Balance of Payments

HS 301

Definition

Balance of Payment of country is defined as a systematic statistical record of all economic transactions taking place between residents of a country and rest of the world over a specified time period, which is usually a year.

Economic transactions – it is an act which involves the transfer of title of ownership of goods and assets. It also includes rendering of services by one person to another. International economic transactions take place between residents of two countries. It involves payments and receipt of money in exchange of goods, services or assets. But it need not always involve payment and receipt of money. In case of gifts or donations, no receipt and payments are involved but they are international economic transactions.

Resident – resident of a country is a person who resides in a country and whose citizenship he/ she holds. E.g., tourists, diplomatic personnel, students studying abroad, workers migrating abroad, are the residents of a country from where they come. Military personnel are residents of a country whose uniform they wear.

Difference between BOT and BOP

Balance of Trade (BOT) includes trade in visible items, i.e., material goods. Also known an merchandise account.

Balance of Payments (BOP) includes trade in both visible (material goods) and invisible goods (services, capital flows etc.).

Features of BOP

- It is a systematic statistical record of all economic transactions between one country and rest of the world.
- It includes all transactions – visible as well as invisible.
- It relates to a period of time. Generally it is an annual statement.
- It adopts a double entry book keeping system for recording transactions. It has two sides – credit side and debit side. All export of goods and services, export of assets, receipt of loans and any debt securities are recorded on the credit side. All import of goods and services, import of foreign assets, extension of loans and debt securities are recorded on the debit side.
- When sum of all credits are equal to the sum of all debits, the BOP is in equilibrium; when credits are greater than debits, there is a surplus in BOP; when credits are less than debits, the BOP is in deficit.
- In accounting sense, total credits and debits in the BOP statement always balance each other.

BOP consists of following accounts

- Current Account
- Capital Account
- Capital Account often subdivided into Private Capital Account and Official Reserve Transaction (ORT) Account

BOP should always balance in accounting sense. Any discrepancy in the current account is usually settled through transactions in private capital account or through transactions in ORT account.

Any remaining imbalance settled through Statistical Discrepancy

Features of Current Account

- Involves real short time transactions (concerned with actual transfer of goods and services which affect income, output and expenditure of the country. They are income generating transfers; not merely financial transaction).
- It involves no payment obligations for the future.
- It is a statement on exports and imports of visible and invisible items.
- Visible items – export and import of material goods.
- Invisible items – export and import of services.
- The account has two sides – a debit side and a credit side. Transactions contributing to outflow of money from the economy are recorded in the debit side, while the transactions contributing to inflow of money in the economy are recorded in the credit side.

Current Account of a Country

Credit	Debit
Export of goods and services, inflow of interest incomes from investment made abroad, travel and tourism expenses made by foreign tourists within the country etc.	Import of goods and services, outflow of interest incomes from investments made by foreign firms within the domestic economy, travel and tourism expenses made by domestic residents while travelling abroad etc.

Items of Current Account

Merchandise Trade

- Merchandise – export and import of goods; export credit item, import debit item.

Trade in Services

- Travel – travel for business, education, health, international conventions or pleasure; expenditure by foreign tourists credit item, expenditure by our tourists abroad debit item.
- Transportation – international transportation of goods, e.g., warehousing (while in transit), other transit expenses; use of domestic transport services by foreigners credit item, use of foreign transport services by domestic traders debit item.
- Insurance – insurance premiums and payment of claims; insurance policies sold to foreigners credit item, insurance policies purchased by domestic users from foreigners debit item.
- Investment income – interest, rents, dividends and profits; income received on capital invested abroad credit item, expenses on capital borrowed from abroad debit item.
- Government transactions – expenditure incurred by the government for the upkeep of its organization abroad, e.g., payment of salaries to ambassadors, high commissioners etc.; such incomes received from foreign government credit item, payments made to the government officials stationed abroad debit item.

Items cont.

- Miscellaneous – expenditure incurred on services like advertisement, commissions, film rentals, patent fees, royalties, subscriptions to periodicals, membership fees etc.; payments received from abroad credit item, payments made abroad debit item.
- Donations and gifts – unilateral transfers or unrequited payments, because nothing is given in return for them; donations/ gifts received credit item, donations/ gifts made debit item.

Transfers

2 types:

- Pure or unilateral transfers – just one way flow. No return flow is expected. Unilateral transfers are recorded in current account.
- Capital transfers – two way flow. No current return flow but in future there will be some return flow. If a country borrows from another country, it will not have to pay back in the current accounting period. For the current accounting period loans taken is a transfer.

Features of Capital Account

- It deals with financial transactions.
- It involves payment obligations for the future, transactions in assets.
- All short and long term international movement of capital.
- The capital account has 2 sides – a debit side and a credit side. Export of assets by a country are recorded in the credit side, while import of assets are recorded in the debit side.
- Gold transactions (monetary gold) form a part of capital account.
- Country invests or lends abroad or acquires foreign assets – debit
- Country borrows from abroad or foreign investments enter or exports domestic assets – credit.
- All financial transactions relating to transfer of money and have no direct impact on the level of income and output of the economy.
- Capital account includes 2 types of foreign investments – foreign direct investments and foreign portfolio investments.
- Capital account can be divided into Private Capital Account and Official Reserve Transaction (ORT) Account.

Capital Account of a Country

Credit	Debit
Inflow of investments from other countries, borrowing from other countries, exporting assets	Investing in other countries, lending to other countries, acquiring or importing foreign assets

Features of Capital Account cont.

- If assets are traded between private citizens of two countries then transactions are recorded in Private Capital Account; private lending to other countries / private purchase of assets from other countries/ private investments abroad are debit items; private borrowings from other countries/ private sale of assets to other countries/ inflow of private investments from abroad are credit items.
- If assets are traded between central banks or the monetary authorities of 2 countries then the transactions are recorded in the ORT Account.

Few Definitions

- **Foreign Direct Investments**: Investments in the form of a controlling ownership in a business enterprise in one country, by an entity based in another country. FDI is frequently not a simple monetary transfer of ownership or controlling interest, but also involves complementary factors such as participation in organizational and management systems, and transfer of technology and expertise. FDI can be made by individuals but are more commonly made by companies wishing to establish a business presence in a foreign country.

- **Foreign Portfolio Investments**: Foreign Portfolio Investment is the entry of funds into a country where foreigners deposit money in a country's bank or make purchases in the country’s stock and bond markets. Portfolio investments typically involve transactions in securities that are highly liquid, i.e. they can be bought and sold very quickly. A portfolio investment is an investment made by an investor who is not involved in the management of a company.

Definitions cont.

- **Asset**: Any item of economic value owned by an individual or corporation, especially that which could be converted to cash. Examples are cash, securities, office equipment, real estate, a car, and other property. Asset of an individual is what he/ she owns.

- **Liabilities**: A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits, i.e., transfer or use of assets, provision of services etc. Liability of an individual is what he/ she owes to others.

- In capital account, Assets = Debit, Liabilities = Credit.

- In current account, Credit = Income, Debit = Payment.

Official Reserve Transaction Account

- ORT Account shows the extent of official intervention by the monetary authority of a country (Central Bank) to finance external imbalance.
- It consists of Central Bank’s transactions in international reserve assets, e.g., foreign exchange reserves, gold (monetary), credits issued by IMF (International Monetary Fund), Special Drawing Rights (SDR).
- Acquiring foreign assets through purchase of monetary gold, SDR, lending by the Central Bank, are recorded as debit item.
- Selling of foreign assets through sale of monetary gold, SDR, borrowing by the Central Bank, are recorded as credit item.

Foreign Exchange Reserves

Foreign exchange reserves consist of every convertible foreign currency held as foreign reserves. They should be convertible into gold, dollar or any other international reserve assets. No country will hold rupee as foreign reserve.

Special Drawing Rights (SDR)

- International reserve assets created by IMF.
- They are described as “paper gold”.
- SDR was created in 1969 to supplement a shortfall of preferred foreign exchange reserve assets, namely gold and US dollar.
- The value of SDR is based on a basket of key international currencies reviewed by IMF every 5 years.
- The weight assigned to each currency in SDR basket is adjusted to take into account their current prominence in terms of international trade and national foreign exchange reserves.
- In November 2015 review, IMF decided to include Chinese Yuan (renminbi) in the basket from 1st October 2016. From that date onwards SDR basket consists of 5 currencies: US dollar (41.73%), Euro (30.93%), Chinese Yuan (10.92%), Japanese Yen (8.33%), British Pound (8.09%).

SDR cont.

- SDRs are allocated to the member countries of IMF by IMF. The amount of SDR that is allocated to each country is based on their individual IMF quota. IMF quotas are based on the relative economic position of the country in the world economy. The quota is a country's financial commitment to the IMF and its voting power.
- SDRs can be traded for freely usable currencies between IMF members through voluntary trading agreements. These agreements are facilitated by the IMF, and can be done to adjust reserves or meet balance of payment needs.

Monetary Gold

- Gold owned by a government, usually as a part of currency reserves.
- Many states hold monetary gold as a part of many things that determine a currency’s value, the bulk of which is the reserve of foreign currency.
- Monetary gold is not traded, except between central banks and occasionally with international organizations such as IMF.
- Transactions in monetary gold occur only between monetary authorities and their counterparts in other economies, or between monetary authorities and international monetary organizations.
- Transactions in monetary gold is recorded in the ORT Account.

Non-Monetary Gold

- Non-monetary gold covers exports and imports of all gold not held as reserve assets (i.e., monetary gold) by the authorities.
- Non- monetary gold is treated as any other commodity.
- Transactions in non-monetary gold is recorded in the Current Account.

Double Entry Book Keeping Method

The accounting procedure that is used in preparing the BOP Account is the double entry book keeping method. The rationale behind the procedure is that each complete economic transaction should be recorded twice (once as a credit item and once as a debit item), because each economic transaction has two sides. In international transactions, something leaves the country and something enters the country, and therefore they should be recorded twice.

Please refer to the attached document for an example of double entry method of book keeping:

Demonstration of Double Entry Method of Book Keeping.docx

Balance in BOP

- Double entry book keeping method ensures that the BOP of a country is balanced or in equilibrium. If a country has current account deficit, it must have a capital account surplus, either through surplus in the private capital account or through surplus in ORT account.

$$current\ account + capital\ account\ \equiv 0$$

or

$$current\ account + private\ capital\ account + ORT\ account\ \equiv 0$$

- But the accounting identity may not hold due to measurement errors. For that reason, errors are reported under the heading Statistical Discrepancy to balance BOP account.
- $current\ account + capital\ account + statistical\ discrepancy = 0$

Statistical Discrepancy

The amount that must be added or subtracted to force the measured current account balance and the measured capital account balance to zero.

Foreign Repercussions Effect

- Consider a large country A and its trade with country B.
- Foreign repercussions effect is defined as the effect of a change in national income and imports of a country on the national income abroad and thus the backwash it has on the foreign trade and national income at home.
- Two trading partners' incomes get linked because of the foreign repercussions effect.
- This linkage is the basis of international transmission of business cycles. If a recession occurs in one country, it spreads to another country.

Mechanism:

$$Y_A \uparrow\rightarrow M_A \uparrow\rightarrow X_B \uparrow\rightarrow Y_B \uparrow\rightarrow M_B \uparrow\rightarrow X_A \uparrow\rightarrow Y_A \uparrow$$

Nominal Exchange Rate (NER)

- It is the price of one currency in terms of another currency.
- It is the rate at which one currency is exchanged for another.
- It is nominal because it measures only numerical exchange value, and does not say anything about the purchasing power of that currency.
- The NER of rupee: 70 INR/$

Effective Exchange Rate (EER)

- To get a true picture of the value of domestic currency in the international market, the concept of EER has emerged.
- It is an index that describes the strength of a country's currency relative to a basket of currencies of the country's most important trading partners.
- When looking at the EER of rupee, we will compare the value of rupee against our main trading partners' currencies, e.g., Chinese yuan, US dollar, dirham etc., and give a weight depending upon how much we trade with that country, e.g., China 40%, US 30.5%, UAE 20.5%. Thus weighting will be given to different countries depending on how significant they are.
- The EER is good for looking at the overall performance of a currency e.g., rupee may appreciate against dollar, but this may be due to just temporary weakness in dollar. However, if overall EER increases, it suggests rupee is becoming stronger.

Real Exchange Rate (RER)

- Real exchange rates are used to incorporate the purchasing power and competitiveness aspect of currency.
- RER is NER multiplied by the ratio of price indices of two currencies (market price level of goods and services, given by the indices of inflation).

$$RER = NER * \left(\frac{P^*}{P}\right)$$

P is the domestic price level.

P^* is the foreign price level.

- Discerning how domestic goods are faring relative to foreign goods in terms of competitiveness.
- RER is the rate at which goods of one country will exchange for the goods of another country.
- $NER * P^*$ is the price of foreign basket of goods in terms of rupee. Therefore, RER denotes the ratio of the prices of foreign goods to domestic goods in terms of rupee.
- RER is the real price of foreign goods, i.e., the quantity of domestic goods needed to purchase a unit of foreign goods.
- If $P^*>P$, the amount of domestic goods needed to purchase a unit of foreign good will be more. Hence RER > NER.
- If $P^*<P$, the amount of domestic goods needed to purchase a unit of foreign good will be less. Hence, RER < NER.

RER cont.

Increase in RER of a country implies:

- Foreign goods are becoming more expensive relative to domestic goods.
- People in the country can get less foreign goods for an equivalent amount of domestic goods.
- Net imports will decrease → lowering of current account deficit → higher aggregate demand (due to falling imports and rising exports).

Fall in RER of a country will have opposite outcomes.

Considering RER, with currency devaluation $(NER \uparrow)$ and equivalent increase in domestic price level $(P \uparrow)$, RER remains unchanged. As a result, competitiveness of domestic and foreign goods would not be altered.

Foreign Exchange Market

- It is the place where one national currency can be converted into another currency.
- It is the organizational framework within which individuals, firms or banks buy and sell foreign currencies.
- The foreign exchange market for one single currency, say, US$, is composed of all locations where US$ are bought and sold for other foreign currencies.
- The banks deal in the foreign exchange markets. The banks via the foreign exchange markets develop contacts with individuals.

Determination of Equilibrium Foreign Exchange Rate

- Demand for foreign exchange of a country has a negative relation with the exchange rate (amount of domestic currency per unit of foreign currency).
- Supply of foreign exchange of a country has a positive relation with the exchange rate (amount of domestic currency per unit of foreign currency).
- The intersection of demand and supply of foreign exchange determines the equilibrium exchange rate for a country.
- The relevant diagrams and explanations can be accessed here:
- Equilibrium in Foreign Exchange Market- Diagram.docx

Causes of Deficits in the Current Account

- Development schemes – developing countries invest a huge amount in development schemes – import capital goods, raw materials, highly skilled manpower - exports may not increase as these countries are primary products producing countries – hence deficit in current A/c.
- Price–cost structure – increase in prices due to higher wages, higher cost of raw materials etc., reduces exports and makes current A/c unfavorable.
- Changes in foreign exchange rates – a decrease in FER makes imports cheaper and exports dearer, thus making A/c unfavorable.
- Fall in export demand – lack of export demand for the primary goods of the underdeveloped countries can lead to deficits in their current A/c.
- Demonstration effect – people in less developed countries following the consumption patterns of the developed countries – with simultaneous fewer goods to export, current A/c may be in deficit.
- Cyclical fluctuations – related to business cycles – during recession in a foreign country, incomes of foreign residents fall so they demand less of imports, therefore exports of domestic country fall leading to current A/c deficits.
- Population explosion – increasing imports
- Natural factors – natural calamities affecting the production of a country.

Methods of Correcting Deficit

1) **Deflation** – the policy of reducing the quantity of money by Central Bank through rise in bank rate, selling of securities in the open market etc., will reduce the money income of the people. Hence, demand falls, leading to fall in prices. Result – exports will increase and imports will fall – deficit reduced.

Deflation has following problems –

- Reduction in wages and incomes strongly opposed by trade unions.
- Unemployment creation.
- Expansionary monetary policy rather than contractionary monetary policy more desirable in a developing economy.

Deficit Correction cont.

2) **Depreciation** – fall in the value of home currency with respect to foreign currency – more domestic currency required to buy a unit of foreign currency - imports fall and exports rise – deficit reduced - works in a flexible exchange rate system.

Problems associated with depreciation:

- Not suitable for a country which follows fixed exchange rate system.
- Terms of trade go against the country whose currency depreciates because the foreign goods have become costlier than the local goods and the country has to export more to pay for the same volume of imports.
- If other countries start depreciating their currencies, the process may not be successful.

Deficit Correction cont.

3) **Devaluation** – reduction in external value of currency by the central bank or monetary authority of a country.

Success of devaluation depends on following conditions:

- Elasticity of demand for the country’s exports should be greater than unity.
- Elasticity of demand for a country’s imports must be greater than unity.
- Exports of a country should be non-traditional and increasingly demanded by other countries.
- Other countries should not retaliate by resorting to devaluation.

Devaluation suffers from certain defects:

- Devaluation is a clear reflection on the country’s economic weakness.
- Reduces confidence of the people in the country’s currency and may lead to speculative outflow of capital.

Deficit Correction cont.

4) **Exchange Controls** – control over the use of foreign exchange by the central bank – all exporters are directed to surrender their foreign exchange earnings – foreign exchange is rationed among licensed importers and only essential imports are permitted.

5) **Capital Movement** – correct deficit through inflow of capital or capital imports – if capital is perfectly mobile between countries, an increase in the domestic interest rates above the world rate will result in inflow of capital.

6) **Encouraging Exports** – adoption of various export promotion programs by the government such as reduction of export duties, provision of export subsidies, incentives for exporters e.g., cheaper credits.

7) **Discouraging Imports** – imposition of import duties and quotas, promoting import substitution etc.