Training module

Theory and Practice of International Trade

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After completion of this sub module, the reader would have learnt to distinguish between country based and firm based theories and the basis behind each principle. Besides this, the reader should familiarize himself with the different terms used in international trade theories and organizations. Key international trade organizations, agreement and their specific role are to be remembered.
Theory and Practice of International Trade

In this sub module, you will learn about the basics of international trade theories and different Organizations that play a major role in international trade. International trade theories are divided into country based and firm based theories. Besides the theories, this section also outlines the different important organizations and it’s regulations that are impacting international trade such as the World Trade Organization, General Agreement on Tariffs and Trade and Regional Free Trade Areas and their respective agreements.

1. Introduction to International Trade and Globalization

International trade is defined as the exchange of services and goods between international countries all around the world. It has been practiced since Greek and Roman times where traders on ships travelled to distant land and developed as time goes by due to efficient transportation and correspondence between countries/1/ Globalization is a part of the context of international trade and its definition can be spread into four different viewpoints in relation to international trade/2/.

**Figure 1: Commodities are a declining share in global merchandise trade**

![Commodities Graph](image)


The first viewpoint is that globalization is internationalization. This implies that there is intensification in dealings and interdependence between countries around the world/4/. Thus, globalization is linked to international trade in the sense that more trade in terms of ideas, messages, money, investments and labor across international country borders/2/.
Another way to look at globalization is the creation of a borderless and open world economy where international trade are not hindered by protectionist restrictions set by countries regarding the movement of resources between countries. Thus this definition of globalization looks at ways to abolish regulatory measures like trade barriers, foreign-exchange restrictions, control of capital and visa requirements/2/.

Third definition of globalization and international trade is linked to the dispersal of goods and services in a universal way. Goods and services are to be distributed to all people in the world and focus more on the production and distribution line process in international trade. This gives birth to products and services that are the same and to be found everywhere. For example, Barbie Dolls by the Mattel Company/2/.

Westernization is also globalization. International trade in this perspective has been seen to bring about a certain culture of modernity (for example, capitalism and urbanization) spreading globally and replacing preexisting cultures and beliefs. It is seen by certain countries as colonization and Americanization of ideas/2/.

International trade theory involves two types of broad themes specifically those involving patterns of trade (for example selection of goods that each country trades, comparative advantage) and the terms of trade (a more quantitative theory, for example relative prices of exports and imports of the trading world)/5/. It also can be divided into country based and firm based theories.

2. Country-based and firm-based trade theories

2.1 Country-based theories

The first theories presented in the following belong to the so-called classical trade theories.

2.1.1 Mercantilist Theory

Mercantilism is the economic patriotism for the creation of an affluent and powerful state/6/. The father of capitalism, Adam Smith, created the definition mercantile system to tell about the system of political economy that aims to create wealth in a country by decreasing imports and increasing exports. The aim of these policies was to achieve a good balance of trade in terms of receiving and also to keep domestic employment. For example, the British East India Company,
used in colonization of countries, benefited from the mercantile system as it protects the benefits of the traders and producers.

Mercantilist policies were also an extension of the development of the relationship between international governments and their mercantile classes. The mercantile classes will pay taxes and levies to maintain the government, and in return the mercantile class uses their influence to make governments establish laws and policies that are protectionist in nature. This is to protect their business interests from foreign competition.

There are several policies that are the basis of mercantilist ideology. Firstly, in domestic and local context, governments would play a large role in helping the local and new businesses. Governments will establish policy to aid new industries and companies by providing the capital and exclusions from guild rules and taxes. Besides these policies, the government acting on the basis of mercantilism would also form policies regarding setting up monopolies over local and colonial markets and grant titles and pensions to the prosperous producers. In trade policies, the government played a role to aid local and small medium industries by setting tariffs, quotas and prohibitions on import of goods that have direct competition with local manufacturers.

Governments also forbid the export of tools and capital equipment and the emigration of skilled labor that would cause foreign countries to gain the technical know-how to compete in the production of manufactured goods. Concurrently, each country tries to attract foreign direct investment and manufacturers to its countries.

There are criticisms towards the mercantilist ideology. Trade when is done on free will, benefits all parties. Specialization in production allows for economies of scale, which leads to efficiency and growth. The cooperative relationship between government and industry caused a disadvantage to the rest of the citizens. In this century, the mercantilist policies are not widely applied but still exist. For example, agriculture trade is currently still very much protected by quotas, subsidies and tariffs.
2.1.2 Theory of Absolute Advantage

The theory of absolute advantage was first introduced by Adam Smith. It states that if one country produces a commodity more efficiently than the other and is less efficient in producing the second commodity than the other country, then each country can benefit by specializing in the commodity that it produces more efficiently.

For example, two countries, United States and United Kingdom used to compete in production of corn and textiles. For the United States of America, the labor requirement needed to produce 1 ton of corn are two units while for United Kingdom it is four units.

Therefore in this instance, as the labor requirement to produce corn is less than that of the UK, USA has the absolute advantage in producing corn. Meanwhile this is vice versa for the case of textiles whereby UK has the absolute advantage in comparison to the UK. Hence, specialization should be applied whereby USA will produce and trade in corn and UK should produce and trade textiles. Total output of traded product would increase by double by both countries due to this specialization. Consequently, international trade rises up the total quantity of products by specialization of production between the two countries.

2.1.3 Theory of Comparative Advantage

The theory of comparative advantage is extensively utilized to determine trade pattern. When a country has the absolute advantage over another country in terms of production capabilities in certain commodities, this does not mean that it will be for the common good if only the productive country produces all the trade. In fact the world will experience loss as the productive country has an opportunity cost. Therefore, the theory of comparative advantage is used here to increase the trade and output of the commodity as a whole.

**Table 1 Corn and banana production statistics as comparative between USA, Caribbean and Central America.**

<table>
<thead>
<tr>
<th></th>
<th>United States of America (USA)</th>
<th>Caribbean and Central America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn (Hg/Ha)</td>
<td>85 910</td>
<td>22 631</td>
</tr>
<tr>
<td>Banana (Hg/Ha)</td>
<td>222 572</td>
<td>210 093</td>
</tr>
</tbody>
</table>

An example of the theory of comparative advantage in practice is in agriculture. This case study showcases the Central America and the Caribbean versus the United States of America. The commodities in trade are bananas and corn. Traditionally, bananas are the main export of the Central America and the Caribbean while the USA is the dominant exporter of corn. The yields produced by USA for the banana commodity is larger than yields produced by the Caribbean and Central America. Thus for the corn commodity, USA has a yield of 85910 Hg/ha while the Caribbean and Central America has a yield of 22,631 Hg/ha. Meanwhile, this is the same for the banana commodity whereby the USA still has the highest yield of 222,572 Hg/Ha compared to the Caribbean and Central America of 210,093 Hg/ha. Hence, USA has the absolute advantage in trading these two commodities compared to Central America and the Caribbean. However, for Central America and the Caribbean, the disadvantage of producing bananas is less than the disadvantage of producing corn. This shows that that Central America and the Caribbean has a comparative advantage over the USA in terms of banana trading. Due to the higher magnitude in corn yields production is so much greater than banana productions thus USA has a better comparative advantage in corn production.

1.1.1 The Heckscher-Ohlin Theory of Factor Proportions

Heckscher Ohlin Theory is formed on the basis that International trade compensates for the uneven geographic distribution of productive resources. Countries should produce and export the commodities that are plentiful in their country and import commodities that are not easy to produce and export from other countries. Therefore specialization of a certain commodity should be done by each country on the basis of the abundance of the current resources.

For example, Heckscher-Ohlin theory to identify conditions under which countries are richer in labor than land export labor intensive agricultural products and have wages that approach levels prevailing in high wage labor scarce countries. It would be a great surprise to find supportive data. Traded commodities are really bundles of factors.

2.2 Firm-based trade theories

Firm-based trade theories are related to the rise of multinational companies and the theories that guide the function of international trade in these companies.

2.2.1 Country Similarity Theory

Trade conduct is reliant upon there being a supply of goods and services and a corresponding demand for those (or similar) goods and services. Country Similarity Theory states that countries
having the most similarities with one another (degree of industrialization; per capita income, savings habits, communications and transportation systems, degree of technology, language, etc) will be most likely to trade with one another. This rational theory is based upon the foundation that similar countries will be interested in similar goods and services. Not a scientific theory but at least points to specific countries in being good candidates for a country’s first foray into international trade/9/. Countries should mainly exchange differentiated goods; those for which brand name and reputation plays a crucial marketing role. Thus, this will lead to maximization of revenues from sales of these goods within targeted market sectors, clustered based upon the criterion of possession of necessary purchasing power/10/.

2.2.2 International Product Life Cycle Theory

Developed nations trade based on a theory modeled on the basis of the product life cycle concept. According to this theory, there are three levels in a company’s internationalization which are a new product, a maturing product and a standardized product. This type of philosophy is very much applied by multinational companies with some modifications/11/. The main aim of this theory is how a firm should act to increase their profits for their financial shareholders/10/.

*New Product Level*

In this level, new products are created and marketed in the domestic market and as it reached more popularity, it is exported in a smaller scale to other developed market economies. For example, Japan creates a new environmentally friendly car and then sells in a small scale to Korea another advanced economic nation/10/.

*Maturing Product Level*

When the new products begins expansion in the market, existence of competition and standardization of products, the company will decide to transfer production from the home nation to a bigger scale foreign market. Normally, there is a branch opening in the part of the world that the company would like to expand its horizons regarding the new product. Normally, the driving forces behind this is the production and transaction costs as moving the production to another country where the costs of production and labor is lower will increase the company’s profit. Another advantage is that the branches are able to satisfy customers’ demands quickly as transportation does not take a long time as compared when it was in the home country and exporting the product to a country located further away/10/.
Standardized Product Level

It is the products mature and declining level. Production of the products is done in developing countries due to the low transaction costs and products are exported from these places to the home country and other places as well.10/

2.2.3 Porters Theory of National Competitive Advantage

The economist Michael Porter had developed a theory that contrasted with some of the Classical theories of international trade such as the Comparative Advantage theory and the Heckscher Ohlin’s Theory. According to Porter, some countries and their companies have a sustained competitive advantage in certain industries in comparison to others.

Porter’s Diamond describes the four interacting forces of national or home base that can be graphically displayed as a diamond shaped figure.

Figure 2: Porter’s Diamond Diagram


“Factor conditions” are the state of the nation factor of production. This encompasses labor, capital, land, natural resources and infrastructure. Factor condition advantages at a national level can be translated into general competitive advantages for national firms in international markets. For example, linguistic ability of the Swiss has provided a significant advantage to their
banking industry. Cheap energy has traditionally provided an advantage for the North American Aluminum Industry.

Meanwhile for “Home demand Conditions”, it describes the nature of the domestic customers can become a source of competitive advantage. Dealing with sophisticated and demanding customers at home helps train a company to be effective overseas.

“Related and supporting industries” are local clusters of related and mutually supporting industries can be an important source of competitive advantage. These are often regionally based, making personal interaction easier. In Northern Italy for example, the leather footwear industry, the leather working machinery industry and design services which underpin them, group together in the same regional cluster to each other’s mutual benefit.

“Firm Strategy, Industry structure and rivalry “details the characteristic strategies of the industry structures and rivalries in different countries can also be bases of advantage. German companies strategy of investing in technical excellences gives them a characteristic advantage in engineering industries and creates large pools of expertise/12//10/.

2.2.4 Global Strategic Rivalry Theory

Global Rivalry Theory describes several ways in which Multinational Enterprises can develop competitive advantage over its competitors. Some of the ways are by ownership or patenting of intellectual property rights, channeling money into research and development, excellent usage of the *experience curve* and expansion of their business to global business or economies. Once again, the main aim here is for profit maximization for those companies and the social and environmental aspects is not addressed/13/ /14//10/.

3. Regulations and Laws of International Trade

The following chapter gives an overview of the major trade regulations and law that govern international trade.

3.1 World Trade Organization Framework

Trade regulations between countries around the world are dealt with by the World Trade Organization (WTO), a global international organization. In the WTO framework, the world’s trading nations (130 nations) have discussed, negotiated and formal agreements are drafted in parliaments across the globe. Some of the major agreements are discussed in the following
subchapters. WTO was formed in 1995 to replace the General Agreement on Tariffs and Trade (GATT). The principle agreement of GATT in 1994 is currently being utilized as basis of the WTO Framework for trade in goods. A stage to stage process of negotiation and consultation which can include a ruling by a panel of experts and the opportunity to appeal against any decisions that have been made/15/. However, the WTO also has much more functions than the GATT agreement. Besides dealing with the institutional framework for multilateral trade negotiations in the progress of free trade, it also handles commercial service, intellectual property rights and foreign investment/8/.

WTO permits countries to apply trade measures regulating product characteristic or their related processes and production methods but trade restrictions on the basis of unrelated Productions and Processing Methods.

3.2 General Agreement on Tariffs and Trade (GATT)

The GATT treaty was signed in 1947 and effective in 1948 whereby 23 countries pledged to decrease 45000 tariff rates. The aim of GATT was to decrease trade barriers and encourage free trade amongst member countries. There have been eight rounds of GATT negotiations. In the final round called the Uruguay Round, agricultural trade was included for the first time. Negotiations lead to an agreement between member countries signed in Marrakesh, Morocco. This agreement details decreasing tariffs on industrial goods from 4.7% to 3% and share of goods with no tariffs was increased from 20-22% to 40-45%. Certain industries had altogether removal on pharmaceuticals, construction equipment, medical equipment, paper products and steel. Government procurement policy is a policy that requires government to buy from domestic producers. This was eliminated in the Uruguay Round/8/.

Among the main components of the GATT that are utilized in the WTO is the Article I and III. The Most Favored Nation Treatment (Article I) details that WTO members are to trade in the way that products of one country should be treated equal as similar products of another country. This article is very much applied for labeling schemes. Article III of National Treatment Principle which states that upon the entrance of commodities into the local market, it must be considered on equal terms as competing products of the country’s market.

There are certain exceptions to GATT which are detailed in Article XX: General Exceptions. The GATT Article I and III are overruled in cases where action is needed by member countries to
protect public morals, to protect human, animal or plant life or health, in relating to the conservation of patents, trademarks and copyrights and the prevention of deceptive practices and also relating to conservation of exhaustible natural resources if certain measures are made effective in conjunction with restrictions on domestic production or consumption.

### 3.3 Technical Barriers to Trade Agreement

The technical barriers to trade agreement were formed during the WTO Tokyo Round of negotiations. Since then it has been revised during the WTO Uruguay Round. It acknowledges countries rights to use standards which are suitable. Necessary measures are allowed to be taken by member countries to reach required standards. However, too many regulations can deter trade for manufacturers and exporters thus application of international standards and the agreement by member countries would ease this problem/16/.

More than 200 standard setting bodies consisting of both government and non-governmental organization use the code of good practice outlined in this agreement to develop, adopt and apply these voluntary standards. Methods utilized to determine whether a product conforms with relevant standards have to be fair and reputable. Countries are encouraged to acknowledge procedures for assessing whether a product conforms to avoid duplicate testing in both countries. All WTO members must establish enquiry points and circulate information among the members of WTO/16/.

### 3.4 Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods

Intellectual property rights includes an assortment of standards in the protection and enforcement of intellectual property rights and the absence of a multilateral framework of principles, rules and disciplines in combating with counterfeit goods have caused tension in international economic cooperation. Thus this agreement leads the way in application of the principles of GATT and other related intellectual property rights; the stipulation of proper intellectual property rights, stipulation of effective enforcement measures, multilateral dispute settlements and intermediate arrangements/16/.

Countries need to give equal protection of intellectual property rights between foreign and domestic products. The Berne Convention for protection of literary and artistic work is used as
the basis of compliance by member WTO countries. The agreement also details the trademarks of companies or service marks and its rights conferred on the owners. There is also a list of obligations in terms of the utilization of trademarks and service marks/16/.

For example, section III of this agreement regarding geographical indications was utilized in the case study of Basmati Rice trade between the United States, Pakistan and India. To protect its trademark name Basmati Rice which indicates rice specially grown in the Punjab area, India and Punjab applied for intellectual property rights using geographical indications as the basis. When the United States wanted to use the name Basmati for its rice exports it was prevented due to this intellectual property rights and the USA rice had to change to another name/17/.

3.5 Agreement on Agriculture

The “Agreement on Agriculture” was developed during the Uruguay Round of GATT. The main aim of this agreement is for trade reformation in the agriculture industry and to create market oriented policies/18/.

Imports will see fewer assortments of trade restrictions thus increasing market access for international trade. Trade restrictions like quotas and other non-tariff measures will be eliminated. The only one to be used is tariffs and is presented as a tariff package. This began implementation in 1995/17/.

Meanwhile, there will be less domestic support whereby subsidies and others that are similar are decreased. However, governments are allowed to give a hand to their rural economies. Policies utilized to do this should cause fewer problems in terms of trade. There are some exceptions to developing countries whereby it does not reduce their subsidies or decrease tariffs equal to developed countries. If the country is extremely under developed, this action is not necessary at all/17/.

3.6 Sanitary and Phytosanitary Measures (SPS) Agreement

A separate agreement was developed regarding food safety and animal and plants health standard which is referred to as the Sanitary and Phytosanitary Measures Agreement. Countries are permitted to fix their own standards which must be based on science. Application of the standards must be on the basis that it is necessary to protect human, animal or plant life or
human health. Any discrimination towards other countries with the same conditions is not to be done/16/.

International standards, guidelines and recommendations are to be used by WTO members if they are available. This is to decrease the risk of any legal disputes for the member countries. There is an exception if WTO countries apply a higher standard when there is scientific justification or if the standards are based upon suitable evaluation of risks with consistent results. Application of precautionary principle is to be used when dealing with scientific uncertainty/16/.

Exporting countries need to prove to the importing countries that the standards and methods used for product quality control before it is exported is equal or more superior than the standards and inspection procedures of the importing country. If there are changes to the standards and methods used, governments have to give advanced notice and form a national enquiry point to provide information/16/.

3.7 Regional Level Free Trade Areas and Agreements

Countries with similar commodities and resources used for exports in a region have banded together to form regional free trade agreement (RFTA)/8/. Free trade will exist among countries in the RFTA which removes all tariffs and non-tariffs barriers for free movement of goods and services between the nations. In 1996, WTO Committee on Regional Trade Agreements was established in 1996 to oversee all RFTA. The RFTA needs to comply with WTO regulations. All member countries in the WTO are part of one group of the RFTA. Among the major free trade areas and agreements are the European Union (EU), The North American Free Trade Agreement (NAFTA), the Association of Southeast Asian Nations (ASEAN), Baltic Free Trade Area, Caribbean Community (CARICOM), Common Agriculture Policy (CAP), the Common Market of the South (MERCOSUR), the Australian-New Zealand Closer Economic Relations Agreements/19/.

4. Summary

International trade is the exchange of goods and services around the globe. Globalization, an important factor in international trade is characterized by internationalization, borderless and open world economy, dispersal of goods and services across the globe and westernization.
International trade theories are divided into country based theories and firm based theories. The Mercantilist theory is a political economic system which aims of wealth creation in home country by protectionist measures, decreasing imports and increasing exports. Meanwhile the theory of absolute advantage emphasizes on specialization of products if the country can produce it more efficient than another country. The Theory of comparative advantage states that although one country may be superior in production for more than one commodity compared to another country, due to opportunity cost, it would be better if there was specialty as well whereby the commodity chosen is the one that will give the maximum advantage to the country. Besides this, the Heckscher-Ohlin Theory of Factor Proportions describes that specialization should be chosen also by the abundance of resources available in a certain country. On the other hand, firm based theories concentrate on multinational companies. County Similarity Theory states that when countries have similarity in resources, they will trade with one another. International Product Life Cycle Theory is the theory that follows the product life cycle of a single product from cradle to grave and find ways to increase the profit for stakeholders. Porter’s Theory of National Competitive Advantage which shows that countries and companies have a competitive advantage compared to others. Complimenting the Porter’s Theory is the Global Strategic Rivalry Theory which shows how multinational companies gain advantage over its competitor. Agreements like the Agriculture Agreement have been developed under the World Trade Organization and the General Agreement on Tariffs and Trade. These and other significant agreements regulate international trade flows.

/3/ Worldbank, Global Economic Prospects 2009, p. 32