CHAPTER I

INTRODUCTION

1.1 The Problem

The service sector has become increasingly important in the international economy. This is evident from the formations of General Agreement on Trade in Services (GATS) as a part of WTO. World trade in services has expanded considerably in recent years. This growth has been spurred by many factors, such as rapid advances in information technology, rising demand for services in both developed and developing countries, the growing importance of multinational firms and increased outsourcing of many activities by firms (Fieleke, 1995).

The trade in services, like trade in goods would certainly promote economic growth at country level, regional and global levels. However, the volume and rate of growth of trade in services is not the same across the world. The volume and growth of international trade in services differ among developed and developing countries. In this context, major research question is what are the factors, which determine the international trade in services. It is also important to know whether these groups of factors which determine the international trade in services differ between developed and developing countries, between high income countries and low income countries and between different geographical regions of the world.
The core subject matter of the study deals with the estimation of panel data multiple regression models to identify the factors that determine the trade in services. It also involves the test of causality between trade in goods and services. The analysis is aimed at suggesting policy prescriptions for improving international trade in services for developed countries, developing countries and for India as a case of developing countries.

1.2 Background of the study

The conventional image of services as a non-productive sector has been replaced by a more dynamic role of services in the development process, which is related to transformations brought about by communications technology, as well as the importance of efficient producer services. The past decade has seen a rise in the growth of services in the national economies of developing countries. While most developed countries have service sectors, which contribute over two-thirds of GDP, most developing countries witnessed an increase in their service sectors' contribution to over 40 per cent of GDP. Technological innovation has expanded the opportunities for services to be embodied in goods that are traded internationally, e.g. software in diskettes, films in video tapes or those to be delivered digitally through electronic commerce, i.e. internet and the new possibilities for trade in long-distance services associated with these networks.

It is not difficult to identify the many ways that efficient services contribute to improved economic performance. An efficient and well-regulated financial sector leads to an efficient transformation of savings to investment, ensuring that resources are deployed where they have the highest returns; benefits also arise from increased financial product
variety and better risk sharing in the economy. In the case of telecommunications, improved efficiency generates economy-wide benefits as telecommunications are a vital intermediate input and are also crucial to the dissemination and diffusion of knowledge, for instance the spread of the internet and the dynamism that it has lent to economies around the world is telling testimony to the importance of telecommunications services. Similarly, transport services contribute to the efficient distribution of goods within a country and a country's ability to participate in global trade, thus helping to realize the benefits of integration. Although these are the more prominent services, others are also crucial like business services such as accounting and legal services are important in reducing transaction costs. The study of Collier and Gunning consider high transaction costs as the most significant impediment to economic growth in Africa (Collier and Gunning, 1999). According to Summers the single most important innovation in the history of the American capital markets was the idea of generally accepted accounting principles. Software development is the foundation of the modern information-based economy. Education and health services are necessary in building up the stock of human capital, a key ingredient in long run growth performance (Summers, 1999). It is widely believed that efficient services not only provide a direct benefit to consumers but also influence the overall economic performance. A positive correlation between higher FDI flows, higher growth in services and exports also cannot be negated (Matoo et.al., 2001).

But all the above benefits from trade in services can be realized only if the trade is liberalized and not restricted or regulated. The justification of the expected gains from
free trade in services is the following. Trade in goods typically accounts for less than half of GDP in most countries, and even less than a third of output in the industrial economies. Its liberalization is expected to affect economic growth. Hence, comparable gains from liberalizing trade in services should be expected since services are becoming increasingly tradable and that they account for a large and growing share of GDP in most countries (Matoo et.al., 2001).

World trade in services increased from US $ 784485 million in 1985 to US $ 1622190 million in 1990. The increasing trend in service trade continued as the figured reached US $ 2381795 in 1995 and to US $ 3700814 million in 2003. The ever-increasing volume of trade in services only indicates towards growing importance of it in total world trade.

1.3 Objectives of the study

1. To study the nature, composition and issues relating to the international trade in services.

2. To identify the factors determining trade in services.

3. To study the extent and degree of influence of the factors which determine trade in services between developed and developing countries, different income groups and across the major geographical regions of the world.

4. To understand the behaviour of trade in services pre WTO and post WTO periods.

5. To examine the causal relationships between trade in goods and trade in services.

6. To study the importance and significance of trade in services in India.
1.4 Methodology

The study is based on panel data modeling using 19 years data from 1985 to 2003 for a total of 82 countries. The countries are classified into two groups; (i) classification based on different income groups namely high income countries, upper middle income countries, lower middle income countries, low income countries. (ii) Classification based on different geographical regions namely America, Europe, Africa and Asia. The groups are based on World Bank classification of countries into different income groups and regions. For the purpose of analysis, study is using multiple regression log-log models, using panel data. The different variables used in the study are trade in services, trade in goods, GDP of major trade partner, Foreign Direct investment inflows and exchange rate (per US $). The data on the same has been collected from different annual reports of WTO, World Bank, UNCTAD statistical yearbook etc. The values of variables are expressed in million dollars.

The panel data modeling has used fixed effect and random effects estimation techniques, depending on data requirement and its suitability. These two techniques help in understanding the individuality of each unit included in a panel data, which may otherwise be not accounted for in pooled multiple regression model based on ordinary least square estimation. Under fixed effect estimates, the individual characteristics of countries like differences in political system, geographical conditions, trade policy, etc. are incorporated in intercept term and it is allowed to vary across different countries and time, with the help of introducing dummy variables for each specific country and every
time period. The overall constant term is excluded to avoid falling in dummy trap. Under random effect estimates, the individual characteristics of the countries are incorporated in disturbance term, as they are assumed to be uncorrelated with other independent variables included in the models.

The advantage of using panel data is that the study can relax the assumption of non-stationarity especially since numbers of time periods are less then the number of cross-sectional units. However, the stationarity of panel data have been tested using panel unit root tests. The result revealed that all the variables are stationary at level.

1.5 Importance of Study

In recent years the role of services in international transactions has become the focus of a great deal of attention. The technological revolution in data processing and telecommunication activities has provided opportunities for a rapid expansion of international transactions in the service sector of the world economy (Sapir 1985). A primary reason why international trade in services has been limited is that the performance of many services necessitates physical contact between producer and consumers, a condition that renders service provision to distant locations infeasible. New technology, in particular the internet, provides the medium of exchange that overcomes such historical trading hurdles for many services, effectively reducing transport costs from infinity to virtually nothing. A study conducted by Freund and Weinhold suggest that internet development abroad has already begun facilitating increased export of
services to the United States (Freund and Weinhold 2002). There are many other types of services which are traded internationally, ranging from travel, tourism and motion pictures to expertise provided by lawyers, accountants and other professionals.

New information technologies have rendered many services increasingly tradeable. "knowledge-intensive services" can be exchanged through telecommunications networks and have become increasingly unbundled. Increasingly, people are crossing international frontiers either to render or to receive services. The opening of branches and subsidiaries of service firms or the provision of services through franchising and other management contracts is being facilitated by improvements in international information networks. The establishment of international networks has led to substantial economies of scale and of scope; greater value added is created; many of the limitations hitherto imposed by the need for direct personal contact between users and providers are eliminated as they are an important component of the total revenues of enterprises and individuals.

If we try to compare the growth of trade in services for the year 1995 and 2003 for the world as a whole, we find that world trade in services was in the vicinity of US $ 247993 million in 1995, i.e., 24% of the world trade in goods. In the year 2003, it has increased to US $ 4027781 million or about 27% of the world trade in goods. This shows that there has been a large increase in trade in services over the years. The volume of trade in services of the developed countries has gone up from US $ 1819036 million to US $ 2759166 million during 1995 to 2003. In the case of developing countries during the same period it has moved up from US $ 611008 million to US $ 8519036.
If the service exports as a percentage of total service trade are considered then the statistics shows that the world service exports during 1990 was 49% of its total trade in services, 50% each in 1995 and 2003. In developed countries, the percentage of total service exports in terms of total service trade was 50% in 1990, 51% each in 1995 and 2003. While in developing countries, these percentages were 46% in 1990 and 47% each in 1995 and 2003 (WTO Annual Reports).

Trade in services and its growth has been of special relevance to India. India’s share in service trade is higher than its share in manufacturing trade in world trade for merchandise and services. The service sector boom in India in the post Uruguay round period shows that India has a competitive advantage in several service sectors. There is potential for poverty alleviation from services trade, although this has been largely ignored. While services may not employ people below poverty line directly, liberalisation has made a number of services accessible at economic prices to a large number of people, including the poor. In addition, the potential for employment of unskilled personnel in some services sectors such as telecommunication, tourism and audio-visual is very high. For example, nearly two-thirds of the employment in the telecommunications sector is of those with low or no skills (Jha, Nedumpara, Gupta, 2004).

Thus from the above discussion it seems that service sector and its trade is of special relevance to both developed and developing countries. Both the group of countries tends to gain from such a trade though competitive advantage of developed and developing countries differ with regard to certain services.
The study of topic hence become imperative as it will help in giving us a in-depth knowledge of different factors which determine and influence the trade in services across the globe in general and different income groups and regions in particular. This understanding will help the countries of the respective income group and regions in future policy formulations related to international trade in services. At the same time the analysis done with the help of statistical tools and techniques would help in arriving at a conclusion as to whether the more liberalized trade in services is going to benefit and increase the economic welfare of countries at large or else the major benefits will be cornered to few developed countries with little and marginal gains to developing and least developing countries.

1.6 Outline of the Study

The entire study is divided in to eight chapters including conclusion. In chapter II, the study discusses the literature review of different studies conducted in the past related to international trade in services. The section 2.5, of the chapter deals with studies related to international trade and economic growth, which includes different types of studies explaining how trade has either helped in attaining growth in trading nations. It explains the success and failure of export led growth hypothesis in few nations. The section 2.6 in this chapter deals with liberalization in international trade and economic growth. This section shows how trade has helped the faster economic growth. The last section i.e. 2.7, deals with studies specifically related to service sector trade and its role in economic growth.
Chapter III discusses the concept of trade in services and related issues. It tries to give global profile of trade in services. It deals with growing importance of services and its emerging trends. Infact different types of services are growing and expanding simultaneously and hence the growth and importance of these different types of services is shown in this chapter. The chapter is also discussing the importance of services to both developed and developing countries and a perspective towards liberalization of trade in services and its impact on their respective economies.

The panel data is analyzed with the help of regression models in chapter IV. The countries are grouped in to developed and developing nations and further in to four-income groups viz. high income, upper middle income, lower middle income and low income countries. The regression models showing relationship between the trade in services and different variables like trade in goods, foreign direct investment inflows etc are based on either fixed effect or random effect techniques depending on the suitability of data. The second section of this chapter shows the relation between trade in services and different variables across the different major regions of the country. The result showed that there is strong relation between trade in services and trade in goods across different income and regional groups. The impact of trade in goods is higher in case of developed and high income group and for European and Asian group of countries.

An attempt to study the impact of WTO on trade in services is done in chapter V. The same group classification is followed in chapter IV also. The regression models used are
also the same. The time period is divided into pre and post WTO periods for all regressions models. This division of time period helps us to know whether the emergence of WTO has helped increased trade in services over a period of time through its liberalization policy or has it not. The result revealed that WTO did help in increasing trade in service since its formations.

The results of Granger causality test are shown in chapter VI, the tests tried to know whether there exist causal relation between trade in goods and trade in services. The test is conducted on five countries in each income group. The finding shows that though there exist causal relation between the two, there is no uniform pattern across the income groups.

The role and importance of trade in services of India is discussed in chapter VII. It shows the growth of service and goods export in India's total trade over a period from 1956-2003. The chapter also helps us to know the changing structure of India's service exports, where the role of miscellaneous services, which particularly includes software services, is increasing rapidly. The analysis of regression model shows even for India, trade in goods helps in increasing trade in services.

The conclusions and policy implications are given in chapter VIII. The study concludes that the main factor determining trade in services across the income and regional groups, so also pre and post WTO period is trade in goods.
1.7 Limitation of the study

The difficulty in availability of data on trade in services and different other variables included in the study has limited the study to only eighty-two countries in the world. As trade in services is a recent phenomenon, the analysis is based on just 19 years for each country, i.e. from 1985 to 2003.