

## A Brief Review of the Evolution of International Trade Theories

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### Abstract:

This study intended to review of the evolution of the theories and policies related to international trade, ranging from classic and neo-classic theories to recent trade theories that have been already applied by several developed countries for international trade. To that end, at first neo-classic trade theories, ranging from reciprocal demand theory to resource endowment one, along with their experimental applications as well as logical critics against them are offered. then, complementary discussions on Linder's overlapping demand and the role of geography and transportation in trade, vertical intra-industry trade, horizontal intra-industry trade are followed. It finally ends by emphasis on the theories of Ozawa's flying geese model and strategic trade. Research findings show that economic theories initially focused on inter-industry trade and then expanded with an emphasis on intra-industrial theories. Among these, the role of geography, trade within the vertical and horizontal industry is important. According to the research results, theories of international trade initially emerged with the presentation of classical theories and then matured with neoclassical theories. But the evolution of theories entered a new phase after the introduction of the role of geography and economies of scale with Paul Krugman's article on "trade and geography" in the form of new trade theories (NTT). Also, the progress of international trade theories occurred with the introduction of theories into trade cycles and strategic trade issues.

### Introduction

International trade is one of the most important issues in the world economy. This sector is the main source of foreign direct investment (FDI) and absorption of new technology to increase the economic *GDP* of countries (Krugman, 1980). Studies revealed that trade theories have developed in line with the development of countries. The emergence of mercantilism school, in the late 16th to the 18th centuries in the modernized parts of Europe, is one of the first systematic attempts of the Europeans to formulate and explain trade theories. As a national economic policy, the main tenet of the mercantilism school was to encourage exports, reduce

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imports, and more specially to maximize the gathering of gold and silver in order to gain more power. Historically, this school had the most contribution in encouraging an aggressive mentality, and led to the colonial expansion in the capitalism economic system (Johnson, 1915; McCusker, 2005). However, when we look back at the past, we see that the evolution of what is today called standard theory of international trade is related to the period from 1770 to 1830. Such evolution began with the works of Adam Smith (1776), such as *Wealth of Nations* and *Principles of Economics* by David Ricardo (1817), respectively. These two books depicted the England's success in the fields of free trade, base trade and industry (Sen, 2010).

Using articles and books on international trade theories, this study review some of the theories of trade and growth in the history of development economics ranging from classic and neo-classic theories to new theories of trade that are now adopted by several developed countries for trade and development. The main emphasis of this study is on the historical review of economic theories. However, although there are studies in this field, the main focus of this study is on theories that have not received much attention in international trade. Topics such as the role of geography in trade, spatial-temporal models of business theories such as the theory of Ozawa's flying geese and strategic trade models are important topics in this study. These international trade theories include: 1) Classic and Neo-Classic Theories 2) New Trade Theories 3) Spatial Models of Trade 4) Intra-Industry Trade 5) Time and Technology Models 6) Strategic Trade. Each of these sections has been discussed below.

### **1- Classic and Neo-Classic Theories- The Rise and Maturity of Free Trade**

The free trade proposed by Smith and Riccardo, in contrast to the mercantilism supportive policies, was adopted as a means to get production returns for most commodities globally. Smith considered the division of labor as a basis for cutting manufacture costs and creating advantageous (absolute) competition in growing industries in the UK. He believed that every country that produces a particular product more efficiently is involved in the specialization of its production or increasing its production more than the domestic consumption. This way, the country exchanges its surplus on its consumption with goods less productive in its production. In effect, the simple fact that two countries can freely trade each and every other country has some benefits in doing such trade. Smith maintained that free trade between countries would result in more efficient use of global resources and improves global welfare (A. Smith, 1937).

In Ricardo's time, the growth in imports of wage goods, for instance corn, had a major influence on decreasing labor wage and, consequently, resulted in the decline in the wage goods price in the UK. Accordingly, Riccardo formulated the main hypothesis of Smith's free trade theory based on the working hours and constant costs in a two-commodity world. In Ricardo's world, the necessary

prerequisite for securing the profitability of bilateral trade was considered as a comparative advantage for societies with a full specialization in a particular commodity in terms of working hours used for each output unit (Ricardo, 1955). In this theory, work force is the only factor in production, and, accordingly, countries differ in the productivity of labor in different industries. Every country produces goods that its labor force produces them relatively more efficiently, and on the other hand imports the goods that the work force produces it relatively inefficiently and inadequately. For Ricardo, the difference in the price of goods between two countries is formed due to differences in the productivity of the factors and is the reason for the mutually beneficial trade between countries (Sraffa & Dobb, 1951).

Bentham (1748-1832), as a utilitarian, believed that in Ricardo's comparative advantage theory, the role of demand was not deemed as an important factor to justify the trade conditions. By introducing reciprocal demand, John Stuart Mill (1873-1806) introduced the concept of demand in the Ricardian trade theory (Crisp, 1998). A couple of years later, Alfred Marshall (1890) developed it by presenting offer curve and characterizing terms of trade (Obstfeld, Rogoff, & Rogoff, 1996).

In Marshall's theory, units of sample goods recommended by the countries surveyed in the two-state model showed demand patterns similar to supply patterns. However, the side of the supply embedded in such theory changed a great deal of the Ricardian principle of constant labor time inputs to the concept of real costs. Indeed, for Marshall such costs were rated based on job satisfaction. Besides, contrary to constant factor coefficients of workforce in Ricardian theory, output in Marshall's theory followed changing factor coefficients even in the case of downward output conditions (Bhardwaj, 1989). In the meantime, several economists have attempted to complete Ricardo's comparative advantage theory. Among them, Haberler's (1968) effort was the most prominent. According to his theories, the labor value theory is not necessary to provide relative costs, however, the cost of the next best alternative of a product or service should be equal to the value of the commodity that is waived to produce the best alternative. In this case, he formulated Ricardo's theory based on opportunity cost. Therefore, for him, every country proceeds to produce and export a commodity that its opportunity cost is lower. It is, thus, natural that the more differences in opportunity costs between two exchanging countries, the more exchange and trade motivation will be (Baldwin, 1982).

Ricardo's comparative advantage theory, although proposed to partly explain the cause of trade realization in the goods traded and the volume of commerce, does not explain why the relative cost is different for different countries (Sen, 2010). Accordingly, Heckscher (1919) and then Ohlin (1924) inspired the balancing rule between the supply and demand forces of the Austrian school with the concept of

opportunity cost and consumer utility, dating back to the free trade school and the classic Ricardo's comparative advantage theory to their early stages (Sen, 2010). In keeping with this theory, the difference in relative frequency of factors and their prices causes the difference in relative prices of goods before the trade between the two countries occurred. Therefore, the leading determining factor of comparative advantage in each country is intended for beneficial trade (Heckscher, 1991). In effect, each country is likely to export goods that have a lot of production factors for that commodity in the country, and its use is cheap for the country. In turn, every country is expected to import goods that production factors for that commodity in the country are scarce and it is expensive for the country to use it. In this case, unlike the Ricardo's method in which the supply cost is measured in terms of working hours, the returns of the two factors of labor and capital production are valued at a level in proportion with the market value of their consumer goods. Therefore, in identifying the trade benefit factors, customer preferences for commodities will be as influential as supply factors in deciding the price competitiveness of commodities in communities where trading occurs (Feenstra, 2015).

In this case, Heckscher-Ohlin, and later Samuelson (1949), by introducing the hypothesis of factor price equalization (Samuelson, 1949), developed free trade in another way, in which the source endowments of nations are the determinant factor of bilateral trade. In these circumstances, free-trade theory went away from Ricardian comparative cost interpretations of school technology and got closer to a resource-based description for nations with similar access to technology. Therefore, product, consumption, and trade (product) enhancement was warranties for two trading nations in equilibrium (Sen, 2010). With the expansion of trade theories, which increasingly diminished the role of supply side, another justification of the trade model, called overlapping demand, in which the role of demand side was more highlighted in the justification of the busiest trade was offered by a Swedish economist, Linder (1961). According to Linder, the main international trade is industrial goods, hence firms within a country are generally encouraged to produce goods that have a large domestic market, and accordingly the external market with potential exports power is found in countries with similar consumer tastes close to domestic consumers. In this case, such countries need similar demands as for the products they produce and consume jointly (Linder, 1961). In explaining trade, Linder argues that since consumer preferences are heavily dependent on their income levels, a country with high per capita income, demands luxury goods, and a country with low per capita income demands low-quality goods. Therefore, in the new interpretation, Linder overrides supply side domination from the viewpoint of competitive costs or factor endowments, and product differentiation or, as he maintains, sophistication of product takes the role of demand into the central stage as an explanation for trade. This theory is also widely used in the explanation of south-south trade or intra-industry trade;

however, it has been relatively ignored in the literature of trade in recent years. Accordingly, the Heckscher-Ohlin-Samuelson (HOS) neoclassical trade theory continues to have a special attractiveness to economists who seek to find the cause of free trade in optimization at global scale, production efficiency (or output return), consumption (as well as prosperity) and the utility of production factors in full employment (Sen, 2010).

## **2- New Trade Theories – Discarding Limiting Assumptions of Free Trade**

The transition from old free-trade theories to new trade theories was brought about with the efforts of many people. New trade theories generally have three main discriminating features to old (classical and neoclassical) theories; first: the economies of scale, second: imperfect markets, and third: product differentiation. The idea that a return to an ever-increasing scale of production could be regarded as a trade factor was initially expressed by Graham (1923) and Ohlin (1933) (Feenstra, 2015). Based on this theory, even if two countries are comparable with regard to their comparative advantage, it would be better for them both to become specialized in the production of one single commodity. The reason is that specialization in one country gives it the ability to better utilize the opportunity of scale of production. On the other hand, this, in turn, reduces goods production cost, and thus expands the domain of profit-making inter-commodity trade (Helpman, 1989). The basic literature on new trade theories was presented by scholars such as Lancaster (1975, 1979), Spence (1976), and Dixit and Stiglitz (1977). Lancaster showed that consumers acquire more utility from using their ideal variety as it distinguishes such a commodity from other commodities (Lancaster, 1974). In contrast to Spence, Dixit and Stiglitz, by introducing a utility function through which the utility rises with a variety of consumer goods, and not just one single commodity, described a consumer who acquires utility by demanding for distinct and diverse commodities. They introduced love of variety as its main topic (Dixit & Stiglitz, 1977; Spence, 1976). The aforementioned notions were assumed by Krugman (1979, 1980), Lancaster (1980), Helpman (1981) in the trade literature. In turn, Krugman employed Spence, Dixit, and Stiglitz's love of variety, and Lancaster and Helpman used the term of ideal variety (Feenstra, 2015).

In the literature on new trade, there is a distinction between economies of scale imported by companies externally with a national origin, and economies of scale formed by the global industrial development with an international origin. Nevertheless, the benefits ensued from trade rise with an increase in industries output from industrialized countries benefiting from a national economic scale. Correspondingly, trade interests also become likely for industries that benefit from international savings. In particular, small countries that do not have access to these economies in the absence of such conditions would benefit from trade liberalization when such conditions become present. Therefore, trade can be

beneficial or harmful, based on external savings at the international level for states that have the capacity to enjoy economies of scale. The abovementioned cases are also accessible for countries that benefit from natural resources endowments or countries with similar pre-trade prices (Ethier, 1984; Helpman, 1984). Therefore, the economy of scale which comes to company externally and affects industry internally brings output to world trade stage from a location viewpoint. In this case, it allows the reduction of costs on a global scale, while shifting output from regions/countries with lower cost-efficiency (Ethier, 1984; Krugman, 1981) and, as Krugman (1981) says what is clear here is an example for free trade, which is linked to the potential benefits to all trading nations with achieving global scale returns.

However, the application of a return in an increasing scale at newer times for new trade theories was associated with complex problems, especially when its starting point was described based on HOS neoclassical formulation, which, in turn, resulted in more and more complex theories of those new theoreticians who especially had emphasis on the predictive power of HOS theory in conditions of increasing economies of scale and imperfect competition (Helpman, 1981, 1984). However, both the discussed national and international economies are disruptive for predictive power along with the main propositions of HOS classical model. Another problem of new theories is the failure of the full competition market in terms of output economies of scale which is one of the fundamental assumptions in the old literature (Sen, 2010). For that reason, producers who benefit from the scale of production usually try to impose their influence and power on market by controlling prices and market share. This, in turn, leads to the creation of a defective competition market, monopolistic competition, as well as oligopoly or monopoly. Such a change negates the underlying assumptions in the classical model, and accordingly, the main results from the point of view of its predictive power and its secondary results, such as the factor-price equalization (Samuelson's theorem), protection and real wages (Stolper-Samuelson's theorem, 1941) as well as the results of variations in quantities of factor endowments (Rybczynski theorem, 1955) are eliminated in the traditional models of trade models. Therefore, the attempts made in the circles of new trade theories to restore the predictive power of these theories by presenting a series of preventive assumptions did not contribute in terms of its generality (Helpman, 1981). Empirical research related to the new trade theory has also revealed the complexities and problems as well as issues that remain in international trade. However, many basic empirical research studies showed that although the assumptions of classical and neoclassical trade models are weak compared to the new trade theories, as new trade theories do not explicitly explain the trade between countries, such assumptions are not completely discarded (Helpman, 1981).

Similar to economies of scale, product diversity disrupts the main characteristics of the HOS trade model. When demand in each country is created for specific types

of commodities produced by an industry, conditions for inter-sectoral (or intra-industry) trade are provided for such a country. In other words, in the case of imperfect markets, each country can exchange a distinct form of product with another country. In this case, while trading, firms can freely shift from a product variety to another variety that is more profitable. This way, instead of leaving an industry, firms can turn into the so-called intra-industry trade. This will violate Samuelson's theorem, and in such a situation, countries will not reach to full specialization (Krugman, 1979). In the classical and neoclassical trade theories, with the assumption of complete competition between industries, the homogeneity of goods and fixed return to scale from the Ricardian model to the Heckscher-Ohlin model, and also the difference between countries (which are mostly dependent on global trade or inter-industrial trade) are emphasized on. In effect, such classical and neoclassical trade theories are not able to foresee or describe intra-industry trade, since in these models trading similar goods between countries is not reasonable (Sen, 2010). A distinction in a commodity can be due to horizontal differentiation, i.e. differences due to properties, and also the differences due to quality and technological distinction. A wide range of theoretical and empirical research has been mostly dependent on cross-sectional assessment of intra-industry trade, in which there were attempts to reach consensus on its determinants (Greenaway, Hine, & Milner, 1995; Greenaway & Milner, 1984).

### **3- Spatial Models of Trade- Trade and Geography**

Most research relating to trade in the past has paid little attention to the spatial dimensions of trade described concisely in the earlier part. As Frankel (1988) states, theories of (international) trade ignored the geographic dimension of trade. In effect, they considered the countries as entities coming out from objects that do not have any physical location in the geographic space (Frankel, 2007). More attention was, instead, paid to the geographic dimensions of trade, and also on the amount and type of goods transported between the regions.

Map representation of commodity flows is, in turn, widely used for regional scientists and transport geographers to investigate the pattern of trade flows between the regions. Early studies can be found in the works of Smith (1964), Ulman (1957), Berry (1962 and 1966), Cox (1965), Rogers (1971), Black (1973), Tobler (1975, 1981 and 1987), and Knudsen (1988). For instance, Ulman (1957) explored the spatial pattern of commodity flow in the US domestic and foreign trade which is mostly done by railways to describe spatial communication in the economy of America. In this context, Ulman maintains that the trade flow is realized through intervening opportunity, complementarity, and transferability. Considering Ulman's three principles of spatial interaction, trade occurs once there are two regions where there is market-clearing of movable (completable) product, while no other source of supply (intervening opportunity) exists, and while there

is no high costs or friction of transportation (transferability) (Ulman, 1957). In another study, Barry (1962 and 1966) examined India's commodity flow to illustrate the pattern of flow, and also pinpoint the determinants of the pattern of communication between India's economy. Displaying spatial patterns of commodity flows in India, his research developed a lot of cartographic maps of Indian commodity flow, providing a clear picture of the original patterns of spatial interaction in India in the 1960s. This atlas, indeed, included commodity flow in India covering 63 types of goods transported. Besides, for each commodity, a series of maps involving twelve features, indicates the quantity of transportation and the value of flows from or to the centers of main metropolitan and non-metropolitan cities, the major production zones, main transport routes, the origins and major destinations of the trading partners, the main regional flows, as well as the inner regions of the country and urban population density as a possible demand factors (Berry, 1963, 1966). Similarly, examining the flow of agricultural and farming commodity via railroads to six New England states in the US in 1959, Smith (1964) reviewed an indicator based on completeness spatial interaction to describe the spatial pattern of cargoes shipping to New England from 34 states. His completeness index showed the relative importance of trade partners (R. H. Smith, 1964). Black (1973) also carried out a binary factor analysis of a set of 24 product groups for nine parts of the United States. He reported seven significant factors, each of them is concentrated in a different geographic region (Black, 1973). In turn, Knudsen (1988) made use of the concept of Ulman's completeness to investigate the pattern of trade partners in the US interstate commodity flow for the years 1972 to 1981, indicating that trade partners were often stable over time, despite the rapid changes in the volume of flows. Moreover, he concluded that the partners involved in great quantities are more reliable as compared to those involved in small partners (Knudsen, 1988).

The studies related to trade flows in the transportation geography field and regional science is classified into three major categories. The first one emphasizes on the analysis of exploratory spatial data of flows related to a number of quantitative methods in which geographic or spatial patterns are connected with mathematical or statistical methods aiming to depict the phenomena discovered in the geography field more effectively. The second classification attempted to discover and isolate the causes and issues determining the pattern or spatial structure of the observed trade flows. The second method, in turn, attempts to reveal and isolate the reasons and factors determining the spatial pattern or structure observed of trade flow created based on the results extracted from the first category. The final category is the identification of trade flows which is highly based on several findings and attitudes emerging from the second field. A dependable estimate of trade flows is likely through the expansion of spatial interaction models. In addition to all stated before, the analysis of spatial exploratory data based on trade flows, classified as

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the main topic in the study of inter-regional trade, can be studied as the foundation in understanding the regional economic structure (Lee, 2011).

#### **4- Vertical Intra-Industrial Trade- The emergence of Multinational Corporations**

The initial research studies on the role of geography and geographic regions and its role in trade opened up a new topic in the trade literature. When industrial firms enjoy from scale economies in different places and transport intermediate goods at different phases of the production chain for different areas, vertical intra-industrial will occur before delivery to final consumers. The swift growth of trade in components and parts of production is described in some terminologies, including international fragmentation of production, the emergence of international production networks and production outsourcing (Arndt & Kierzkowski, 2001; Jones & Kierzkowski, 2005; Ng & Yeats, 2003). The key notion provided for all the justifications is that the production process, which is traditionally integrated into one company or in an area vertically split into distinct parts that can be sited in a number of regions in one country or in several countries which have specific production firms. In this framework, the specialists increase the vertical intra-industrial trade at a certain level of production process by increasing production. In the description of vertical specializing, a product have to be made in successive phases and must pass through at least one border region more than once. For instance, in the simplest form, a country can export an intermediate product to another country that accomplishes commodity production, and then re-export the final product to the first country. Therefore, another kind of intra-industry trade, known as vertical intra-industry trade, seems to focus mostly on the trading of intermediate products under the vertical integration of production.

In turn, Jones and Kierzkowski (1990) provided a general model for the analysis of international fragmentation of production for the first time, explaining why production varies and how it triggers the international trade flow. In the simplified form of Jones and Kierzkowski's fragmentation model, blocks of production usually represent a constant scale return, while it is assumed that services-connecting activities such as transportation are expected to have higher returns. In this case, the total cost of production can be reduced by production outsourcing of a part of integrated production activity. That is, the movement of a part using relatively heavy unskilled labor brings about another area in which labor productivity is greater than its wage rate, resulting in lower production costs. This geographical fragmentation of production, therefore, necessitates connection services including transportation, communications, and other coordination activities. In turn, the roles of such factors as geographical proximity, trade integrity, and trade barriers in such type of trade become more prominent. This way, the additional costs of service connections will be more consistent with the

final assembly costs of less manufacturing blocks. Consequently, the average cost of production generally decreases discontinuously in conditions where the degree of fragmentation increases. In effect, the more fragmented produced blocks, the greater vertical intra-industry trade is predictable (Jones & Kierzkowski, 2018). Various aspects of production fragmentation and vertical intra-industrial trade have been so far examined both theoretically and experimentally. Based on the overall results of these studies, factors like geographical proximity are affected by lower shipping costs, near production factors, cultural commonalities, trade integration and trade barriers, which influence communication costs, and in-industry vertical trade (Balassa, 1986). Based on the theories of fragmentation and outsourcing, the leading sources of such a growth have led to the increase in global incomes and the reduction of communication and transportation costs (Arndt & Kierzkowski, 2001; Dluhosch, 2006; Egger & Egger, 2005; Yeats, 1999).

### **5- Foreign Trade and Foreign Direct Investment (FDI) - Time and Technology**

Direct foreign investment (FDI), which flows along with the flow of technology, is an important factor relating to flow of trade and space patterns present in the theoretical trade literature since the 1960s. Michael Posner was one of the economists who, in 1961, tried to develop a trade model by highlighting the role of time and technology change over time. He proposed a model where inventions are being created in a country, but new technology spreads with a lagged time in different parts of the world. Introducing reaction lag meaning the time interval between the start of export from the innovator country and the time of perception of the domestic producers, and also the demand lag for consumers, as well as the imitation lag, involving the time to mimic the ideas of the original innovator in other areas, Posner defined Technological Gap Theory (Posner, 1961). Hufbauer, inspired by Posner's work in 1966, introduced the role of long-term dynamic economies of scale achieved through learning by doing as a fundamental factor affecting the length of the time lag. That is why it takes time for domestic manufacturers to imitate foreign inventors, and reduce their prices to their level. This increases the time it takes to remain a trade with the technological gap. Hufbauer also assumes that high-wage economies have a relative superiority in exports with technological gap. Hence, trade with a technological gap emerges in the form of an export flow from rich-wage economies to low-wage economies. However, when new ideas are successfully mimicked, such exports are stopped, and the comparative advantage in the production of such goods goes to low-wage economies, and high-wage economies will become the net importers of the goods that they were once its inventors (Hufbauer, 1966). Following Posner and Hufbauer's research, Vernon introduced the Product Life Cycle theory in 1970, based on foreign investment and technology-driven trade flows. According to this theory, the products follow the three stages of being new, mature and standardized.

In the beginning, a new product is being developed and manufactured in a country where it has shortage of labor, but sufficient capital and technology. Nevertheless, after two other stages, the production of the new product is transferred to other industrialized countries, and then to underdeveloped countries with cheap labor (Vernon, 1970). A relatively more realistic approach to new technology theories and FDI, including Ozawa's (1995) flying geese (FG) model, was derived from the Akamatsu's (1961 and 1962) dynamic relative advantage, to describe the re-allocation of production and shift of export platforms in Asia occurring since the 1980s. Accordingly, it seems that PLC theory and its congeners such as FG associates, the technology-integrated trade approach, and FDI use two concepts of product diversity in increasing the horizontal intra-industrial trade and imperfect market. In other words, they emphasize on the role of FDI on horizontal intra-industrial trade (Kasahara, 2004).

#### **6- Strategic Trade – Fight against Free Trade**

The presence of economies of scale, imperfect markets and product diversity, along with intra-industrial trade is possible in both directions; when markets can be divided by using flexibilities of different demands dominant in both countries for the same commodity (commodity diversity), or when the company can use discrimination or price dumping to maximize its revenue (Sen, 2010). These conditions relate to cases where the demand curve is subject to different flexibilities in both countries. The existence of imperfect markets with the potential of bilateral dumping by countries, in each other's market, encouraged Brander and Spencer (1985) to develop the concept of strategic trade. These conditions are most likely to escalate when the countries that have domestic national economies of scale and have manufactured the goods ahead of others, sell their goods at a lower price than other countries that have just entered the industry. Another possibility is that a nascent industry justifies strategy trade policy with high export subsidies to achieve the above-mentioned conditions in order to maximize economies of scale. This is, indeed, the basis of offensive strategic trade in some advanced nations from an industrial point of view (Brander & Spencer, 1985; Krugman & Obstfeld, 2009). New trade theories strategic trade for public policy brought about good foreign exchange benefits, especially for the US during the 1980s. Therefore, the vagaries of history, and not the sources that determine what a country produces or exports, plays a fundamental role in the trade. Therefore, the role of history and accident was very important in finding the place of an industry on a global map (Krugman, 1994). This concept which changed from an import substitution regime to an export promotion regime was used in the 1980s to identify the exports of developing countries. These cases were, in turn, widely used by free trade principles in developing countries as instruments for questioning controlled trade regimes (Bhagwati, 1978; Srinivasan, 1978).

## **7- Conclusions**

For the past four centuries, since the time of the mercantilism school, and perhaps earlier, economic scholars have been working to properly understand trade relationships and examine the causes of trade as an effective strategy to grow and improve economic quality. The evolution of trade theories seems to have been examined at three levels. The first is to support free trade, to determine the level of trade and development between regions. This level began with the theories of Smith's absolute advantage and the relative advantage of Riccardo and was then developed by people such as Bentham, Stuart Mill, Marshall, Heckscher, Ohlin and Samuelson. At the next level, new trade theories (NTT) were developed with the emphasis on the economies of scale, imperfect markets, and product differentiation. The result is the emergence of theories of intra-industry trade. Studies have shown that the existence of a transport scale saving factor plays an important role in the benefits of intra-industrial trade. As Ohlin (1935) described that theories of interregional and international trade as helping to solve the problem of the interdependence between world prices and the importance of space and transportation costs in trade (Ohlin, 1935); it is believed that the development of trade theories, from old to new ones, seems to have gone through three levels. The first level focuses on supporting the trade through the ongoing implementation of free trade policies. This happens through intergovernmental ties, and also at the pressure of international institutions such as the IMF and the World Trade Organization. This second level relies on the policies that lead to the development of trade among industries. This level is achieved through economies of scale and specialized benefits. The third level, in turn, relies on the relations between countries and geographic locations, paying attention to reasons of the advantages and benefits of transportation and production inputs. so, it seems that the spatial patterns of trade are capable of justifying the trade relations of companies appearing in scale of one or more country in the future.

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**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

**Reference**

- 1- Arndt, S. W., & Kierzkowski, H. (2001). *Fragmentation: New production patterns in the world economy*: OUP Oxford.
- 2- Balassa, B. A. (1986). *Intra-industry trade among exporters of manufactured goods*: World Bank.
- 3- Baldwin, R. E. (1982). Gottfried Haberler's contributions to international trade theory and policy. *The Quarterly Journal of Economics*, 97(1), 141-148.
- 4- Berry, B. J. L. (1963). *Structural Components of Changing Transportation Flow Networks*: Transportation Center at Northwestern University.
- 5- Berry, B. J. L. (1966). *Essays on Commodity Flows and the Spatial Structure of the Indian Economy*. Retrieved from
- 6- Bhagwati, J. N. (1978). Anatomy and Consequences of Exchange Control Regimes, Vol. 1. *Studies in International Economic Relations*, 10.
- 7- Bhardwaj, R. (1989). India's Trade with Japan: Constraints and Opportunities. In: JSTOR.
- 8- Black, W. R. (1973). Toward a factorial ecology of flows. *Economic Geography*, 49(1), 59-67.
- 9- Brander, J. A., & Spencer, B. J. (1985). Export subsidies and international market share rivalry. *Journal of international economics*, 18(1-2), 83-100.
- 10- Crisp, R. (1998). Utilitarianism.
- 11- Dixit, A. K., & Stiglitz, J. E. (1977). Monopolistic competition and optimum product diversity. *The American Economic Review*, 67(3), 297-308.
- 12- Dluhosch, B. (2006). Intraindustry trade and the gains from fragmentation. *The North American Journal of Economics and Finance*, 17(1), 49-64.
- 13- Egger, H., & Egger, P. (2005). Labor market effects of outsourcing under industrial interdependence. *International Review of Economics & Finance*, 14(3), 349-363.
- 14- Ethier, W. J. (1984). Higher dimensional issues in trade theory. *Handbook of international economics*, 1, 131-184.
- 15- Feenstra, R. C. (2015). *Advanced international trade: theory and evidence*: Princeton university press.
- 16- Frankel, J. A. (2007). *The regionalization of the world economy*: University of Chicago Press.
- 17- Greenaway, D., Hine, R., & Milner, C. (1995). Vertical and horizontal intra-industry trade: a cross industry analysis for the United Kingdom. *The economic journal*, 105(433), 1505-1518.
- 18- Greenaway, D., & Milner, C. (1984). A cross section analysis of intra-industry trade in the UK. *European Economic Review*, 25(3), 319-344.
- 19- Heckscher, E. (1991). edited by Harry Flam and M. June Flanders. Heckscher-Ohlin Trade Theory. In: Cambridge: MIT Press.

- 20- Helpman, E. (1981). International trade in the presence of product differentiation, economies of scale and monopolistic competition: A Chamberlin-Heckscher-Ohlin approach. *Journal of international economics*, 11(3), 305-340.
- 21- Helpman, E. (1984). Increasing returns, imperfect markets, and trade theory. *Handbook of international economics*, 1, 325-365.
- 22- Helpman, E. (1989). *Monopolistic competition in trade theory*. Retrieved from
- 23- Hufbauer, G. C. (1966). Synthetic materials and the theory of international trade.
- 24- Johnson, E. R. (1915). *History of Domestic and Foreign Commerce of the United States* (Vol. 1): Carnegie institution of Washington.
- 25- Jones, R. W., & Kierzkowski, H. (2005). International fragmentation and the new economic geography. *The North American Journal of Economics and Finance*, 16(1), 1-10.
- 26- Jones, R. W., & Kierzkowski, H. (2018). The role of services in production and international trade: A theoretical framework. *World Scientific Book Chapters*, 233-253.
- 27- Kasahara, S. (2004). The Flying Geese Paradigm: A critical study of its application to East Asian regional development.
- 28- Knudsen, D. C. (1988). On the stability of trade partnerships. *Environment and Planning A*, 20(10), 1335-1343.
- 29- Krugman, P. R. (1979). Increasing returns, monopolistic competition, and international trade. *Journal of international economics*, 9(4), 469-479.
- 30- Krugman, P. R. (1980). Scale economies, product differentiation, and the pattern of trade. *The American Economic Review*, 70(5), 950-959.
- 31- Krugman, P. R. (1981). Trade, accumulation, and uneven development. *Journal of Development Economics*, 8(2), 149-161.
- 32- Krugman, P. R. (1994). *Rethinking international trade*: MIT press.
- 33- Krugman, P. R., & Obstfeld, M. (2009). *International economics: Theory and policy*: Pearson Education.
- 34- Lancaster, K. (1974). *Socially optimal product differentiation*: University of California, Berkeley.
- 35- Lee, J.-S. (2011). *Trade and spatial economic interdependence: US interregional trade and regional economic structure*. University of Illinois at Urbana-Champaign,
- 36- Linder, S. B. (1961). *An essay on trade and transformation*: Almqvist & Wiksell Stockholm.
- 37- McCusker, J. (2005). *Essays in the economic history of the Atlantic world* (Vol. 1): Routledge.
- 38- Ng, F., & Yeats, A. J. (2003). Major trade trends in East Asia: what are their implications for regional cooperation and growth? *World Bank policy research working paper*(3084).

- 39-Obstfeld, M., Rogoff, K. S., & Rogoff, K. (1996). *Foundations of international macroeconomics*: MIT press.
- 40-Ohlin, B. (1935). *Interregional and international trade*: Harvard University Press, Cambridge.
- 41- Posner, M. V. (1961). International trade and technical change. *Oxford economic papers*, 13(3), 323-341.
- 42-Ricardo, D. (1955). *The works and correspondence of David Ricardo: Volume 10, Biographical miscellany* (Vol. 10): Cambridge University Press.
- 43-Samuelson, P. A. (1949). International factor-price equalisation once again. *The economic journal*, 59(234), 181-197.
- 44- Sen, S. (2010). International trade theory and policy: a review of the literature.
- 45- Smith, A. (1937). The wealth of nations [1776]. In: na.
- 46-Smith, R. H. (1964). Toward a measure of complementarity. *Economic Geography*, 40(1), 1-8.
- 47- Spence, M. (1976). Product selection, fixed costs, and monopolistic competition. *The Review of economic studies*, 43(2), 217-235.
- 48- Sraffa, P., & Dobb, M. H. (1951). *The works and correspondence of David Ricardo* (Vol. 1): Cambridge University Press Cambridge.
- 49- Srinivasan, T. (1978). Liberalisation Attempts and Consequences. In: NBER.
- 50- Ulman, L. (1957). Trade Unions. In: JSTOR.
- 51- Vernon, R. (1970). Introduction to " The Technology Factor in International Trade". In *The Technology Factor in International Trade* (pp. 1-5): NBER.
- 52- Yeats, A. J. (1999). *Just how big is global production sharing?* : The World Bank.

## مروری کوتاه بر سیر تکاملی نظریه های تجارت بین الملل

### چکیده:

این مطالعه با هدف بررسی سیر تحول نظریه ها و سیاست‌های مرتبط با تجارت بین‌الملل از نظریه‌های کلاسیک و نئوکلاسیک گرفته تا نظریه های تجاری اخیر که قبلاً توسط چندین کشور برای تجارت بین‌الملل اعمال شده است، انجام شد. برای این منظور، در ابتدا نظریه های تجارت نئوکلاسیک، از نظریه تقاضای متقابل تا نظریه وفور منابع، همراه با کاربردهای تجربی آن‌ها و همچنین منتقدان منطقی علیه آن‌ها ارائه می‌شوند. سپس، بحث های تکمیلی در مورد تقاضای همپوشان لیندر و نقش جغرافیا و حمل و نقل در تجارت، تجارت درون صنعتی عمودی، تجارت درون صنعتی افقی دنبال می‌شود. در نهایت با تأکید بر نظریه های مدل‌های پرنده اوزاوا و تجارت استراتژیک به پایان می‌رسد. یافته های پژوهش نشان می‌دهد که نظریه های اقتصادی در ابتدا بر تجارت بین صنعتی متمرکز بوده و سپس با تأکید بر نظریه های درون صنعتی گسترش یافته اند. در این میان نقش جغرافیا، تجارت در صنعت عمودی و افقی مهم است. بر اساس نتایج پژوهش، نظریه های تجارت بین الملل در ابتدا با ارائه نظریه های کلاسیک پدید آمدند و سپس با نظریه های نئوکلاسیک به بلوغ رسیدند. اما تکامل نظریه ها پس از معرفی نقش جغرافیا و اقتصاد مقیاس با مقاله پل کروگمن در مورد تجارت و جغرافیا در قالب نظریه های تجاری جدید (NTT) وارد مرحله جدیدی شد. همچنین پیشرفت نظریه های تجارت بین‌الملل با ورود نظریه‌ها به چرخه‌های تجاری و مسائل استراتژیک تجارت رخ داد.

**کلید واژه ها:** نظریه کلاسیک، نظریه تجارت جدید، فناوری، تجارت درون صنعت، تجارت و جغرافیا، تجارت عمودی و افقی.