

Chapter - VII

MAIN FINDINGS AND CONCLUSIONS

The central theme of the present study has been to examine and analyse India's export trade with special reference to price and quantity trends and structure over time.

With reference to above, an empirical investigation has been carried out in a stepwise fashion whose main findings and conclusions are presented hereafter.

After having examined a brief survey on empirical research done so far, a detail explanation of methodology adopted to estimation of value, price and quantum indices for Indian exports by various commodity groups is presented and trends of quantity and price is analysed by various commodity groups. The structure of India's exports in money terms as well as in real terms, both at aggregated and disaggregated levels is examined. Further, a separate analysis of Indian exports has been carried out for the periods : 1965-66 to 1981-82 and 1970-71 to 1986-87.

As far as the construction of price and quantum indices of exports and imports indicating price and quantity trends over time is concerned, it has been a matter of common practice among various countries of the world to construct the

price and quantum indices of exports and imports at highest degree of aggregation in terms of section of SITC Commodity groups. With reference to this, it is however, important to note that greater the degree of aggregation involved, greater will be the possibility of ignoring the relative importance of a commodity belonging to a respective section and hence the price and quantum indices of exports and imports may not be able to present a clear picture of price and quantity trends overtime.

Further, it is important to note that the estimated price and quantum indices of exports at a greater degree of disaggregation will be more meaningful in terms of its implications as compared to that of at greater degree of aggregation.

The present work therefore, has been designed to construct Paaschee price index and Laspeyre's quantum index of Indian exports at a higher degree of disaggregation of Three-Digit Level of SITC Commodity groups for the period of 1965-66 to 1981-82 with 1970-71 as the base year.

With reference to above, it is important to note that the construction of price and quantum indices of Indian exports has been done by making necessary adjustments in view of incomplete coverage of commodity of exports and non-export of a com-

modity either in the base year or in the current year. However, adjustments were also made in case of non-availability of data on quantity of exports.

Further, the price and quantity trends in Indian exports are examined by various commodity groups viz. (a) Consumer goods, (b) Intermediate goods for producing consumer goods, (c) Intermediate goods for producing capital goods and (d) Capital goods. With reference to the same, the value, price and quantum indices have been estimated by using Paasche price index method and Laspeyre's quantum index method. This enabled us to examine the effects of changes in prices and quantity on value of exports more meaningfully.

So far as the effects of changes in the price and quantity on value of total exports, during 1965-66 to 1970-71 are concerned, our findings reveal the fact that the price effect has been more prominent than the quantum effect. The fall in the value of exports by 27.75% has been due to a greater percentage fall in price by 40.07% than the increase in the quantity by 9.65%.

However, during the period of 1970-71 to 1981-82 the opposite came to be true as the increase in the value of total exports by 336.89% has been due to a greater increase in the quantity by 122.18% than the increase in price by 110.14%.

With reference to the relative prices of primary products and manufactured products, it has been found that over a period of time under consideration, the variations in prices have been more favourable to manufactured products as compared to that of primary products. This can be discerned from the fact that the export price index of manufactured products has increased by 268.33% as against the increase in the price index of primary products by 181.03% during the period of 1965-66 to 1981-82.

As regards, a relation between export prices and domestic prices, it is found that the movements in export prices have been lower than the domestic prices. The export price index has registered an increase of 194.35% as compared to an increase in the domestic price index of 287.14%. This indicates that Indian exports have been more profitable to be sold in the domestic market than in the world market.

As far as the behaviour of price indices of major commodity groups of exports is concerned, we find that during 1965-66 to 1981-82, the price index number of consumer goods increased by 154.14% or at an average annual rate of 9.07%, while the price indices of intermediate goods for producing consumer goods, and intermediate goods for producing capital goods increased by 304.64% or at an average annual rate of 17.92% and

by 271.52% or at an average annual rate of 15.97% respectively. However, the price index of capital goods increased by 295.95% or at an average annual rate of 17.41%.

With reference to quantum index, our results reveal that the quantum index of total exports during 1965-66 to 1981-82 increased by 102.63%, whereas the volume indices of exports of consumer goods, intermediate goods for producing consumer goods, intermediate goods for producing capital goods and capital goods increased by 111.20%, 29.23%, 76.38% and 846.14% respectively. The maximum increase in the volume index number of capital goods can be attributable mainly to increase in the volume index of the exports of machinery and transport equipment.

In order to examine the structural behaviour of Indian exports, a macro level analysis has been carried out in terms of share of exports to NNP, share of Indian exports in world exports, growth rates of exports and instability coefficients of exports, whose relevant conclusions are furnished below:

(i) The proportion of exports to NNP over a period under consideration reveal an increasing trend behaviour indicating an increasing tendency towards outward orientation of the Indian economy and increasing tendency for comparative advantage.

(ii) An inter-country analysis of national income and exports in terms of proportion of exports to national income comprising of 55 countries of the world grouped in to (a) highly developed (b) intermediate and (c) underdeveloped in accordance with their level of economic development reveals that the proportion of exports to national income shows a rising trend over time.

(iii) As regards, the relation between exports and economic development, considering per capita income as a rough indicator of economic development, we have regressed the proportion of exports to NNP on per-capita income. Our regression results shows that with an economic development of a country, India being under consideration, the proportion of exports to NNP has increased over over time indicating an increasing tendency for outward orientation of the economy.

(iv) In view of the assessment of the export performance of Indian in relation to world exports, our findings reveal that there has been a precipitous decline in the share of India's exports in world exports from 0.95% in 1966-67 to 0.45% in 1988-89 indicating a relative stagnation of Indian exports.

(v) As far as the growth rates of Indian exports are concerned, our empirical findings reveal that the total exports grew at the rate of 6.76% over the period of 1965-66 to 1981-82.

From among the major commodity groups of exports, the exports of capital goods registered a highest rate of growth of 15.75%. However, the exports of consumer goods, intermediate goods for producing consumer goods and intermediate goods for producing capital goods grew at the rates of 6.96%, 4.15% and 5.82% respectively.

Moreover, from among the principal commodities of exports, the exports of Sugar & Honey, Gums Resins & Lac, Vegetable Oils & Fats, Textile Fibre Yarn & Thread and Petroleum and Petroleum products registered a decline in their growth rate of -3.61%, -2.81% -1.53%, -2.57% and -3.81% respectively.

However, it is important to note that the maximum growth rate of exports is revealed by export of Machinery and minimum growth rate is revealed by exports of Fruits, nuts & Vegetables.

(vi) As far as instability coefficient of exports is concerned, it has been estimated for major commodity groups of exports at current prices and constant prices for the period of 1965-66 to 1981-82.

From among the major commodity groups of exports, our findings show that except intermediate goods for producing capital goods with an instability index of 24.58, the rest of the

commodity groups of exports, viz, consumer goods intermediate goods for producing consumer goods, capital goods and total exports are more stable at current prices with an index of 11.39, 12.73, 34.28 and 10.18, than at constant prices with an index of 17.66, 26.18, 55.13 and 16.63 respectively.

Further, in the context of Indian exports, the hypothesis that as compared to the exports of primary products, the exports of manufactured products are more unstable which has come to be true as is evident from our findings that the exports of manufactured products show an instability index of 21.96 at current prices and 24.20 at constant prices. While the exports of primary products show an index of 11.22 at current prices and 18.30 at constant prices during the period of 1965-66 to 1981-82. Thus we can perceive that the exports of manufactured products are more unstable at current as well as constant prices in relation to the exports of primary products.

Further, the structural change in Indian exports has been examined at current as well as at constant prices at micro (i.e. disaggregated) level, With reference to degree of commodity concentration in the composition of Indian exports and in terms of shift in the shares of major commodity groups of exports viz. consumer goods, intermediate goods for producing consumer goods, intermediate goods for producing capital goods in the total exports.

In order to examine the degree of commodity concentration in Indian exports at Three-Digit Level of commodity groups, the commodity concentration index at current and constant prices was calculated. With reference to the same, our findings show that there has been a declining tendency of degree of commodity concentration in the composition of Indian exports in money terms as well as in real terms. However, it becomes clear that exports are more diversified in money terms than in real terms over the period 1965-66 to 1981-82 as the same index in money terms declined by 35.87%, while it declined in real terms by 32.46%.

This declining tendency of commodity concentration index over a period under consideration, is indicative of the fact that with the passage of time, the Indian exports have tended to be increasingly diversified.

In view of the empirical investigation of the relation between exports and economic development of India, our findings in terms of estimated regression equations reveal that the share of capital goods in total exports being positively related to per capita income, the economic development tends to raise the share of exports of capital goods in total exports which is in consonance with our expectation. This is so because

with economic developmet, the capital base of the country tends to improve remarkably which gets reflected in to the increased production and exports of capital goods.



Further, an analysis of India's foreign trade in general and India's export trade in particular, the following conclusions need to be explicitly spelt out.

(1) As far as the average annual rates of growth is concerned, our findings reveal that, Indian imports registered a growth rate of 13.81% per annum during 1966-67 to 1988-89, 17.33% during 1970-71 to 1988-89 and 19.49% during 1973-74 to 1988-89. However, Indian exports registered a growth rate of 14.36% during 1966-67 to 1988-89, 15.52% during 1970-71 to 1988-89 and 16.19% during 1973-74 to 1988-89. Thus, we can see that after 1970-71 the growth rates of exports remained less than taht of imports and after 1973-74 the growth rates of imports and exports remained higher than that of prior to 1973-74. This state of affairs can be attributed to the oil price hike in the middle of 1973 which led to an increase in the value figures of exports.

(ii) As regards, the share of Indian exports in GNP, our findings reveal a systematically increasing trend of 3.9% in the year 1966-67 to 5.2% in the year 1988-89 indicating an increasing

tendency towards outward orientation of the Indian economy over time consequent upon an adoption of export oriented trade policy by the Government of India.

Further, in order to examine the structural behaviour of indian exports, a separate study has been made for the period of 1970-71 to 1986-87 and 1965-66 to 1981-82. However, our main findings regarding the structural behaviour of Indian exports by various commodity groups Viz., agricultural and allied products, Ores and minerals, (excluding coal), manufactured goods, and mineral fuels and lubricants (including coal) are furnished hereafter.

As regards, India's exports during the period of 1970-71 to 1986-87, our findings show that the percentage share of exports of agricultural and allied products in total exports declined from 39.22% in 1970-71 to 27.48% in 1986-87, whereas the share of exports of manufactured goods increased from 31.44% in 1970-71 to 62.71% in 1986-87. This trend reversal of share of exports in total exports indicates that the Indian exports over a period of time under consideration have diversified. However, the percentage share of exports of ores and minerals is shown to have declined from 9.57% in 1970-71 to 5.76% in 1986-87.

Having briefly, summarised, the main findings of structural behaviour of Indian exports during 1970-71 to 1986-87, the main findings as regards, the structural behaviour of Indian exports during 1965-66 to 1981-82 are in order.

(i) The percentage shares of exports of traditional goods, primary products and traditional manufactured products in total exports have declined during the period under consideration. Whereas, the shares of exports of non-traditional goods, non-traditional manufactured goods, and total manufactured goods increased over time. Thus, our findings are indicative of increasing degree of diversification of Indian exports.

(ii) The commodity composition of Indian exports according to market conditions is indicative of the fact that the monopolistic and oligopolistic strength of Indian exports has declined which can be seen from their declining shares in total exports over time.

(iii) As far as the commodity composition of Indian exports by SITC commodity groups is concerned, our findings show that the shares of exports of chemicals, machinery and transport equipment and miscellaneous manufactured goods in total exports increased over time, whereas that of food and live animals and manufactured goods classified chiefly by materials declined.

(iv) As regards, the commodity concentration index indicating the degree of diversification or concentration of commodity exports of India, our results show that the value of index has precipitously declined for exports according to market conditions indicating greater degree of diversification of Indian exports over time.

(v) As regards, the direction of India's exports in terms of regional destination, our findings show that there has been an increase in the relative importance of Economic Regions, 5, 6 and 7 i.e. other Oceanian countries, Eastern European Countries and European Common Market Countries respectively, as their percentage shares in our total exports increased over time.

(vi) As far as the relation of each commodity group of exports and economic development is concerned, our results show that the exports of non-traditional goods, total manufactured goods and non-traditional manufactured goods are of greater importance in India's economic development as their percentage shares in total exports vary positively with India's per Capita income which is evidenced by our estimated regression equations.

Moreover, similar results hold in case of exports of chemicals, machinery and transport equipment and miscellaneous manufactured goods.