CONCLUSION

This dissertation has been concerned with the natural resource content and the issues concerning the factor structure of India's foreign trade. A large part of this empirical study is based on the input-output data along with its assumption of fixed technical coefficients. The lack of other alternatives compelled us to substitute the value of resource products for resource content. The trade statistics of India for the twenty years period lacked comparability due to various changes introduced in the recording of the trade figures. Therefore, any conclusion drawn from this is subject to these limitations.

One significant aspect that arises from this study is that the overall structure of India's foreign trade has not changed much in the last twenty years period of time. The resource products, either in a crude or semi-processed form, still constitutes the basis of our foreign trade and our comparative advantage mainly lies in these resource products. When the share of each resource class in total exports and imports and their relative changes in the last twenty years period were examined, it was found that the relative shares have had only minor variations. But there were major structural changes within each of these resource classes. For example, it was noticed that, in exports, the relatively

dominant items of 1950's like tea, spices, raw cotton, manganese ore etc., were stepping back and those items like iron ore, fruits and nuts and coffee, which were relatively insignificant in 1950's, have come in the frontline. On examining the impact of changes in unit values, it was found that variations in unit values of resource commodities relative to the general trend were not that significant so as to influence much their relative shares. The study of the impact of demand and supply forces on the changing conditions in the markets of resource products showed that variations in domestic demand and supply were stronger than in the rest of the world. The relative resource requirements marked particularly high in the last two years of our study. The regional study showed that there were important changes in the direction of our trade in resource commodities. There was found to be a significant expansion of our exports of resource commodities to East Europe as compared to other areas while in the case of imports it was found to be from North America.

The study of direct and indirect resource requirements also revealed some notable aspects. It was observed that for every one rupee worth of direct exports and resource products, the gross output requirements of these products were of 1.6 rupee worth. Similarly, for every one rupee worth of direct imports, we received two rupees worth of these resource products indirectly. When we examined the net trade balance

of renewable and non-renewable resources it was found that the highest deficiency was in the case of renewable resources.

What have we to say from this about the Malthusian doctrine of increasing scarcity of natural resources? If we accept Professor Harold Barnett's[1] criteria of defining scarcity as cost relative to an overall price index, then the unit values of resource products relative to the general trend suggest no apparent scarcity. But this is not a satisfactory way of defining resource scarcity and as Vanek[2] puts it: "that prices and costs in largely competitive world markets reflects relative scarcities of the world" rather than that of a country. It was found, from Chapter V, that the renewable resources have been scarce relative to other factors. With each addition to our population, therefore, the Malthusian forces had been clearly operative in the last twenty years.

Our empirical investigation of Heckscher-Ohlin theory using the Indian trade figures for the year 1963-64 showed an index of comparative capital labour intensity, 1.63. This implies that capital labour requirements per crore rupees worth of exports is less than that of competitive import replacements. This picture is in much agreement with the traditional

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[1]Harold Z. Bannett and Chandler Morse. Scarcity and Growth: The Economics of Natural Resource Availability. Baltimore, John Hopkins Press. pp.164-201.

[2]Vanek. Op.Cit., p.137.

understanding that India is labour abundant and capital scarce. While taking the third factor, natural resources, it is further observed that the natural resource content of one crore rupee worth of exports is almost double that of imports. This again exactly fits to the common understanding that this country has a large resource base. But it must be noted that no complementarity relation between natural resources and capital is observed in India's foreign trade structure. On the other hand it was noticed that variations in capital were quite independent of variations of natural resource content. Therefore Vanek's presumption of complementarity between capital and natural resources do not apply in India's case.

The breakdowns of labour content as per the skill category proved yet another hypothesis that our exports production involved less skill requirements as compared to competitive imports. As would be expected from a multi-labour-factor, Heckschen-Ohlin model, India, not only indirectly imports professional, technical and related workers and administrative, executive and managerial workers (which are considered to be scarce in this country) but also semi-skilled clerical and sales workers. Moreover, a sizable proportion of the first skill category, professional, technical and related workers, constitutes engineers and natural scientists, the ratio of which again significantly appears in competitive imports. The engineer-scientist ratio can be interpreted both as a measure

of skill intensity and also a proxy for research and development activities. On the one hand, the general scarcity of this highly skilled labour involves a comparative disadvantage for India in products requiring relatively large amounts of such labour. On the other hand, it is this section of labour which when employed in research and development activities, help for product improvements in those product lines where the technological opportunities for product improvements are favourable and thus fosters the comparative trade advantage of a country based on technological differences. This means that the engineers-scientists variable is significant, both as a skill factor and also as a factor based on technological differences, in influencing the trade pattern of a country.

In closing, it should be stated that our empirical results, based on the application of Indian trade data, do support the general notion of the factor proportions theory; but a generalization of the theory on the basis of these empirical evidences will be too early. However, it should be emphasised, as other writers have emphasised recently, that it is time now to discard the simple, two-factor trade theory of Heckscher and Ohlin in favour of multi-factor trade models. Account should be made of other variables such as labour-skills, natural resource, technological differences, human capital, transportation costs and tariff and non-tariff measures, all

of which do tend to influence the trade pattern of a country. Only under this more general approach, the relative factor abundance will have any implication in understanding the trade pattern of a country.

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