CHAPTER VIII

FINDINGS AND CONCLUSION
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FINDINGS, CONCLUSION AND POLICY IMPLICATION

The chapter is recapitulation of main findings and conclusions of research investigation. But the chapter recapitulates major findings of only those chapters which deal with empirical results of analysis. Results are reported sequentially.

8.0 Nature of Distribution and Test of Stationarity of Time Series

1. Series of such variables as (i) GDP, (ii) exports, (iii) imports, (iv) exchange rate, (v) prices of exports and (vi) quantities of exports diverge from normal distribution. Distribution of all these series are positively skewed and concentration of frequencies of high values range from moderate to high;

2. Export earnings, import bills, export prices, and export quantities are stationary; but GDP and exchange rate are non-stationary.

8.1 Indo-East African Trade

1. Time Series of (i) GDP, (ii) exports, (iii) imports, (iv) exchange rates, (v) prices of exports and (vi) quantities of exports diverge from normal distribution. Consequently, all these series are positively skewed and concentration of frequencies of high values range from moderate to high;

2. Export earnings, import bills, export prices, export quantities are stationary. But time series of GDP and exchange rates are non-stationary;

3. The growth gains of Indian economy from exports to East African countries are quite high. Besides, Indian economy derives larger gains from trade than the gains accruing to African economies;

4. There is need for both expansion and diversification of trade of the trading partners. India could unilaterally raise its imports from East Africa;

5. Avenues for re-export trade may also be explored;

6. The trade sectors confers much greater growth gains than trade gains;
7. The growths gains vary sharply among the sectors, variation of gains among sectors depend upon value of exports and strength and spread of linkages of trading sectors with the economy;

8. Growth gains of non-trade sectors are invariably lower than those derived by trading sectors;

9. The Indo-East African trade has got tremendous potential for growth and diversification.

8.2 Indo Iranian Trade

Following are the main findings of the paper:

1. Time series of trade and its constituent imports and exports, which are used for analysis, are stationary on application of Dickey-Fuller test.

2. D-F test reveals the time series of India’s GNP to be non-stationary.

3. Distributed lag models, involving imports, exports and total trade as dependent with GNP as independent variable are revealed to be well co-integrated by Engel-Granger test.

4. Introduction of lagged values of imports, exports and total trade in their respective bi-variate regressions improves the explanatory power of 3 initial functions by 7 and 1 percent respectively which makes the distributed lag models acceptable.

5. Distributed lag models with the specification of partial adjustment hypothesis are found appropriate for analyzing Indo-Iranian trade.

6. Adjustment of actual to desired exports is practically instantaneous, adjustment of actual to desired imports of India from Iran involves 2-3 periods, while adjustment of actual to desired total merchandise trade is spread over a pretty long time periods.

7. Short and long run India’s marginal propensities to import, export and trade with Iran differ greatly from corresponding values of short run marginal propensities. But these propensities reveal huge scope for growth of Indo-
Iranian trade, which may probably require greater degree of diversification of import-export baskets of these two trade partners.

8. Indian exports to Iran appear to be driven more by Iranian demand for the same than the available supply constraints on Indian side.

### 8.3 Commodity Composition of India’s Foreign Trade

1. The commodity concentration in Indian exports has been moderate for long. This has made pattern and structure of Indian exports temporally stable over a period of three decades.

2. The index of commodity concentration tends to increase from base to second year and from second to third year. This suggests process of diversification of export basket to be in operation though the rate of change has been relatively moderate to slow. The moderate value of 57.82\% coefficient of variation, whose value is 57.82\% also supports this inference.

3. Agricultural exports display the minimum commodity concentration, which is followed by group of manufacturing goods. This highlights the need for accelerating the diversification of export baskets. Success of the policy depends on acceleration of diversification of economic structure.

4. Highest degree of concentration is depicted by gems and jewellery and minerals. Greater diversification of gems and jewellery necessitate greater degree of variety in designing and moving out of from traditional to modern jewellery designs in external markets.

### 8.4 Scope for Further Research

This study focused only on major commodity groups. Exploration of new markets for current exports and new entrants in export basket needs market research. Future research may be undertaken to analyze shares of individual commodities. Market research with a view to keep abreast of changing levels and pattern of demand for commodity-wise Indian exports in international markets is needed. But it requires continuous research.
8.5 Geographical Concentration in India’s Foreign Trade

(1) Results of analysis reveal that there exists a very high degree of geographical concentration in India’s exports. Limited number of markets such as US, EU, China and Japan, which are among the major trade partners, account for the highest proportion of Indian exports. This highlights the need for penetration into new market.

(2) Even within the broad geographical groupings, exports are absorbed by few countries. It highlights the need for further diversification of geographical spread for Indian exports. Look Eat Policy is an attempt in that direction. What is suggested is not the trade diversion from current to new partners but creation of new export markets and expansion of export markets in such countries which absorb lower share of total Indian exports. This will immunize Indian economy, export trade especially from the periodic vagaries of recession in developed countries of the world.

(3) The results of analysis also reveal high degree of geographical concentration of Indian imports; even within the broad geographical groupings, imports are absorbed emanate from few countries.

8.6 Policy Implications

Change in policy regime in 1990 has led several analysts to opine that India should opt for export led strategy of growth. However, the ELG hypothesis has not received any conclusive support in the context of the studies that have been conducted so far. The studies relate both to Indian economy and other economies of the world (Prakash S. and Sonia Anand, 2013). The findings of these studies reveal ELG hypothesis as non-sustainable for Indian economy over long period. Hence, the modifications in policy are required for diversification of export trade to away from dominance of primary goods and primary based manufactures to other manufactures and services.

8.7 Export Earnings and Growth Strategy

1. Findings of this study reveal that too much emphasis should not be put on making exports cheaper by depreciating the rupee, since contribution of
quantities of exports account for greater proportion of export earnings than prices. Decline in exports prices due to depreciation of rupee requires larger quantities for compensating the loss on account of reduced prices, while available exportable surpluses may not suffice for this. Besides, opportunity cost of diversion of resources from non-export to export sectors has to be evaluated carefully.

2. Even at lower prices, export quantities have to increase more than proportionately in order to compensate the loss due to decrease in prices. Such policies focus incessant growth of exportable surpluses, which is not possible always.

3. New entrants into export basket are playing relatively increasing role in the growth of export earnings.

4. Export of services and business outsourcing also fall in this category.

5. Special policy measures may be required for sustaining export of several erstwhile imports into Indian economy, which are now finding export markets. Such products also need sustained policy support. Sustained export of such goods requires consistent increase in efficiency and productivity to control cost and rising of quality.

**8.8 Growth Effect of Changes in Exchange Rate**

1. The market based exchange rate may fluctuate mildly or wildly; but RBI intervenes only if the observed rate fluctuations fall beyond either side of the band. But the question is how does RBI determine this band? It is desirable that the band is determined optimally with reference to the balancing of costs and benefits accruing to the economy in terms of export promotion, import restriction, if any, and keeping the imported part of inflation in check

2. Rate of exchange of Indian rupee in currency market has declined at statistically significant rate, though the rise in price and quantity of exports has neutralized a part of negative effect of decline in exchange rate on export earnings both in rupee and dollar terms.
3. Growth curves of export earnings in Indian rupee and US dollars show that export earnings have grown significantly during 25 years covered by the study.

4. Quantities of export have also grown at significant annual compound rates; Rupee and dollar prices of Indian exports have significantly and positively changed over the years.

8.9 Results of Decomposition Model

1. Substitution of regression growth rates in the equation of decomposition model satisfies the equation exactly.

2. The Decomposition models of exchange earnings are validated by empirical evidence. Decomposition model of prices is also validated empirically.

3. Exchange rate has fluctuated a lot from 1990-91 to 2012-13 due to change in policy from administered to largely market determined rates.

4. Fluctuations in exchange rate lie outside the range of stability only for four out of all the years of the study period.

5. Indian rupee in the terminal year of study period has depreciated by nearly two thirds of its value in the base year.

6. Fall in the value of rupee has induced exports to rise. The export earnings in current exchange rate, absolute as well average, significantly differ from earnings at the base year rate.

7. Average import bills at terminal and base year rates do not differ significantly. Imports have not been significantly affected by depreciating value of rupee, indicating positively sloped demand curve for imports.

8. Results of decomposition model of export earnings and import bills show the pivotal role of change in exchange rate, though the quantitative dimension is relatively more important in imports than exports.

9. Output effect of export earnings on 130 sectors of Indian economy depicts great deal of variation between sectors and years.
10. Though goods of only 42 sectors are exported, yet output of all 130 sectors of the economy register growth as a result of exports.

11. Growth of output of the export goods is affected directly by volume of exports. But growth of output of 55 non-export sectors is affected indirectly via linkages of production activities of export sectors.

12. Output of all goods is highly affected by export earnings. But output of sectors having exportable goods, is affected more than that of non-export sectors.

13. The maximum output effect accounted by change in final demand (export earnings) is Rs 3.489 crore and 3.465 crore respectively in 1998-99 and 2003-04 (years for which Leontief Inverse is available from CSO) which relates to silk textiles and tobacco producing sectors.

14. The maximum output effect accounted by change in technology is Rs.375.36 crore which relates to cotton textiles.

8.10 Notes and Comments

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