Chapter 6: Economics of International Trade

Introduction

1. International Trade: is defined as the exchange of products, services, and capital between countries. It can be seen as both a cause and a result of globalization.
2. International trade gives firms the ability to increase sales and profits, but also comes with risks relating to foreign exchange rate fluctuations.
3. Today, the factors that influence supply and demand are global in nature.

Imports and Exports

1. Introduction
    a. The flow of international trade can be measured by imports and exports. Imports are defined as products and services that are produced outside of a country's borders and then brought into the country. Conversely, exports are defined as products and services that are produced within a country's borders and then transported to another country. The difference between the two is what constitutes trade balance, or balance of payments.
2. The Need for Imports and Exports
    a. Gaining Access to Resources: international trade allows individuals, households, and firms to gain access to resources of which the supply would otherwise be non-existent or insufficient
    b. Creating Additional Demand for Products and Services: international trade allows for the increase in demand for goods that are produced within all countries. Without international trade, firms would only produce to meet the demand of domestic consumers.
    c. Providing Greater Choice to Consumers: international trade gives consumers access to a greater number of choices of goods and services, some that may not even be available domestically. Imports may enable consumers to have access to goods and services that better meet their needs.
    d. Improving Quality and/or Prices of Goods and Services: international trade increases the number of firms competing in markets, which leads to increased competitiveness, efficiency, quality, and prices for consumers. (As well as innovation)

3. Trends in Imports and Exports
    a. There are two major phenomena that have improved and promoted international trade:
        i. Decreases Trade Barriers:
            1. Trade Barriers: are defined as restrictions, typically imposed by governments, on the free exchange of goods and services. Common types of trade barriers include:
            2. Tariffs: Taxes (duties) levied on imported goods and services. Tariffs allow governments to establish trade barriers (often to protect domestic producers) and to raise revenue.
            3. Quotas: Limits placed on the quantity of products that can be imported.

4. Non-Tariff Barriers: Are composed of a variety of measures, such as certification, licensing, sanctions, and embargoes, that make it more difficult and expensive for foreign producers to compete with domestic producers.

ii. Improvements in Transportation and Communication:
    1. Transportation includes improvements in international shipping, aerial shipping, and road shipping.
    2. Communication includes telecommunications and the internet.

Comparative Advantage Among Countries

1. Introduction
    a. The Theory of Comparative Advantage states that countries will have varying degrees of efficiency in the production of products and that countries specialize in the production of goods for which they have a comparative advantage in producing. (Comparative advantage in production being defined as being able to produce a good or service more efficiently than another country.) The theory further states that countries will export goods for which they have a comparative advantage, and will import goods from countries which have a comparative advantage in production of that good. Overall, this leads to increased efficiency and wealth. There are what are called the "Gains of Trade."
    b. Comparative Advantage can arise as a result of natural, human, or capital resources. CA from natural resources is a result of having a greater amount and/or better access to natural resources. CA arising from human resources can be a result of a greater population, more productive population, or specialized workers. CA arising from capital resources can result from greater possession of, access to, and cheaper capital.

Balance of Payments

1. Introduction:
    a. Balance of Payments: tracks transactions between a country and the rest of the world over a period of time (typically a year.) Transactions in this circumstance can be specified as "those transactions consisting of those involving goods, services, and income; those involving financial claims on, liabilities to, the rest of the world; and those (such as gifts) classified as transfers."
    b. The balance of payments shows the flow of money in and out of the country as a result of imports and exports of goods and services. It also shows the financial transactions and transfers between domestic and foreign economic entities. Analyzing a country's balance of payments helps in understanding the country's macroeconomic environment.
    c. The Balance of Payments consists of two accounts:
        i. Current Account: indicates how much the country consumers and invests (outflows) compared with how much it receives (inflows). This is primarily driven by the exportation and importation of goods and services.
        ii. Capital and Financial Account: records the ownership of assets. In particular, it reflects investments made by domestic entities in forein entities and vice versa.

These investments can be the acquisitions of production facilities or the purchase and sale of financial securities.

iii. Theoretically, the sum of the Current Account and Capital and Financial Account should equal zero.

2. Current Account
    a. The Current account includes three components:
        i. Goods and Services = (Exports - Imports) (Net Exports, Trade Balance)
        ii. Income = Salaries + Income on Financial Investments
        iii. Current Transfers = Unilateral Transfers
    b. Components of the Current Account
        i. Goods and Services: usually the largest component of the current account. It reflects the flow of money in and out of the country as a result of the trade of goods and services. The resulting figure is known as Net Exports and the Trade Balance. A position trade balance indicates greater exports than imports (Trade Surplus), and a negative trade balance indicates greater imports than exports (Trade Deficit.)
        ii. Income: reflects the flow of capital in and out of the country from salaries and income from financial investments.
        iii. Current Transfers: relate to unilateral transfers, such as the flow of gifts of money in and out of the country.
        iv. The value of the entire Current Account is equal to the sum of these components. A positive value indicates a Current Account Surplus, while a negative value indicates a Current Account Deficit. Generally, the goods and services component is the largest component of the Current Account.
    c. Importance of the Current Account
        i. Running a Current Account Surplus indicates that a country is saving, meaning that its inflow is greater than its outlow, therefore having the ability to lend to or invest in other countries.
        ii. Running a Current Account Deficit indicates that a country's outflow is greater than its inflow, and therefore needs to borrow from or be invested in by other countries.

3. Capital and Financial Account
    a. The Capital and Financial Account is comprised of two subaccounts:
        i. The Capital Account: which reports financial transfers between domestic and foreign entities.
        ii. The Financial Account: which reflect the investments that domestic and foreign entities make in one another.
            1. Financial Account = (Direct Investments) + (Portfolio Investments) + (Other Investments) + (Reserve Account)
            2. Direct Investments: are long-term investments between domestic and foreign entities.

3. Portfolio Investments: reflect the purchases and sales of securities, such as debt and equity securities, between domestic and foreign entities.
4. Other Investments: are largely made up of loans and deposits between domestic and foreign entities.
5. Reserve Account: shows the transactions made by the monetary authorities of a country, typically the central bank.

4. The Relationship Between the Current Account and the Capital and Financial Account
    a. The sum of the Current Account and the Capital and Financial Accounts should equal zero. This is because the capital and financial flows move in the opposite direction of the goods and services that give rise to them.
        i. If a country has a current account surplus, it should have a negative capital and financial account. This makes sense, as the current account surplus indicates savings, which is then reinvested in or lended to other countries.
        ii. If a country has a current account deficit, it should have a positive capital and financial account. This makes sense, as the current account deficit indicates borrowing and lending, which requires that they borrow or be invested in.
        iii. In practice, however, the sum of the two accounts (as they are recorded in real life) will almost never equal exactly zero. The difference between the final calculation and zero is what is called "Errors and Omissions" and often is a result of imperfect and inconsistent methods of measurements across dimensions.

5. Why Does a Country Run a Current Account Deficit and How Does It Affect Its Currency
    a. Running a current account deficit is not necessarily a bad thing. It is common for developing economics and those transitioning from planned to market economies to run a current account deficit as their economy develops. Additionally, a country may run a current account deficit because domestic consumption requires a magnitude of goods and services that domestic production can not meet, and this can be a figure larger than the country's ability to export.
    b. There is a long-run debate in economics about the effects of running a long-term current account deficit. Doing so requires that a country secure investment and loans from other countries. Some argue that as long as other countries are willing to continue loaning and holding assets in the dollars of the borrowing country, running a long-term current account deficit is not harmful.
    c. Running a current account deficit will cause other countries to hold dollars and assets in the currency of the borrowing country. If the lending and investing country decides that it no longer wants to hold these dollars or assets, they can trade or convert them, which causes the dollar to depreciate and the assets to become less valuable.

Foreign Exchange Rate Systems

1. International trade requires that payments be made between countries, which requires the exchange of currencies. These payments and their values are, therefore, affected by fluctuations in exchange rates. An Exchange Rate is defined as the number of units of one currency it takes to convert that same currency into another currency. Payments for international trade can be made in either country's currency.
2. The exchange rates between world countries function identically to the prices of goods and service, meaning that their values are determined by the forces of supply and demand. Demand for a currency increases its relative strength, meaning it appreciates. Decreased demand for a currency decreases its relative strength, meaning it depreciates.
3. Three Main Kinds of Exchange Rate Systems:
    a. Fixed Rate: fixed exchange rate systems do not allow for fluctuations in the value of currencies. An example of this would be the Bretton Woods conference of 1944 determining that the US Dollar would be set as equal to 1 / 35 of an ounce of gold, and then all other currencies would be pegged in terms of the US dollar.
        i. An advantage of a fixed rate system is that it eliminates the Currency Risk (or Foreign Exchange Risk), which is the risk associated with the fluctuations in currency exchange rates. This means that importers and exporters can have greater certainty in the value of payments they receive.
        ii. However, as the competitiveness of economies change over time, valuations can become inefficient. An economy that becomes uncompetitive over time will see a decrease in their trade balance, as their currency becomes overvalued. The only way to fix this is by officially devaluing their currency relative to other countries.
    b. Floating Rate: floating exchange rate systems do not set fixed exchange rates and instead allow the market forces of supply and demand to determine exchange rates.
    c. Managed Floating Rate: managed floating exchange rate systems involve action on the behalf of central banks to try to stabilize the value of their currency within a floating exchange rate system. To do this, central banks will use foreign currency to buy and sell its own currency in order to decrease or increase its demand, causing it to either appreciate or depreciate depending on the action. Central banks have a range in which they aim to keep the value of their currency, but actually buying and selling of currencies by central banks is rare.

Currency Values (Factors That Influence Currency Value)

1. Balance of Payments
    a. A country's balance of payments will influence the value of its currency. In a floating exchange rate system, a currency's value should correct an unsustainable surplus of deficit in a country's balance of payments.
    b. In the case of a deficit in a country's balance of payments, it's currency should depreciate. This will cause its exports to be cheaper in other countries, and therefore more competitive, which will increase exports. Simultaneously, this will cause imports to

become more expensive, reducing imports. Together, this helps the balance of payments deficit by increasing exports and increasing imports.

c. Conversely, in the case of a surplus in a country's balance of payments, it's currency should appreciate. This will cause exports to become more expensive in other countries, decreasing exports. Simultaneously, it will cause imports to become cheaper, increasing exports. Together, this helps the balance of payments surplus by increasing imports and decreasing exports.
d. This self-adjusting mechanism does not always work in practice. Reasons for this include that there are many factors that influence exchange rates and the potential for a country to be part of a currency zone (such as in the case of the Euro.)

2. Level of Inflation
    a. Inflation directly affects exchange rates. Higher levels of inflation will lead to devaluation relative to countries that feature lower levels of inflation.

3. Level of Interest Rates
    a. Higher interest rates can cause a country's currency to appreciate through the following phenomena:
        i. Foreign entities find domestic investment more attractive, increasing demand for domestic currency, causing domestic currency to appreciate.
        ii. Foreign entities' demand for domestic currency appreciates as they are incentivized to use it to achieve higher yields.
    b. However, higher interest rates can cause inflation, which devalues a currency.

4. Level of Government Debt
    a. If a country's government features a high level of debt and there is perceived risk of default, investors who hold bonds in that government's currency may choose to sell their bonds and take their money out of that country, causing the currency to depreciate.

5. Political and Economic Environment
    a. Capital tends to flow into countries with more political and economic stability and away from countries with political and economic instability. Economic instability can take the form of low growth, high unemployment, and poor prospects/
    b. Government policies towards foreign investors will also affect capital flows. Countries that are open to Foreign Direct Investment will attract capital.

6. Reserve Currency
    a. Reserve Currency is currency that is held by a significant number of countries in their foreign exchange reserves. This type of currency has more factors influencing exchange rates than those who are held by fewer countries. A reserve currency also tends to be the international pricing currency for international goods, services, and commodities. Demand for this kind of currency is also generally higher than for others. Some people predict a decrease in the value of the US dollar as other reserve currencies emerge, but

countries have incentive to ensure that this doesn't happen in order to protect their reserves.

7. Relative Strength of Currencies
    a. The concept of Purchasing Power Parity has been used to explain relative currency valuations, meaning whether currencies are fairly valued relative to each other. According to the economic theory that PPP comes from, baskets of goods should cost the same in different countries.
    b. In the situation that there exists a disparity between the value of goods and currencies across economies, there is also an arbitrage opportunity. However, there are potential barriers that make taking advantage of such an opportunity potentially less valuable, and these include import and export restrictions, transportation costs, and perishability.
    c. Two limitations to the use of PPP include the difficulty of properly identifying and constructing baskets of goods across countries, and the limitations on international trade imposed by economic barriers.
    d. However, differences in purchasing power parity and their reflected inequities in exchange rates do tend to correct themselves over the long-term.

Foreign Exchange Market

1. The Foreign Exchange Market: is where currencies are traded. It is a liquid and active market in which an average of $5 Trillion are traded every day. It is made up of a highly decentralized network that connects buyers and sellers.
2. Foreign Exchange Rate Quotes
    a. Foreign exchange markets offer two exchange rates for any given currency:
        i. Bid Exchange Rate: (or bid rate) is the exchange rate at which the bank of currency dealer will buy the foreign currency.
        ii. Offer Exchange Rate: (or offer rate / ask exchange rate) is the exchange rate at which the bank or dealer will sell the foreign currency.
    b. The difference between these two rates is known as the bid-offer spread. This spread is how the exchanging entity makes profit, they buy currency at a cheaper rate than they sell it. This spread and its component rates vary across economic entities, and the larger the amount traded, the smaller the spread.
3. Spot and Forward Markets
    a. Spot Market: where currencies are traded now and immediately delivered. The exchange rate in this market is called the Spot Rate / Spot Exchange Rate.
    b. Forward Market: where currencies are traded now but delivered some time in the future. The exchange rate in this market is called the Forward Rate / Forward Exchange Rate.