

A Survey of the Evolution of International Trade Theories

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Abstract: *The purpose of the paper is to give emphasis to the evolution of international trade theories and their application among nations. A review of the literature method was applied to review the evolution of different scholars' contributions in the area of international trade. Over a period of time, the development in theories of international trade has gone significant changes. While classical and neo-classical trade theories remain valid new trade models have important insights to describe and seem to a better explanation of the present global trade patterns in the dynamic world.*

Keywords: *Trade Theory; Trade Model; Adam Smith; Mercantilism; Comparative Cost.*

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I. Introduction

International trade is a dynamic factor in global economic activity and a driver of economic growth in many countries. International trade has a long history. The development of international trade thoughts starts from Pre-doctrinal theoretical elements to modern trade theories. Trade was a basic aspect of ancient Greek. Many goods were traded in one part of the Mediterranean, originating in a completely different and distant region due to increased population movement and transport development. Food, raw materials, and manufactured goods were not only made available to the Greeks for the first time, but the export of such classics as wine, olives, and pottery helped to spread Greek culture to the wider world (Cartwright, 2018). Plato (427-348 B.C.) and Aristotle (384-322 B.C.) have contributed much to Economics philosophy. Plato's idea of division of labor was a fundamental concept of Adam Smith's (1723-1790) theory of international trade. Plato argues that the specialization of members of a community can improve their material conditions by producing that commodity at which they are more skilled and trade quantities of it away from the other things that they need from others who are doing the same. (Ebeling, 2015). International trade theories are formulated to explain the international trade of different countries. Trade theories explain how trade is related to the allocation of resources, production, and distribution of scarce resources domestically and internationally. Basically, trade theories are trying to answer what goods are traded internationally and what are the fundamental laws that govern the international allocation of resources. In the historical perspective view, economists were trying to understand and explain trade patterns of nations. Over time, economists have developed theories to elucidate the basis and patterns of global trade. The theory of international trade went through many developments from classical to Neoclassical, new trade theories and new classical trade theory. Classical theories are viewed as country-based theories. However, by the mid of the 20th century, the theories began to explain trade from a firm perspective rather than a country. These theories are stated as modern and firm-based theories, both of these categories, consist of several international theories. Trade theories were developed to explain the basics and benefits of international trade of countries in different periods of time.

Aim of the survey

The main aim of the present survey is to give emphasis to the evolution of different theories of international trade.

Traditional Trade Theory.

The classical trade theory and neo-classical trade theory are called as traditional trade theories. Theory of Mercantilist, the theory of absolute advantage and theory of comparative advantage comes under classical theories. The first International trade theory originated from the mercantilist period. During the period from the sixteenth to the middle eighteenth-century Britain, Spain, France, and the Netherlands were the most developed countries in the world economy. Governments of these nations had a powerful intervention in their economic policy. Their governments were concerned with the ways of maintaining their own power and wealth. The economic philosophy that properly reflected these goals was known as mercantilism. Mercantilism engorges a surplus of exports over imports to increase the stock of precious metal. And encouraged government regulation of trade to promote a surplus trade balance. It states that a country's wealth depends on the balance of export minus import. The mercantilist views of international trade explain that nations should discourage imports

through tariffs and quotas and encourages exports through export subsidies and support (Verter, 2015). Mercantilists' main concern was increasing the welfare of a nation while obtaining only by decreasing the welfare of other nations. According to this view, the benefit of international trade of a nation was matched with the cost of other nations. Salvatore, (2013) noted that the mercantilists measured the wealth of a nation by the stock of precious metals it possessed. In contrast, the wealth of a nation is measured by its stock of human, man-made, and natural resources available for producing goods and services. Hume, (1752), Smith (1776) claimed that given a free market in precious metal, any attempt by a country to establish a long-term favorable balance of trade was foredoomed to failure. Hume also argued that short term trade surplus is possible. As noted by Hill (2013), Hume pointed out an inherent inconsistency in the mercantilist principle. For example, if England had a surplus trade with France the resulting inflow of gold and silver would increase the domestic money supply and generate inflation in England. On the other hand, in France, the outflow of gold and silver would have the reverse effect. the money supply of France would decline, and its prices would fall. This change in relative prices between France and England would encourage the French to buy fewer English goods and the English to buy more French goods. Therefore, there would be a zero-sum game. A zero-sum game is one country will gain by the results in a loss of another. In the long run, no country could gain a trade surplus.

In the 19th century, traditional trade theories were developed by two main schools of thought, The British Classical School and French Liberal School. One of the first classical theories of international trade is the Absolute Advantage theory. According to Adam Smith (1776), trade only appears when there are absolute cost differences between countries. Smith argued that one nation can produce a certain good with less labor than the other nation and the other nation can produce another good more efficiently. Labor efficiency creates a possible beneficial trade between both nations. There is a main concern in mind after reading the absolute advantage theory that what would happen if a country has the absolute advantage in all goods or absolute disadvantage in any of the products.

David Ricardo, (1817) developed the classical theory of comparative advantage to explain countries' international trade. Ricardo's main contribution to international trade was to show that there is a basis for beneficial trade whether or not countries have the absolute advantage. Ricardo showed that trade is even possible when one country can produce all goods more efficiently than the other country if the relative costs of production of two goods differ between countries (Salvatore, 2013). This is known as the principle of comparative advantage which is still one of the most important concepts in trade theory. The comparative advantage theory says that a country will export the goods and services that it can produce at a low opportunity cost and import the goods and services that the country would produce at a high opportunity cost. However, comparative advantage is derived from a highly simplistic two good/two-country model. The real global trade is more complex, with countries exporting and importing many different goods and services. There is a number of criticisms for the classical theory of international trade. It unrealistically assumes that imports of a country will match its imports. It fails to consider capital cash flows. It is a common mistake in the classical theory of international trade. Haberler (1861) noted in his book on *A Survey of International Trade Theory* that the pure theory of international trade begins with Ricardo's Theory of Comparative Costs. it is to be noted that the theorem had already been formulated by Torrens in 1815. According to Paul Krugman (1990), the application of economies of scale by global producers using new technology many countries can produce very cheaply, and export their surpluses to other countries. For example, China produces very cheaply and export many products to other nations. This shows the real patterns of global trade. Despite the criticisms, the theory of comparative advantage can still give more basic knowledge to understand the pattern of world trade, even if it is becoming less relevant in a globalized world and modern theories of international trade.

Neoclassical International Trade Theory

Neoclassical thoughts emerged in the 1900s to compete with the earlier theories of classical economists. Neoclassical economics focuses on supply and demand as the driving forces behind the production, pricing, and consumption of goods and services. In the 1930s, Swedish economists Heckscher and Ohlin proposed Factor Endowment Theory to replace Ricardo's theory of comparative advantage with many factors. Factor Endowment Theory is called Neoclassical International Trade Theory, and this model is called the H–O model. According to HO Model international trade was primarily due to countries' differential factor endowments. There are four major theorems in the Heckscher- Ohlin model: factor-price equalization theorem; Stolper-Samuelson theorem, Rybczynski theorem; and Heckscher-Ohlin theorem (Lam,2015). The factor price equalization theorem says that if the prices of the output goods are equalized between countries engaged in free trade, then the price of the input factors will also be equalized between countries. Stolper-Samuelson theorem states that an increase in the price of good will causes an increase in the price of the factor used intensively in that industry and a decrease in the price of the other factor. Rybczynski theorem states that an increase in the endowment of a factor will increase the output of the industry using it intensively and decrease the output of the other industry. The factor endowment theorem explains that the exports of a country depend on its resources

endowment whether it is capital-abundant or labor abundant. If capital abundant, it will produce and export capital-intensive goods relatively more cheaply than the other country. Likewise, a labor-abundant country will produce and export labor-intensive goods relatively more cheaply than the other country. International trade takes place due to the differences in the comparative costs of factors of production that arise, due to the abundant or insufficient within countries. In other words, international trade allows countries to specialize in one particular product and at the same time they import products from other countries of which they are specialized in (Verter, 2015; Hill et al, 2015)

The neoclassical contributions to trade theory were further developed by Wolfgang Stolper and Paul Samuelson (1941) and Samuelson (1949) into Heckscher-Ohlin-Samuelson (or H-O-S) theory of trade. The Samuelson theorem shows that an increase in the relative price of a good increase the real wage of the factor used intensively in producing that good and lowers the real wage of the other factor. Given the additional assumption that neither country specializes in its export commodity, the factor price equalization theorem states that trade equalizes real factor prices in the two countries.

The New Trade Theory

International trade cannot be explained by a single principle. Over time, new trade theories evolve from various scholars. In the early 1950s, Wassily W. Leontief conducted an empirical study of the H.O model. He studied the US economy closely and noted that the United States was abundant in the capital and, therefore, should export more capital-intensive goods. However, his research revealed the opposite results of USA was importing more capital-intensive goods. According to the HO theory, the United States should have been importing labor-intensive goods, but instead, it was actually exporting them (Saylor Academy, 2012). This is called as “Leontief paradox” and thereafter some doubts arise for the applicability of H-O theory. Classical trade theories challenged by many scholars (Rassekh, 2009), and provided an opportunity for the new development of international trade theories. Moreover, in the post-war II period, the firm-based theories evolved with the growth of the multinational companies. Many multinational companies emerged for international business and the classical trade theories were lacking to explain the new patterns of global trade. Salvatore, (2013) identified that the Heckscher–Ohlin theory-based comparative advantage on differences in factor endowments theory leaves a significant portion of today’s international trade unexplained. Therefore, business school professors put forward new firm-based international trade theories to explain the new patterns of global trade. In the late 1970s, new trade theory was formulated to explain the global trade. These trade models explained with the concept of comparative advantage and allow for increasing returns to scale, external economies, differentiated products, and the associated imperfectly competitive market structures. Trade is shown to arise even between economies identical with respect to factor endowments and technical knowledge.

Meini, (2013) highlights that, in the early period of new trade theories, there are many other hypotheses and theories to explain the cause of international trade. Such as Availability Theory of Kravis, (1956), Technological Gap Theory of Posner,(1961), Product Life Cycle Theory of Hirsch,(1967) and Vernon,(1966), Theory of Demand Preference Similarity of Linda(1961) and Porter,(1990) Diamond Model international trade. These models attempt to address the shortcomings of the standard trade theory of international trade.

Kravis (1956), questioned the assumptions of the classical theory that technology was the same in all trading countries. Availability theory states that a country tends to import products that are not available at home. Availability is determined by natural resources, technological progress, and product differentiation (Gandolfo, 1998). The basic idea of the Availability theory a country will import those goods which are not available in the country in the absolute sense and the country has to export those goods which are produced more than the domestic needs.

Technology Gap Theory, developed by Posner (1961), describes an advantage enjoyed by the country that introduces new products in a market. The country will enjoy a comparative advantage as well as a temporary monopoly status until other countries have achieved the ability to imitate the new product. It is commonly accepted that technology innovations have positive impacts on exports since it improves the production efficiency of innovative countries. Posner described that the process of technological change leads to the imitation gap which influences the patterns of international trade. As mentioned by Ramos & Zarzoso,(2010) International trade theory highlights the importance of technological innovation in explaining a country’s international competitiveness (Posner 1961; Vernon 1966; Fagerberg 1997).

Vernon (1961) initially proposed the product life-cycle theory. The product life cycle model explains that a product is initially produced for home consumers and exported by the innovating country because of limited initial demand in-home and other countries. but finally, it ends up as an importing country of the same product or some differentiated variety of that product. The product life-cycle theory has been an accurate explanation of new global trade patterns. Consider photocopiers; the product was first developed in the early 1960s by Xerox in the United States and sold initially to U.S. users and then Xerox exported photocopiers from the United States to Japan and the advanced countries of Western Europe. As demand began to grow in those

countries, Xerox entered into joint ventures to set up production in Japan (Hill, 2013). That means, over time, an exporter of the particular product will become an importer of the same product as production becomes concentrated in lower-cost foreign locations.

Jan Tinbergen (1962) attempted to explain the pattern of global trade with the gravity model. The gravity model advocates that relative economic size attracts countries to trade with each other. However, greater distances weaken the attractiveness. The gravity model was initially explained as an empirical one, without any particular grounding in trade theory, but the widespread adoption of the gravity model to explain patterns of trade has been seen by economists as a significant development on previous theoretical models in international trade.

Michael Porter's Diamond Model of international trade also comes under new trade theories. It is known as the Theory of National Competitive Advantage of Industries. The model explains why certain industries in a particular nation are internationally competitive, whereas others might not. Porter explains that any company's competitiveness in the international arena is based mainly on an interrelated set of location advantages such as Firm Strategy, Structure and Rivalry, Factor Conditions, Demand Conditions, and Related and Supporting Industries. If these conditions are favorable, it forces domestic companies to continuously innovate the new product.

II. Conclusion

The paper tries to bring the major theories of international trade. The development of trade theories was discussed from mercantilism to new trade theories. Many of the researches were reviewed in the area of international trade and outlined. The classical trade theories presented above are focused on explaining the trade pattern of essentially two trading countries. However, classical and neo-classical trade theories remain valid and solid theoretical in international trade analysis. Over a period of time, the development in theories of international trade has gone through significant change. New trade models have important insights to describe and seem to offer a better explanation of the present global trade patterns in the dynamic world.

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