

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

6.1. Summary and Policy Implications

The main objectives of this paper were to apply the gravity model to analyze determinants of Bhutan's trade flow and trade potential based on the annual trade volume with its major trading partners using the panel data estimation technique. We have established that the application of the gravity model in applied research of bilateral trade is theoretically justified. There are wide ranges of applied research where the gravity model is used to examine the bilateral trade patterns and trade relationships [see Rahman(2000), Xhepa and Angoli(2002), Byres (2000), Sandberg and many more].

6.1.1. Summary

We have estimated generalized gravity model of trade, exports and imports. Our results show that Bhutan's trade (sum of exports and imports) (table 5) is positively determined by the size of the economies, openness of economy of both Bhutan and its trading partners, FTA with India and negatively influenced by distance. The major determinants of Bhutan's exports (Table 8) are; partner country's total exports demand, distance, trade openness, bilateral trade agreement with India and Bangladesh. The bilateral agreement with Bangladesh on the other hand, has no effect on Bhutan's imports (Table 9), rest all determining factor of exports are also the determining factor for imports but with lower effect of coefficient elasticity. Transportation cost is found to be a significant factor (in all three models) in influencing Bhutan's trade negatively. This implies that Bhutan would do better if the country trades more with its neighbors.

Further, we also investigated the role that infrastructure variables and income differences play as explaining bilateral trade flows in a panel data framework. Only the per capita GDP differential is found significant with positive sign indicating Bhutan's trade supports the H-Ohlin hypothesis over the Linder hypothesis in our trade model (Table 10a). However, some studies have mentioned that PCGDP differential is not a proper representation of the factor endowment differential, as H-O hypothesis assumes zero transportation cost and perfect competition which are not realistic. In our study the product of per capita GDP is found insignificant indicating the level of infrastructure

development has no effect on Bhutan's trade. Actually the significance of this variable concerning infrastructure might have some important implications for economic policy. Viewing infrastructure as an international public good rises the question of how the cost of infrastructure should be shared between trading partners. So the limitation of accuracy and consistency of these figures have to be considered which might lead to biased estimates of these coefficients.

When testing intra-bloc trade effects, preferential dummy variables present a positive sign suggesting that belonging to preferential arrangements fosters trade. Similarly, Bhutan's trade is found to be influenced to a great extent by the bilateral free trade agreement with India (found highly significant in all three models) indicating the importance of maintaining the trade agreement with India. Trade agreement does improve the explanatory power of the model and it shows that trade with countries Bhutan shares a border is much higher than export volume in no border case. However, since in our study we are not considering the difference between trade creation and trade diversion these results have to be taken with caution.

SAPTA is found statistically insignificant in all the models and the preferential trade agreement with Bangladesh is found insignificant in trade and import models. This implies the effect of bilateral trade agreement is greater on Bhutan's trade than the effect of a regional agreement. And the significance of FTA is much greater than the partial trade agreements. Thus, improvement in the trade agreement with Bangladesh and with SAPTA progressing to SAFTA, is likely to boost both exports and imports level.

With regard to trade potential it is observed that Bhutan still has more room to increase export within the region but overtraded imports with most of the countries indicating high performing pairs. With industrialized countries there is room to enhance both export and import, but the potential magnitude is marginal.

However, it should be noted that with change in the methodology and improvement in the sets of data we might get different results. Moreover, this being the first empirical study on the Bhutan's trade, there is lot of room for improvement of this study. Therefore, we suggest that further research is needed to confirm the interpretations and to draw precise conclusions.

6.1.2. Policy Implications and Recommendations

The policy implications of the results obtained are that regional integration through free trade or preferential trade agreement is found best policy option to boost Bhutan's exports. Further liberalization of trade barriers of Bhutan and its trading partners is necessary to enhance Bhutan's trade. It is found that Bhutan's trade not only depends largely on the foreign demand, but also on its own production capacity. Therefore, to boost exports Bhutan should emphasize more on the expansion of production volume and diversification of products and promote the development of domestic supply and adopt a policy strategy that favors production and at the same time should maintain quality of the goods and services as well as increase the varieties of goods and service offered.

While the effects of other explanatory variables are of a more long term nature, reducing distance costs will significantly increase trade volumes at a shorter time. Reducing distance costs refers not to improvements of the physical infrastructure only. Market access measures, border procedures, movement of people, development and dissemination of information are important dimensions of the distance costs that need to be improved.

The economic growth of the individual economies and of the whole region will also strongly influence both export and import potentials. Therefore, stabilization of policies and establishment of conducive business environment for private sector development which ensure high growth rates shall be high on the agenda of policy makers. But in the context of Bhutan's export structure, mostly based on low value added commodities would make any desirable structural change difficult and its small population and small size limits the supply capacity or potential of supply and retards trade. However, the fact that Bhutan have unexploited trade potential in the region and with more room to increase its exports within the region; the integration with these countries through FTA could help to boosts Bhutan's exports to these countries.

Some other policy recommendations can be drawn from our analysis. Bhutan has already proposed preferential trade agreement with Nepal and intends to have trade agreement with other neighbouring countries like Thailand. In this scenario as our empirical results corroborate size and distance as one of the main determinants of trade, so countries should make efforts to reduce transaction costs between both regions to achieve a deeper economic integration. Since Bhutan has still room to increase its exports

within the region, the integration with these countries through FTA could help to boost Bhutan's exports to these countries.

Furthermore, the economic opening through the reduction of trade barriers is considered as one of the main sources of growth. An open trade regime is the only option for a small economy, as Bhutan need to climb over the obstacles created by the small domestic market. Our empirical results have also shown that trade openness is quite significant with positive sign. But it should also be noted that Bhutan already pursue open trade regime, it has trade openness ranging from 40 to 90 % highest in the sub-region and as mentioned earlier there are no non-tariff barriers or import restrictions imposed or protectionist measures adopted by the RGoB. With few domestic industry and limited production capacity tariffs are mostly imposed even on imports that are not produced at home hence they are clearly aimed at raising revenue rather than protecting a domestic industry.

On the other hand, just reducing the trade barriers and liberalizing trade alone is not significant in promoting economic growth development. Trade and trade policies ought to be seen as part of a wider development strategy, which includes macroeconomic policy, infrastructure development, investment in human resources by promoting education and health system and the improvement of governance. These elements of investment climate are essential for ensuring sustainable growth and for enabling trade strategies to generate future benefits and be themselves a source of growth.

Further, we tried to identify those countries with strong potential to both export and import. Results indicate stable and upward trade trend of both exports and imports with India, but with rest of the trading partners especially the developed countries out side the region, Bhutan's trade fluctuate a lot and are not stable trading partners, so precise trade prediction is not obtained. As mentioned earlier it is observed that Bhutan has export potential within the region and overtraded imports with most of these countries (high performing pairs). With industrialized countries there are room to enhance both export and import but the magnitude of potential is marginal.

With high performing pairs, government should put an effort to maintain this optimal level of exports and imports with these countries. On the other hand with regard to potential countries government should adopt policies that aid to obtain the trade

potential. As per the estimation results Bhutan under-traded exports with most of the countries indicating more room to increase its exports since the volume of export made are very negligible to almost all countries. So to attain the potential export level it is essential to carry out in-depth study on the potential export sector and analyze the market structure.

The regional integration is recommended which can effectively help Bhutan deal with the domestic market size constraint on development. The small domestic market size can be easily augmented with huge market available in the neighborhood especially India which also ensures a timely and reliable delivery of goods with minimum transit loss, Bhutan should exploit the large Indian market and take advantage of it. Moreover, since natural trading partner's hypothesis seems to hold for Bhutan and India, further economic integration between the two countries would benefit both the countries.

Bhutan has comparative advantage in certain areas like hydropower, tourism potential, textiles and herb-based pharmaceuticals among others. However, Bhutan lacks capital, technical expertise and technology in addition to the hurdle posed by its small domestic market. The regional cooperation can augment the process of domestic production diversification through investment and technological linkages. But to attain this government need to further liberalize FDI policy and developed along cautious lines to promote potential investors since studies have found present FDI Policy to be conservative, presenting several constraints to potential foreign investors. In particular, need to relax the ceiling on foreign equity participation investment and a further simplification of the regulatory framework for private investment, particularly industrial licensing has been considered an essential element of future reforms (CBS, IDE/JETRO, 2004- from Wangyel 2003). Therefore, regional integration is vital for Bhutan to enhance its exports.

Also Bhutan should look into future trade diversification by identifying textile, readymade garments and fusion designs production and promoting intra-industry trade flows. Since accordance with paper by (CBS,IDE/JETRO,2004) studies have confirmed rich potential in enhancing intra-South Asian trade flows, if the region's trade flows are kept in tune with trends in the global trade flows of the intra-industry variety. Bhutan would benefit if it follows a policy of "export-oriented production, based on import-substitution" taking advantage of the huge Indian market under free trade arrangements. It

can also help substitute garments import from Bangladesh, Nepal and Thailand. Regional integration process would highly contribute reducing the perceived “distance cost”, thus inducing structural improvement in exports. It is extremely important for policy setting both by and within the trading bloc.

It is imperative that policy is set in accordance not only with the correct response parameters (based upon the fully specified model), but also that the various member states propensities to import and export are sufficiently taken into account. As Bhutan’s trade is not independent, all partner countries’ propensities to export and import must be taken into account sufficiently and adequately when trade policy is set.

6.2. Limitations and Future Scope of the study

6.2.1. Limitations of the Study

The main limitation of this study is the accuracy and consistency of the data³ which is the key element of the whole analysis and might lead to bias results or estimation. Moreover, Bhutan being very small economy compared to its trading partners and with great difference in GDP figures could distort the estimation. With these limitations, however the gravity equation fits the Bhutan’s trade data well and delivers fairly precise and plausible income and distance elasticities and all other macro economic variables and geographical characteristics with statistically significant t-statistics. To date there are no empirical studies on the determinants of trade flow and trade potential of Bhutan, thus this being the first of it’s kind has lot of room for improvement. With change in methodology might result in change in the estimation results, therefore proper specification of model is required especially to estimate precise trade potential of Bhutan.

Further, there is huge border informal trade with India which is not taken in to account in this study. It is estimated that in 1993-94, India’s informal exports to Bhutan was to the tune of US \$ 31.3 million, while it imported goods through informal channels worth US \$ 1.2 million. Therefore, informal trade balance was exceedingly in favor of

³ “A system of national accounts to measure economic performance was introduced only as recently as 1987 and with retrospective estimation techniques, it was projected backward up to 1980. “it is worthwhile, however to bear in mind that the national accounts estimates, although now available with a year’s lag are in need of improvement if they are to serve as the basis for economic analysis and planning”(MoF, 2000).

India, with exports exceeding imports by a margin of US \$ 30.1 million. It can be seen that while India had a trade surplus with Bhutan on the official account it had a trade surplus of a much larger magnitude on the unofficial trade account. Much of the informal trade between India and Bhutan are not illegal economic activities (i.e. those unregulated by the government) but more of extra-legal trading (CBS, IDE/JETRO, 2004).

6.2.2. Recommendations for Further Study

This study is limited to the determinants of the overall trade and the trade potential of Bhutan as a whole with its major trading partners. The country specific effects are not taken into account due to lack of data, otherwise one could find the major factors that contribute trade flow to each country separately and study their significance.

Further product wise analysis could be carried out and find the major sectors and identify its determinants which would help to guide policy makers in formulation of development and planning of those sectors and attain higher economic growth. Trade potential can also be estimated at a sectoral level providing areas where Bhutan could exploit and the reasons why the potential is not realized can be investigated. This will assist government in its bilateral trade negotiations and also identify areas of possible government intervention.

Furthermore, we have not addressed the welfare impacts of the regional trade agreements, the effects of lobbying and the progression of the agreements. And also effect of bilateral and multilateral integration could be considered in future studies, to find whether such integration leads to trade creation or trade diversion.

6.3. Conclusions

Bhutan being a small country is heavily dependent on external trade for large number of essential goods. It is therefore vital to understand the factors determining trade flow and ensure adequate foreign reserves to pay for our import needs and important to carry out in depth research in the field, also the international trade matters a lot and its effects on the economic life of people in a country are enormous. Thus, this study being first of its kind on empirical analysis on international trade of Bhutan, serious attempt is made to contribute to the Bhutanese literature which could be a basis for future studies in the field and can compare the degree of trade shifts. Also with further improvement in the

empirical model and methodology developed in this study, could be useful for Trade Ministry to conduct research for the formulation of trade policy.

Even though economic analysis is not always the fundamental driver of trade policy but it is important for a country to have analytical tools in place to provide balance to decision making about trade agreements. At the same time economic analysis should be one part of the process of trade policy formulation of the country. Good technical analysis is useful for all trade policy initiatives, including unilateral measures and bilateral agreements, but it is particularly important for decisions about free trade agreements and multilateral trade negotiations. Negotiations on FTAs and in the WTO typically take place over an extended period of time and important commercial interests in the countries involved as well as third parties.