging investment and alleviating poverty, which should also improve output and lead, in time, to further promotion of export. Sri Lanka has experienced increases in exports, national output and capital formation, along with some volatile terms of trade, which, in conjunction with the country's development plans, would suggest that dynamic links should exist between exports, national output, capital formation and terms of trade. The commonly used Granger-causality tool reveals the expected causal links. Export, either directly or indirectly via auxiliary variables, is causally linked with economic output.

The importance of capital formation and terms of trade in bringing about the observed causal feedback between exports and output is a key outcome. Consequently, despite our finding of causal links between exports and output, our results should not be interpreted as indicating definitive support for an "*export-led growth*" strategy; i.e., as support for the stance that export is an essential determinant of economic growth for all the member countries of the SAARC.

---