**ECO 102**

**INTERNATIONAL TRADE AND EXCHANGE RATE**

**1. INTERNATIONAL TRADE**

The global economics is rapidly changing and both developed and developing economies are gearing up to the challenges of competing in a highly integrated global market. Thus, government authorities, traders and policy makers are given too much attention to the issue of ‘International Trade.’

**BASIS OF INTERNATIONAL OR FOREIGN TRADE**

Foreign trade as sometimes called is a type of trade that is built upon the bases of the theory of comparative cost advantage. The theory states that every nation exercises certain kinds of comparative cost benefits from the production of certain types of commodity whose resources are either exclusively available in the home country or availably in the other nations in very cheap prices.

For example, Nigeria and other similar countries have comparative advantage over production of crude oil. Thus, exporting oil to other countries and earn huge profits. Similarly, America has advantage in the production of cars and weapons. In essence, no country in the world is assumed to be self-sufficient perhaps it has to depend on other countries its required factor inputs like machines, labor, raw materials or even finished products.

**FACTORS THAT NECESSITATES INTERNATIONAL TRADE**

1. Countries have to depend on other nations as they cannot produce everything by themselves at a possible lowest cost.

2. Country may have the resources and manpower to produce all types of goods and services but it may find them from other nations who specialize in production of such goods or services at a very cheaper rate.

3. Country may produce some goods and services at a very cheaper rate compared to other countries and export them to other nations at higher rate thereby making a higher profit.

**DIFFICULTIES IN INTERNATIONAL TRADE**

**1. Distance**

The geographical locations and distances between the countries are enormous. Thus, goods and services can either be delivered by rail, road or sea or air. Distance creates higher transport costs as well as more dangers of sea or air perils such as explosions or accidents etc. These may cause delay in the delivery of goods and services which in most cases lead to the spoilage of certain perishable goods.

**2. Different languages**

The buyers and sellers may not be able to communicate with each other effectively due to language barriers. This is because different languages are spoken in different nations. Therefore, one has to depend on the translators for a pay and are not always reliable.

**3. Risk in transit**

International trade involves high risks than the domestic trade. Even though the risks can be covered by insurance perhaps the danger is enormous.

**4. Lack of information about foreign businessman**

Knowledge of credit-worthiness and the financial standing between the seller and prospective buyer is invisible. This is due to bad habit among the parties as there is no strong proof of the buyer’s ability to pay or the seller’s in possession of the goods or services. Thus, there is the risk of bad debt for the seller or duping the buyer.

**5. Import and export restrictions**

Custom taxes and duties on the import of the goods and services vary between nations. Similarly, export restrictions and procedures vary from nation to nation and also from time to time. Therefore, parties are required to fill various documents and formalities to complete the transactions.

**6. Study of foreign markets**

Every market has its own features and settings. Therefore, it will take time for parties to understand the vast array of different price interactions, demand and supply interactions, government policies, marketing methods, customs laws, weight etc. of the market. This makes it very difficult to collect all the information accurately about the foreign markets.

**7. Problems in payments**

Remittance of money in foreign trade involves much time and expense. This is due to the fact that every country has its own currency and exchange rates with which the transactions can completed. These exchange rates keep on changing thereby causing are high risks and the fear of bad debt.

**8. Intense competition**

Because of the countries involves in the trade there is a huge competition between nations involved in exporting the same commodity. Advertisements and other incentives serve as motivating factor in the market.

**CHARACTERISTICS OF INTERNATIONAL TRADE**

**1. Territorial specialization**

Due to comparative cost advantage, international trade among countries is possible. This is because each country has certain resources that can be well utilized for the production of certain type of commodity that is not available in other countries or available in very less quantities.

**2. International competition**

Producers from different nations engage in advertisements, incentives, sales promotion etc. in quest to sell their products in as much quantity as possible. Thus, these types of selling techniques are always helpful.

**3. Separation of sellers from buyers**

Due to geographical distance, buyers and sellers are unable to meet each other physically. They contact each other through mass communication devices such as telephones, internet, video conferencing etc.

**4. Long chain of middleman**

Due to geographical distance buyers and sellers have to rely on long chain of middleman to complete their international transactions. This increases the cost of the goods and services hence making the imported goods or services more expensive.

**5. Mutually acceptable currency**

Apart from Europe, countries have their own currencies and other modes of payment in. As such, there is no common currency for exchange between nations. However, dollars, pounds are some of the selected currencies for this market. These currencies are acceptable all over the world.

**6. International rules and regulations**

Both parties involved in international trade have to complete the guidelines and norms set by the custom authorities of respective countries and follow the restrictions of that nation.

**7. Government control**

Nations exercises effective control over the export and import trade hence, various types of formalities and documents have to be submitted to the government between the respective parties.

**INTERNATIONAL TRADE THEORIES**

Various theories existed that serve as the basis of international trade.

**1. Theory of comparative cost advantage**

The theory postulated that a country tends to specialize in the production of those goods for which it has comparative cost advantage or where the costs are lower than in other countries.

**2. Factor proportions theory**

Also known as factor endowment theory and developed by Heckcher and Ohlin. The theory suggests that a country will specialize and export that product which is factor intensive and in abundant while importing those goods and services which on the other hand are more factor intensive and which is scarce in that country.

**3. Human capital approach theory**

Also known as skills theory of international trade and advocated by Becker, Kennen and Kessing. According to the theory labour can be classified into skilled and unskilled. Therefore, developing economies with abundant unskilled labour will specialize and export labour intensive products while importing goods and services which are more skilled intensive.

**4. Natural resource theory**

Proposed by Vanek J., the basic hypothesis of the theory is that a county will export those goods and services which are more intensive in that natural resource with which it is relatively more endowed.

**5. Research and development and product life-cycle theories**

The theory suggests that in order to develop new products developed countries allocate more of their resource to research and development (R & D) programme. Thus, allowing them to enjoy monopoly benefits in the initial stages of production.

**6. Economies of large-scale theory**

Companies operating in developed nations tend benefits from the large-scale production because they reach a high level output. The lower cost of production will increase the competitiveness of the company enabling it to make an easy entry into the export markets.

**BARRIERS TO INTERNATIONAL TRADE**

**1. Tariffs**

A tariff is a tax imposed by government on goods and services coming into a country. Tariffs were created by government in order to protect local businesses from low-priced competitive products. Thus, tariff increases the price of the goods and services being imported.

**2. Currency fluctuation**

Every county has its own currency and the rate of exchanging one country’s currency exchange for another is called the exchange rate. Rates of currency are always fluctuating and that can be a major barrier to trade because the parties could end up paying more than intended.

**3. Investment regulations**

Investors are people from different part of the world who wish to invest by complying with provision of the investment regulations of the country they are investing. Different countries have different regulations as relate to investment.

4. Environmental restrictions

5. Foreign relations and trade sanctions

6. Safety regulations

7. Immigration policies

**2. EXCHANGE RATE**

The foreign exchange market (FOREX, FX, or currency market) is a decentralized world market for trading of currencies. The participants in the market are international banks. Financial institutions around the world function as anchors of trading between different types of buyers and sellers with the exception of weekends. Electronic Broking Services (EBS) and Reuters 3000 extra are two main interbank foreign exchange trading platforms. The foreign exchange market determines the relative values of different currencies.

The foreign exchange market assists international trade and investment by enabling currency conversion. For example, it permits a business in Nigeria to import goods from the European Union member states, especially Eurozone members, and pay euros, even though its income is in Nigerian naira. It also supports direct speculation in the value of currencies, and the carry trade, speculation based on the interest rate differential between two currencies.

In a typical foreign exchange transaction, a party purchases some quantity of one currency by paying some quantity of another currency. The modern foreign exchange market began forming during the 1970s after three decades of government restrictions on foreign exchange transactions (the Bretton Woods system of monetary management established the rules for commercial and financial relations among the world’s major industrial states after World War II), when countries gradually switched to floating exchange rates from the previous exchange rate regime, which remained fixed as per the Bretton Woods system.

**FEATURES OF FOREIGN EXCHANGE MARKET**

i. Its huge trading volume representing the largest asset class in the world leading to high liquidity;

ii. Its geographical dispersion;

iii. Its continuous operation: 24 hours a day except weekends, i.e., trading from 20:15 GMT on Sunday until 22:00 GMT Friday;

iv. The variety of factors that affect exchange rates;

v. The low margins of relative profit compared with other markets of fixed income; and

vi. The use of leverage to enhance profit and loss margins and with respect to account size.

**MARKET PARTICIPANTS**

**1. Commercial companies**

An important part of this market comes from the financial activities of companies seeking for foreign exchange to pay for goods or services. Commercial companies often trade fairly small amounts compared to those of banks or speculators, and their trades often have little short term impact on market rates. Nevertheless, trade flows are an important factor in the long-term direction of a currency’s exchange rate. Some multinational companies can have an unpredictable impact when very large positions are covered due to exposures that are not widely known by other market participants.

**2. Central banks**

National central banks play an important role in the foreign exchange markets. They try to control the money supply, inflation and or interest rates and often have official or unofficial target rates for their currencies. They can use their often substantial foreign exchange reserves to stabilize the market. Nevertheless, the effectiveness of central bank “stabilizing speculation” is doubtful because central banks do not go bankrupt if they make large losses, like other traders would and there is no convincing evidence that they do make a profit trading.

**3. Foreign exchange fixing**

Foreign exchange fixing is the daily monetary exchange rate fixed by national bank of each country. The idea is that central banks use the fixing time and exchange rate to evaluate behavior of their currency. Fixing exchange rates reflects the real value of equilibrium in the market. Banks, dealers and traders use fixing rates as a trend indicator.

**4. Hedge funds as speculators**

About 70% to 90% of the foreign exchange transactions are speculative. In other words, the person or institution that bought or sold the currency has no plan to actually take delivery of the currency in the end; rather, they were solely speculating on the movement of that particular currency.

**5. Investment management firms**

Investment management firms (who typically manage large accounts on behalf of customer such as pension funds and endowments) use the foreign exchange market to facilitate transactions in foreign securities. For example, an investment manager bearing an international equity portfolio needs to purchase and sell several pairs of foreign currencies to pay for foreign securities purchases.

**6. Retail foreign exchange traders**

Individual retail speculative traders constitute a growing segment of this market with advent of retail foreign exchange platforms both in size and importance. Currently, they participate indirectly through brokers or banks. Retail brokers are largely controlled and regulated in the USA by the Commodity Futures Trading Commission and National Futures Association.

**7. Non-bank foreign exchange companies**

Non-bank foreign exchange companies offer currency exchange and international payment to private individuals and companies. These are also known as foreign exchange brokers but are distinct in that they do not offer speculative trading but rather currency exchange with payments (i.e., there is usually a physical delivery of currency to a bank account). It is estimated that in the UK, 14% of currency transfers/payments are made via Foreign Exchange Companies.

**8. Money transfer/remittance companies and Bureau De Change**

Money transfer companies/remittance companies perform high-volume low-value transfer generally by economic migrants back to their home country. The largest and best known provider is Western Union with 345,000 agents globally followed by UAE Exchange.

Bureau De Change or currency transfer companies provide low value foreign exchange services for travelers. These are typically located at airports and stations or at tourist locations and allow physical notes to be exchanged from one currency to another. They access the foreign exchange markets via banks or non-bank foreign exchange companies.

**TRADING CHARACTERISTICS**

\* There is no unified or centrally cleared market for the majority of trades and there is very little cross-border regulation.

\* Due to the over-the-counter (OTC) nature of currency markets, there are rather a number of interconnected marketplaces where different currencies instruments are traded. This implies that there is not a single exchange rate but rather a number of different rates (prices), depending on what bank or market maker is trading and where it is.

\* In practice the rates are quite close due to arbitrage. Due to London’s dominance in the market, a particular currency’s quoted price is usually the London market price.

\* Major trading exchanges include EBS and Reuters, while major banks also offer trading systems.

\* The main trading centers are New York and London, though Tokyo, Hong Kong and Singapore are all important centers as well. Banks throughout the world participate.

\* Currency trading happens continuously throughout the day; as the Asian trading session ends, the European session begins, followed by the North American session and then back to the Asian session, excluding weekends.

\* Fluctuations in exchange rates are usually caused by actual monetary flows as well as by expectations of changes in monetary flows caused by:

@ changes in gross domestic product (GDP) growth,

@ inflation (purchasing power parity theory),

@ interest rates (interest rate parity, Domestic Fisher effect, International Fisher effect),

@ budget and trade deficits or surpluses,

@ large cross-border mergers & acquisitions deals and

@ other macroeconomic conditions.

\* Currencies are traded against one another in pairs. Each currency pair constitutes an individual trading product and is traditionally noted XXXYYY or XXX/YYY, where XXX and YYY are the ISO 4217 international three-letter code of the currencies involved.

\* The first currency (XXX) is the base currency that is quoted relative to the second currency (YYY) called the counter currency (or quote currency).

For example:

@ The quotation EURUSD (EUR/USD) 1.5465 is the price of the Euro expressed in US dollars.

@ Meaning:

1 euro = 1.5465 dollars.

\* The market convention is to quote most exchange rates against the USD with the US dollar as the base currency (e.g. USDJPY, USDCAD and USDCHF).

\* The exceptions are the British pound (GBP), Australian dollar (AUD), the New Zealand dollar (NZD) and the euro (EUR) where the USD is the counter currency (e.g. GBPUSD, AUDUSD, NZDUSD, EURUSD).

\* The factors affecting XXX will affect both XXXYYY and XXXZZZ. This causes positive currency correlation between XXXYYY and XXXZZZ.

**DETERMINANTS OF EXCHANGE RATES**

**1. Exchange rate**

The following theories explain the fluctuations in exchange rates in a floating exchange rate regime (in a fixed exchange rate regime, rates are decided by its government):

**i. International parity conditions**

Relative Purchasing Power Parity, interest rate parity, Domestic Fisher effect, International Fisher effect. Though to some extent the above theories provide logical explanation for the fluctuations in exchange rates, yet these theories falter as they are based on challengeable assumptions [e.g., free flow of goods, services and capital] which seldom hold true in the real world.

**ii. Balance of payments model**

The model focuses largely on tradable goods and services thereby ignoring the increasing role of global capital flows. As such it failed to provide any explanation for continuous appreciation of dollar during 1980s and most part of 1990s in face of soaring US current account deficit.

**iii. Asset market model**

The asset market model of exchange rate determination states that the exchange rate between two currencies represents the price that balances the relative supplies of and demand for assets denominated in those currencies. The model views currencies as an important asset class for constructing investment portfolios. Assets prices are influenced mostly by people’s willingness to hold the existing quantities of assets which in turn depends on their expectations on the future worth of these assets.

**2. Economic factors**

The economic factors that determine the exchange rates include:

i. economic policy, disseminated by government agencies and central banks.

ii. economic conditions, generally revealed through economic reports, and other economic indicators.

iii. Economic policy comprises government fiscal policy (budget/spending practices) and monetary policy (the means by which a government’s central bank influences the supply and “cost” of money, which is reflected by the level of interest rates).

iv. Government budget deficits or surpluses: The market usually reacts negatively to widening government budget deficits, and positively to narrowing budget deficits. The impact is reflected in the value of a country’s currency.

v. Balance of trade levels and trends: The trade flow between countries illustrates the demand for goods and services, which in turn indicates demand for a country’s currency to conduct trade. Surpluses and deficits in trade of goods and services reflect the competitiveness of a nation’s economy. For example, trade deficits may have a negative impact on a nation’s currency.

vi. Inflation levels and trends: Typically a currency will lose value if there is a high level of inflation in the country or if inflation levels are perceived to be rising. This is because inflation erodes purchasing power, thus demand, for that particular currency. However, a currency may sometimes strengthen when inflation rises because of expectations that the central bank will raise short-term interest rates to combat rising inflation.

vii. Economic growth and health: Reports such as GDP, employment levels, retail sales, capacity utilization and others, detail the levels of a country’s economic growth and health. Generally, the more healthy and robust a country’s economy, the better its currency will perform, and the more demand for it there will be.

viii. Productivity of an economy: Increasing productivity in an economy should positively influence the value of its currency. Its effects are more prominent if the increase is in the traded sector.

**3. Political conditions**

Internal, regional, and international political conditions and events can have a profound effect on currency markets. All exchange rates are susceptible to political instability and anticipations about the new ruling party. Political upheaval and instability can have a negative impact on a nation’s economy. For example, destabilization of coalition governments in Pakistan and Thailand can negatively affect the value of their currencies.

Similarly, in a country experiencing financial difficulties, the rise of a political faction that is perceived to be fiscally responsible can have the opposite effect. Also, events in one country in a region may spur positive/ negative interest in a neighboring country and, in the process, affect its currency.

**4. Market psychology**

Market psychology and trader perceptions influence the foreign exchange market in a variety of ways:

**i. Flights to quality**

Unsettling international events can lead to a “flight to quality”, a type of capital flight whereby investors move their assets to a perceived “safe haven”. There will be a greater demand, thus a higher price, for currencies perceived as stronger over their relatively weaker counterparts. The U.S. dollar, Swiss franc and gold have been traditional safe havens during times of political or economic uncertainty.

**ii. Long-term trends**

Currency markets often move in visible long-term trends. Although currencies do not have an annual growing season like physical commodities, business cycles do make themselves felt. Cycle analysis looks at longer-term price trends that may rise from economic or political trends.

**iii. “Buy the rumor, sell the fact”**

This market truism can apply to many currency situations. It is the tendency for the price of a currency to reflect the impact of a particular action before it occurs and, when the anticipated event comes to pass, react in exactly the opposite direction. This may also be referred to as a market being “oversold” or “overbought”. To buy the rumor or sell the fact can also be an example of the cognitive bias known as anchoring, when investors focus too much on the relevance of outside events to currency prices.

**iv. Economic numbers**

While economic numbers can certainly reflect economic policy, some reports and numbers take on a talisman-like effect: the number it-self becomes important to market psychology and may have an immediate impact on short-term market moves. “What to watch” can change over time. In recent years, for example, money supply, employment, trade balance figures and inflation numbers have all taken turns in the spotlight.

**v. Technical trading considerations**

As in other markets, the accumulated price movements in a currency pair such as EUR/USD can form apparent patterns that traders may attempt to use. Many traders study price charts in order to identify such patterns.

**5. Financial instruments**

**i. Spot**

A spot transaction is a two-day delivery transaction (except in the case of trades between the US Dollar, Canadian Dollar, Turkish Lira, Euro and Russian Ruble, which settle the next business day), as opposed to the futures contracts, which are usually three months. This trade represents a “direct exchange” between two currencies, has the shortest time frame, involves cash rather than a contract; and interest is not included in the agreed-upon transaction.

Spot trading is one of the most common types of Forex Trading. Often, a forex broker will charge a small fee to the client to roll-over the expiring transaction into a new identical transaction for a continuum of the trade. This roll-over fee is known as the “Swap” fee.

**ii. Forward**

One way to deal with the foreign exchange risk is to engage in forward transaction. In this transaction, money does not actually change hands until some agreed upon future date. A buyer and seller agree on an exchange rate for any date in the future, and the transaction occurs on that date, regardless of what the market rates are then. The duration of the trade can be one day, a few days, months or years. Usually the date is decided by both parties. Then the forward contract is negotiated and agreed upon by both parties.

**iii. Swap**

The most common type of forward transaction is the foreign exchange swap. In a swap, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date. These are not standardized contracts and are not traded through an exchange. A deposit is often required in order to hold the position open until the transaction is completed.

**iv. Future**

Futures are standardized forward contracts and are usually traded on exchange created for this purpose. The average contract length is roughly 3 months. Futures contracts are usually inclusive of any interest amounts. Currency futures contracts are contracts specifying a standard volume of a particular currency to be exchanged on a specific settlement date.

Thus the currency futures contracts are similar to forward contracts in terms of their obligation, but differ from forward contracts in the way they are traded. In addition they are traded by speculators who hope to capitalize on their expectations of exchange rate movements.

**v. Option**

A foreign exchange option (commonly shortened to just FX option) is derivative where the owner has the right but not the obligation to exchange money denominated in one currency into another currency at a pre-agreed exchange rate on a specified date. The options market is the deepest, largest and most liquid market for options of any kind in the world.

**vi. Speculation**

Controversy about currency speculators and their effects on currency devaluations and national economies recurs regularly. Nevertheless, economists including Milton Friedman have argued that speculators ultimately are a stabilizing influence on the market and perform the important function of providing a market for hedgers and transferring risk from those people who don’t wish to bear it, to those who do. Other economists such as Joseph Stiglitz consider this argument to be based more on politics and a free market philosophy than on economics.

**vii. Risk aversion**

Risk aversion is a kind of trading behavior exhibited by foreign exchange market when a potentially adverse event happens which may affect market conditions. This behavior is caused when the risk averse traders liquidate their positions in risky assets and shift the funds to less risky assets due to uncertainty.

**viii. Carry trade**

Currency carry trade refers to the act of borrowing one currency that has low interest rate in order to purchase another with a higher interest rate. A large difference in rates can be highly profitable for the trader, especially if high leverage is used. However, with all levered investments this is a double edged sword, and large exchange rate fluctuations can suddenly swing trades into huge losses.

**ix. FOREX signals**

FOREX trade alerts often referred to as ‘FOREX Signals’ are trade strategies provided by either experienced traders or market analysts. These signals which are often charged a premium fee for can then be copied or replicated by a trader to his own live account. FOREX signal products are packaged as either alerts delivered to a user’s inbox or SMS, or can be installed to a trader’s trading platforms.

**FACTORS THAT INFLUENCE EXCHANGE RATES**

Aside from factors such as interest rates and inflation, the exchange rate is one of the most important determinants of a country’s relative level of economic health. Exchange rates play a vital role in a country’s level of trade, which is critical to most every free market economy in the world. For this reason, exchange rates are among the most watched and, analyzed governmentally manipulated economic measures. But exchange rates matter on a smaller scale as well: they impact the real return of an investor’s portfolio. Here we look at some of the major forces behind exchange rate movements.

**1. Differentials in inflation**

As a general rule, a country with a consistently lower inflation rate exhibits a rising currency value, as its purchasing power increases relative to other currencies. During the last half of the twentieth century, the countries with low inflation included Japan, Germany and Switzerland, while the U.S. and Canada achieved low inflation only later. Those countries with higher inflation typically see depreciation in their currency in relation to the currencies of their trading partners. This is also usually accompanied by higher interest rates.

**2. Differentials in interest rates**

Interest rates, inflation and exchange rates are all highly correlated. By manipulating interest rates, central banks exert influence over both inflation and exchange rates, and changing interest rates impact inflation and currency values. Higher interest rates offer lenders in an economy a higher return relative to other countries. Therefore, higher interest rates attract foreign capital and cause the exchange rate to rise.

The impact of higher interest rates is mitigated, however, if inflation in the country is much higher than in others, or if additional factors serve to drive the currency down. The opposite relationship exists for decreasing interest rates - that is, lower interest rates tend to decrease exchange rates.

**3. Current-account deficits**

The current account is the balance of trade between a country and its trading partners, reflecting all payments between countries for goods, services, interest and dividends. A deficit in the current account shows the country is spending more on foreign trade than it is earning, and that it is borrowing capital from foreign sources to make up the deficit. In other words, the country requires more foreign currency than it receives through sales of exports, and it supplies more of its own currency than foreigners demand for its products.

The excess demand for foreign currency lowers the country’s exchange rate until domestic goods and services are cheap enough for foreigners, and foreign assets are too expensive to generate sales for domestic interests.

**4. Public debt**

Countries will engage in large-scale deficit financing to pay for public sector projects and governmental funding. While such activity stimulates the domestic economy, nations with large public deficits and debts are less attractive to foreign investors. The reason? A large debt encourages inflation, and if inflation is high, the debt will be serviced and ultimately paid off with cheaper real dollars in the future.

In the worst case scenario, a government may print money to pay part of a large debt, but increasing the money supply inevitably causes inflation. Moreover, if a government is not able to service its deficit through domestic means (selling domestic bonds, increasing the money supply), then it must increase the supply of securities for sale to foreigners, thereby lowering their prices.

Thanks.