

## Review of Trade Theories in context of Services

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### Abstract

Traditionally, services were considered as non-tradable item due to its intangible nature. Therefore, most of the previous theories of trade mainly talked about goods only. The trade in services also remain overlooked due to lack of standard definition and categorization. It also suffers measurement error during data collection. Thus, it becomes very important to discuss the meaning and nature of services and examine the relevance of existing trade theories for trade in services.

**Keywords:** Trade in services, GATS, WTO, Gravity Model.

### Introduction

The present study discusses the issues involved in understanding and measuring the services in the context of international trade. Most of the previous economic models have been based on goods while the service sectors remain overlooked for various reasons. The main reason may be that traditionally services were considered as non-tradable items due to the lack of technological developments and mobility of people around the globe. Moreover, the data available for measuring services are subject to measurement error. Further, the absence of a standard definition or clear-cut classification of goods and services makes the data collection for measuring services very difficult. Therefore, before empirically exploring the trade in services, it becomes very important to discuss the meaning and nature of services. In this context, the present study aims to discuss various definitions and classifications of services. It further emphasizes various theories of trade and their applicability to services.

### What are Services?

According to Hill, service is “a change in the condition of a person, or of a goods belonging to some economic unit, which is brought about as the result of the activity of some other economic unit, with the prior agreement of the former person or economic unit” (Hill, 1977, p. 318). The definition indicated towards the non-storable and intangible nature of services. The non-storable aspect of services has two important

implications. Firstly, the services require instant consumption as it is produced and secondly, the service provider and receiver must be present at the same location.

The above definition is further extended by (Bhagwati, 1987) after including two other features of services which are:

Services always do not require the movement of consumers or producers, and

Some services are provided with goods which makes it difficult to segregate them.

There are certain non-storable services which can be transferred from one location to another such as insurance and consultancies, power generation etc. with the help of technology. (Stern & Hoekman, 1987) and (Sampson & Snape, 1985) have classified services into four different categories:

1. Where services are provided with goods and no need to move service providers or receivers (for example computer & telecommunication services).
2. Where service providers move to the location of service receivers (for example construction services).
3. Where service receivers move to the location of service providers (for example tourism services).
4. Non-separated services where both service provider and receiver have to move (For example transport and shipping services).

The above classification only helps to understand the nature of services, it does not define services. According to the Manual on Statistics on International Trade in Services (MSITS), the term 'service' refers to a wide range of intangible products and activities that cannot be explained by a single definition. Moreover, there are various services bundled with goods which makes it difficult to identify them separately. Therefore, MSITS adopts the System of National Accounts 1993 approach which defines services as "Services are not separate entities over which ownership can be established. They cannot be traded separately from their production. Services are heterogeneous outputs produced to order and typically consist of changes in the condition of the consuming units realized by the activities

of the producers at the demand of the customers. By the time their production has been completed they must have been provided to the consumers." (Manual on Statistics of International Trade in Services, 2001, 1st edition, p.21)

The System of National Accounts 1993 defines services as follows: "There is a group of industries, generally qualified as service industries, that produce outputs that have many of the characteristics of goods i.e. those concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms- the production of general and specialized information, news, consultancy reports, computer programs, movies, music, etc. The output of these industries, over which ownership rights may be established, are often stored on physical objects - paper, tapes, disks, etc. - that can be traded like ordinary goods. Whether characterized as goods or services, these products possess all the essential characteristics that they can be produced by one unit and supplied to another unit, thus making possible division of labour and the emergence of markets." (Manual on Statistics of International Trade in Services, 2001, 1st edition, p.21)

According to India's Balance of Payment (BoP) format, trade in services includes commercial services which are further categorized as transportation, travel, insurance, government services not included elsewhere (GNIE), and other commercial services under the subcategory "miscellaneous services". The communication, construction, financial services, software services, news agency services, royalties, copyright and license fees, business services, personal, cultural and recreational services and others are categorized under the head "Miscellaneous Services". Under the BOP the subcategories of services are explained as follows:

#### **Transportation Services**

Transportation services include receipts and payments from the carriage of goods and natural persons from one location to and with related supporting and auxiliary services.

#### **Travel Services**

Travel services include a mixture of goods and services

consumed by international travellers. These services can be further broken down into two components – business and personal travel. The business travel includes the goods and services acquired by the person for personal use whose main purpose of travel is for business but does not include sales or purchases made by such person. The personal travel covers goods and services acquired by the person going abroad for purposes other than business.

### **Telecommunications, Computer and Information Services**

According to the latest IMF manual, the service category “Telecommunications, Computer and Information Services” is reclassified by merging Telecommunication which was the former part of “Communication Services” with Computer services. But in India, “telecommunication, computer and information services” is not presented as a single category. Rather, “communication”, “software” and “news agency” are presented separately.

### **Construction Services**

The construction services cover work performed on construction projects and installations by employees outside the economic territory. It also includes installation and assembly work. In India, construction services include construction abroad by Indian companies with the import of goods.

### **Insurance and Pension Services**

According to India's BOP statistics, Insurance and Pension Services include freight insurance, life insurance and auxiliary services for India as well as the foreign insurance company. It also includes pension services.

### **Financial Services**

The Financial services include financial intermediation services (i.e. bank charges, collection charges, commission on financial lease etc.), investment banking services (i.e. brokerage, underwriting commission, etc.) and auxiliary services (i.e. operation & regulatory fees, custodial services, depository services, etc.).

### **Charges for the Use of Intellectual Property (not included elsewhere)**

The transactions related to intellectual property rights are covered under “royalties and license fees”, which are shown separately under the miscellaneous account under invisible articles in India's BOP.

### **Business Services**

The head “business services” includes trade-related services (i.e. commission on export and imports), operational leasing services, merchant services, legal services, accounting & auditing services, tax & management consultancy services, engineering and architecture services, advertising & marketing services, R&D services, environmental services etc.

### **Personal, Cultural and Recreational Services**

In India, “personal, cultural and recreational services” are broadly covered under the head “miscellaneous services” and shown in an invisible account. It covers “audio-visuals and related services” and “other personal and cultural services”.

### **Government Goods & Services not included Elsewhere (G.N.I.E)**

The Government goods and services not included elsewhere covers all goods and services associated with government or international and regional organizations which are not categorized under any other head.

### **What is International Trade?**

The term 'Trade' can be explained as buying and selling of goods and services by a seller to a buyer for some compensation which is generally received in terms of money or currency used within the country. Trade can also take place as an exchange of goods and services between two parties. International trade is an exchange of goods and services between two economies or countries which allows countries to expand their markets beyond national boundaries. The international trade has been defined by different authors as follows:

According to Wasserman and Haltman, “International trade consists of transactions between residents of different countries”.

According to OECD, “Trade in goods and services is defined as the transactions in goods and services between

residents and non-residents”

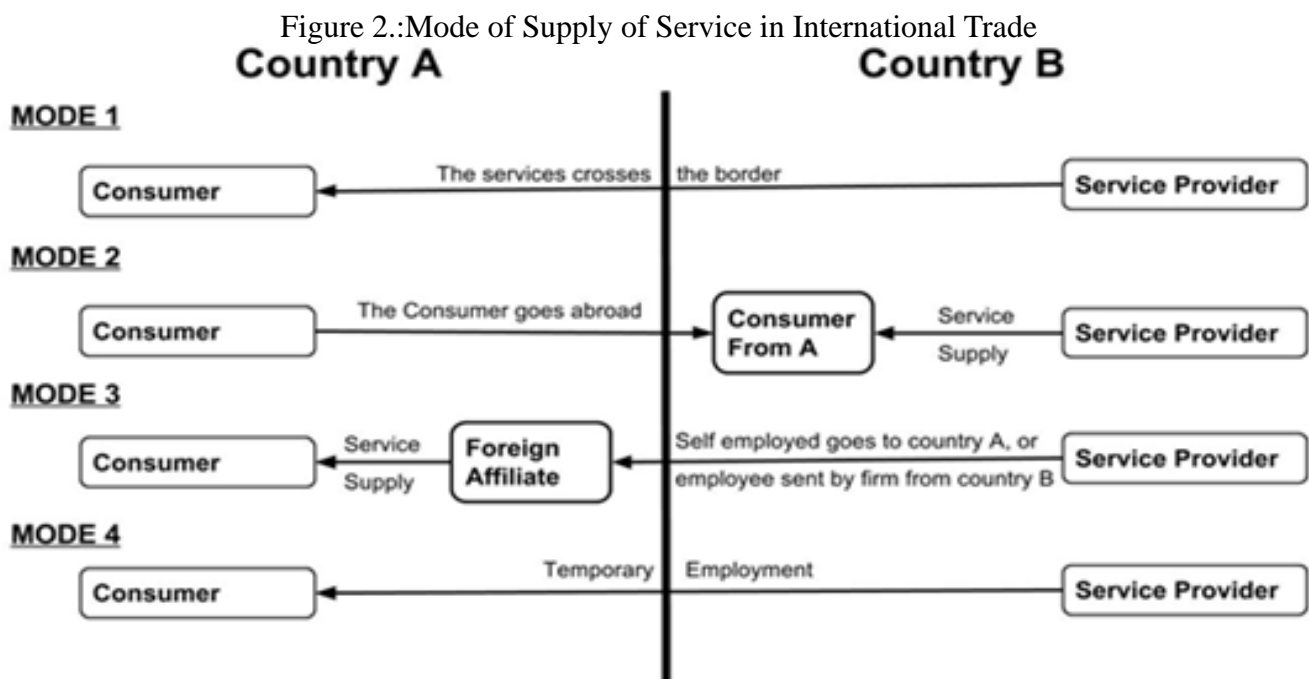
The international trade has two different types- Export and Import. Export means selling goods and services outside the country while import is buying goods and services from the outside world. The international trade comprises the export and import of goods as well as services. Since the study aims to explore the various aspects of trade in services in India, further discussion on trade will remain centred around the trade in services.

### Definition of Trade in Services

(Stern and Hoekman, 1987) explain international trade in services as “occurring when domestic factors receive income from non-residents in exchange for their services.” This definition of trade in services is not based on the location where services are produced. For many services i.e. mainly non-tradable services, the physical proximity of the service provider and receiver is the main concern. The definition of services given by GATS is based on the physical location of the service provider and receiver. Under GATS, trade in services has been categorized into four different groups based on their mode of supply. As per article I:1 of GATS, the services are defined according to the purpose of agreement or modes of supply.

- I. Mode 1: Cross-border supply - It covers services supplied from one country to another (for example, call centre services).
- II. Mode 2: Consumption Abroad - It covers consumers or firms making use of a service in another country (for example, through international tourism).
- III. Mode 3: Commercial Presence - It covers a foreign company setting up subsidiaries or branches to provide services in another country (such as a bank setting up a branch overseas).
- IV. Mode 4: Presence of Natural Person - covers individuals travelling from their own country to supply services in another country (for example, a consultant travelling abroad to provide an IT service).

The GATS classification of services is very similar to the classification proposed by (Stern and Hoekman, 1987) which is already discussed in the previous section. The first category of services which are provided with goods can be considered as GATS mode 1, the second category of demand located services can be considered as mode 3 and 4, and the third category of a provider located service as mode 2 and the last category of non-separated again as mode 3 and 4.



## **GATS & WTO (Regulatory Framework)**

In an international context, GATS has a very important role in trade in services. The concept of GATS is very similar to General Agreement on Tariffs and Trade (GATT) which is specifically meant for merchandise trade. The terms and concepts of GATS have been taken from GATT despite some important differences. The coverage of GATS as compared to GATT is wider, it defines trade in services beyond the traditional notion of cross border exchange of goods and factors. The present section explains the evolution and structure of GATS and how it regulates international trade in services. The GATS is the first multilateral agreement on trade that aims to the liberalization of trade in services. It provides a more secure and competitive global market for trade in services. The GATS covers all services, except “services provided in the exercise of governmental authority” and certain air transport services. The following is the list of services covered under GATS:

### **1. Business and Professional Services**

- a. Accountancy Services
- b. Advertising Services
- c. Architectural Services
- d. Computer and Related Services
- e. Legal Services

### **2. Communication Services**

- a. Audio-visual Services
- b. Postal and Courier Services
- c. Telecommunications

### **3. Construction and related Services**

4. Distribution Services
5. Educational Services
6. Energy Services
7. Environmental Services
8. Financial Services
9. Health and Social Services
10. Tourism Services
11. Transport Services

The General Agreement on Tariff and Trade was established in 1995 to regulate international trade. But GATT has not paid much attention to trade in services as it has done in the case of merchandise trade. In the last few decades, the decrease in transportation and communication costs together and globalization has led to faster growth in trade in services as compared to trade in merchandise which highlights the need for a separate and service-specific regulatory framework for trade in services. The provision of GATT specially meant for merchandise trade cannot be adopted for services as trade in services differs from trade in merchandise in many aspects. In trade in services:

1. Cross border transaction involves the movement of factors internationally and the establishment of operations of the service provider in the country of the receiver.
2. Government regulations of service industries assume an intensity or rarely found in goods industries.

While goods can be traded across borders without any provider or receiver leaving their own country but in the case of services transactions like banking and financing services cannot be traded without the personal interaction of the service provider and receiver. The certain kind of services requires temporary relocation of the service provider. Some services require the geographical proximity of the service provider and receiver. Unlike a trade in goods, the cross-border movement of services is identified by customs at international frontiers. So, the restrictions are generally imposed on foreign presence and establishment to regulate the international trade in services. The service trade is regulated for a variety of reasons that mainly includes protection from foreign competition. The trade-in services are largely regulated by national or sub-national governments through non-tariff barriers (NTBs) in the form of government regulations like professional certifications, quality and environmental standards, or privacy laws. All limit the capacity of providers to deliver services internationally. For example, if two countries have different licensing requirements for doctors, then a doctor from one country could not freely move to and practice in the other. Fully liberalizing trade by reducing NTBs implies establishing common, harmonized, or mutually recognized

standards of service. These reduce inefficiencies while providing quality assurances.

Presently, GATS is the only multilateral regulatory framework for trade in services among 164 World Trade Organization (WTO) member countries. The GATS has two important aspects i.e. Most Favoured Nation (MFN) principle which means that member countries cannot discriminate among their trading partners and the Specific commitment to GATS which includes allowing market access. The principle states that member countries must not discriminate against foreign suppliers to protect their domestic producers in the areas or sectors identified in the agreements.

The GATS contains 29 articles which cover all the service sectors. The articles contain a general agreement that applies to all the member countries. It is the first-ever multilateral agreement which regulates the international trade in services. The GATS operates at three stages- the main text contains general principles and obligations, annexes deal with rules for specific sectors, and individual member countries' specific commitments to provide access to their markets. Unlike GATT, the GATS has one more special element i.e., List of sectors where the member countries are temporarily not applying the "most favoured nation" (MFN) principle of non-discrimination. The GATS also has the provision of periodic negotiations that will progressively liberalize trade among member countries.

### **International Trade Theories**

Trade between countries is an important part of globalization. The international trade has made it possible for oils from gulf countries to reach the rest of the world, or for mobile phones from China to reach Indian markets. In the last few decades, trade in both goods and services has recorded significant growth. In the 21st century, international trade in services has become the main component of economic growth. To conceptual building trade in services, it becomes very important to understand the evolution of international trade theories, their applicability and subsequent developments made over the years. The trade theories are discussed in two parts i.e. traditional theories and modern theories as per their evolution over the period.

### **Mercantilism**

The oldest theory of trade is Mercantilism which was propounded during the 16th century in Europe. As per the mercantilist theory, the creation of wealth by collecting gold and other precious metals was the key objective of trade. The wealth of a country is measured by its holding of gold and other precious metals. The mercantilists focus to have a favourable balance of trade by following self-interest strategies and strict price mechanisms for their benefit. But mercantilists' doctrine was condemned by many economists who advocate free trade and liberal economies. Nevertheless, the idea of mercantilism is formalized as standard international trade theory.

### **Absolute Advantage Theory**

In 1776, Adam Smith criticized the mercantilist theory and gave the trade theory of absolute advantage which was based on free trade. He suggested that countries should produce only those goods which they can produce more efficiently than others. The absolute advantage theory argued that higher global efficiency can be achieved by free trade. As per absolute advantage, only a few countries will be benefitted from free trade if they were efficient in producing many goods as compared to others. In the case of two-country economies producing only two goods and country X could produce both the goods more efficiently as compared to country Y. Now the problem arises that whether there should be any trade between the two countries or not because only country X get benefitted from free trade.

### **Comparative Advantage Theory**

The problem of absolute advantage theory has been addressed by the Ricardian theory of comparative advantage. In the case of the same two economies and two commodity scenarios, this theory explains that a country will produce only that commodity that it can produce more efficiently. If country X could produce both the commodity A and B more efficiently than other country Y, then X country will produce commodity A since it can be produced more efficiently as compared to commodity B. The other commodity B will be produced by country X. In such a case

higher global efficiency can be achieved by free trade and both the country will be benefitted. The Ricardian theory has been empirically tested by many authors such as (MacDougall, 1951), (Stern, 1962) and (Balassa, 1963). But (Robinson, 1961) argued that assumptions of comparative advantage theory like one factor of production, full employment and static equilibrium condition cannot be applied to the real world.

### **Factor Endowment Theory**

The other theory of trade is the factor endowment theory which was given by Heckscher and Ohlin. The Heckscher-Ohlin (H-O) theory stated that countries exported goods whose production required factors with which they were endowed abundantly. If country X has labour and another country Y has capital in abundance then country X will produce and export the labour extensive product and country Y will export capital intensive products. The H-O theory was empirically tested by (Wassily Leontief, 1953) with US data for the year 1947 but the result was found contradictory. The results indicated that the US a capital endowed country was exporting more labour extensive goods.

### **Linder's Similarity Theory**

(Linder, 1961) gave importance to the demand-side factor in his theory to explain the trade patterns between countries. He argued that factors like similarities in income levels and income distribution across the countries determine their pattern of trade. As per the theory, the trade took place between the countries which have similar income levels and demand patterns. (Johanson, 1964) further worked on Linder's theory and come out with findings that a positive relationship between trade intensity and countries' similarities between trading partners could be because of their proximity. (Hirsch and Lev, 1973) further extended Linder's work and also considered the distance as an important determinant of bilateral trade.

### **National Competitive Advantage Theory**

(Porter, 1990) rejects the notion that the trade pattern of a country is explained by their comparative advantage. Moreover, he sees that the other theories of trade based on

factor endowment assume away the role of management i.e., strategies, improved technologies, managerial practices and differentiated products in competition. As such, he focuses more on what makes industries more competitive in different national conditions and how companies can take advantage to compete in these conditions. Porter has given four interrelated factors that lead to international competitive advantage.

- Firm strategy, structure and rivalry: How a company is run and how it competes.
- Related and supporting Industries: The role of suppliers and related workforce.
- Demand Conditions: The nature of demand for industry's products in the home country.
- Factor Endowments: Similar to HO theory but with some other possibilities.

### **Product Life Cycle Theory**

(Vernon, 1992) proposed that major industrial economies such as the US, Germany and Japan focus on the development and innovation of new products while less developed countries focus on the production of mature products. According to product life cycle theory, the production of products shifts from developed countries to developing countries as the product passes through the different stages of its life cycle. The developed countries with the help of their skilled workforce and huge capital resources provide a conducive environment for the development and innovation of new products. If the product remains successful, the companies first serve their domestic market and export to some countries in limited quantity. When the products become standardized, their production is shifted to less developed countries and start to be imported to developed countries.

The traditional theories based on comparative advantage failed to explain why the countries with similar factor endowment trade with each other. The Gravity Model of trade is frequently used by authors to explain the pattern of bilateral trade between countries. The gravity model was proposed by Jan Tinbergen in 1962 which states that the size of bilateral trade flows between the two countries can be explained by the gravity equation which is derived from Newton's law of gravity. The law of gravity states that

planets are attracted to each other in proportion to their size and proximity. Similarly in the gravity model for trade, the relative size of economies is determined by their GDPs and proximity to transaction cost which is measured by geographical distance between countries. The gravity model explains that the relative economic size of the economies attracts each other while their distance weakens their attractiveness. The standard gravity model proposed by (Imbergen, 1962) and (Phen, 1963) is as follows:

$$X_{ij} = C \cdot \frac{GDP_i^a GDP_j^b}{D_{ij}^c} \quad (2.1)$$

Where,

$X_{ij}$  = Trade value between country i and j

C = Constant

$GDP_i$  = GDP of country i

$GDP_j$  = GDP of country j

$D_{ij}$  = Distance between country i and j

The gravity model for international trade has long been criticized for not having a clear theoretical basis. Although the model first appeared as a pure empirical relationship, several theoretical explanations later appeared in the literature. (Helpman, 1987) used the good fit from gravity models as an argument supporting the new trade theory. (Deardorff, 1995) also showed that the model is consistent with the standard Heckscher-Ohlin-Samuelson theory of international trade.

### Theories for International Trade in Services

Now there is an issue of whether the above theories of trade can be applied to goods and services equally or not. The studies pointed out that there are some differences between goods and services (Hill, 1977) but many authors argued that these differences are not applied to trade (Hindley and Smith, 1984). Accordingly, in the absence of any specific trade theory for services, the existing trade theories are often applied to trade in services. Some other authors argued that the increase in the share of services in international trade requires a different approach to explain the law of comparative advantage for international trade in services (Melvin, 1989). (Sapir and Winter, 1994) also concluded that under perfect competition assumption,

comparative advantage theory can be applied to trade in services and merchandise trade also. Many other authors supported the applicability of comparative advantage theory on the premise that the logic of opportunity cost is not limited to goods only (McCulloch, 1988). For example, when the production of service requires certain kinds of factors such as human skills, geographical characteristics and abundance of resources then the country possessing the resources would have a comparative advantage. (Sapir and Lutz, 1981) found that particular geographical location or natural resources can be a source of comparative advantage in the case of tourism resources.

The new trade theory is mainly a theory of intra-industry trade that could also be applied to services which belong to industries having economic scales and imperfect or monopolistic conditions. However, (Deardorff, 1985) has highlighted that the presence of imperfect competition in service industries like many goods industries cannot be used as the sole characteristic to distinguish it from trade in goods.

The trade theories which broadly talk about trade in goods can be categorized into two groups. In the first category, trade theories are based on perfect competition, constant return to scales and comparative advantage. The comparative advantage may arise from technological differences according to the Ricardian model, Factor endowments according to the Heckscher-Ohlin model and differences in taste and preferences as per the Linder hypothesis. In the second category, the comparative advantage arises from economies of scale and imperfect competition but countries are identical.

(Hendley and Smith, 1984) examined the applicability of comparative advantage trade theory on trade in services. They argued that mere differences like goods and services are not the reason for the non-applicability of the existing trade theory of comparative advantage on trade in services. Further, this theory of trade did not specify the characteristics of goods. So, Ricardo's explanation of wine and cloth can also be applied to wine and insurance. (Deardorff, 1985) has evaluated the applicability of the law of comparative advantage on trade in services in a perfect competition scenario if services have certain



characteristics. These characteristics are the complementarity between trade in services and trade in goods, trade in services provided together with factor endowments and production by multinational firms whose factors of production contribute from distance. He concluded that the law of comparative advantage can be applied to services if services have certain characteristics and comparative advantage arises from the difference in factor endowments.

## Conclusion

The present study provides an overview of services and their categorization. The conceptual knowledge of services, their categorization and modes of supply are very important to understanding and interpreting the data. The study indicates that services are categorized by GATS/WTO and RBI on a different basis and also maintain their database accordingly. Further, it is also observed that the intangible nature of services is the main difference between goods and services in the context of international trade.

The various trade theories evolved over the period to explain the pattern of international trade. The literature does not make any clear distinction between goods and services while applying the trade theories. But few authors have highlighted some concerns about applying the traditional theories to services. The applicability of trade theories on services depends on the context and the nature of services covered under the study.

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