

ECONOMICS

(Macro-Economics)

Chapter 6: Open Economy Macroeconomics



OPEN ECONOMY MACROECONOMICS

Open Economy

It is one that conducts business with other countries in a range of methods. The majority of modern economies are open.

Balance of Payment (BOP): It is a record of all transactions that occurred between firms in a particular country and the rest of the world over a certain time period, such as a quarter or a year.

Accounts of Balance of Payment:

Current Account: It is the record of goods and services traded as well as transfer payments. It encompasses a country's most important activities, such as capital markets and services.

Two Components of the Current Account:

- ❖ **Balance of Trade (BOT):** It is the difference between the value of a country's exports and imports of goods over a specified timeframe. The export of products is recorded as a credit in the BOT, whereas the import of goods is recorded as a debit. It is also referred to as the Trade Balance.
- ❖ **Balance of Invisibles:** The difference between a country's exports and imports of invisible over a certain time frame is known as the balance of invisible. Services, transfers, and income movements between countries are all examples of invisible.

Capital Account:

All overseas asset transactions are recorded in the Capital Account. An asset is any type of wealth that may be held, such as money, stocks, bonds, government debt, and so on. The purchase of assets is recorded as a debit item on the capital account.

Components of Capital Account:

- ❖ **Investments:**
 - **Direct Investment:** Equity Capital, FDI, Reinvested Earning, and other Direct Capital Flows.
 - **Portfolio Investment:** Offshore Funds, FII.
- ❖ **External Borrowings:** Includes Short-term Debt, External Commercial Borrowings.
- ❖ **External Assistance:** Multilateral and Bilateral Loans, Government Aid, Inter-governmental Aid.

Deficit of Balance of Payment Account:

- ❖ When a country has a balance of payments deficit, it imports more goods, capital, and services than it exports. It must take from other countries in order

to pay for its imports.

- ❖ A deficit in the balance of payment happens when total payment surpasses total receipts; ergo $BOP = Credit < Debit$.
- ❖ A deficit of the balance of payment can be amended through an official reserve deal which signifies the sale of foreign exchange by the Reserve Bank.

Autonomous Transactions:

- ❖ When international economic transactions are made for reasons other than bridging the balance of payments gap, they are referred to as autonomous transactions.
- ❖ One reason might be to make money. In the balance of payment, these items are referred to as “above the line” items.
- ❖ This type of transactions are free of the condition of the balance of payment account.
- ❖ Autonomous items allude to those international economic exchanges, which happen because of some economic intention, for example, profit maximization.

Accommodating Transactions:

- ❖ The gap in the balance of payments, or whether there is a deficit or surplus in the balance of payments, determines accommodating transactions, also known as
- ❖ “Below the line” items. In other words, the net consequences of autonomous transactions determine them.
- ❖ Accommodating transactions are repaying capital exchanges that are intended to address the disequilibrium in the balance of payments, i.e., the autonomous items.
- ❖ If the balance of payment has a surplus or deficit, accommodating transactions are carried out on purpose to balance the balance of payment's surplus or deficit.

Errors and Omissions:

- ❖ It is difficult to keep accurate records of all international transactions. As a result, in addition to the current and capital accounts, there is a third element of the balance of payment called errors and omissions, which reflects this.
- ❖ The entries made under this head relate for the most part to leads and lags in the detailing of exchange
- ❖ It is a balancing entry that is expected to counterbalance the exaggerated or underestimated components.

Foreign Exchange Market:

- ❖ The foreign exchange market is the market where national currencies are exchanged for one another.

- ❖ Commercial banks, foreign exchange brokers, other authorized dealers, and monetary authorities are the main participants in the foreign exchange market.
- ❖ The foreign exchange markets are the first and most established financial markets and remain the premise whereupon the remainder of the financial edifice is built. It provides global liquidity, ideally with reasonable stability.

Foreign Exchange Rate:

An exchange rate is the worth of a country's currency versus that of another nation or an economic zone, also termed as Forex rate. Most of the trade rates are free-floating and will rise or fall based on market interest on the lookout. A few monetary forms are not free-floating and have limitations. It connects different countries' currencies and allows for cost and price comparisons across territorial boundaries.

- ❖ **Demand for Foreign Exchange:** People require foreign exchange because they want to buy goods and services from other countries, send gifts abroad, and buy financial assets from a specific country. The demand for foreign exchange falls as the flexible exchange rate rises and vice versa.
- ❖ **Supply of Foreign Exchange:** Foreign currency flows into the home country for the following reasons - a country's exports lead to foreigners purchasing its domestic goods and services; foreigners send gifts or make transfers, and foreigners purchase a home country's assets. The foreign exchange supply has a positive relationship with the foreign exchange rate. When the foreign exchange rate rises, so does the supply of foreign exchange, and vice versa.

Flexible Exchange Rate:

The market forces of demand and supply determine this exchange rate. It is also referred to as a floating exchange rate.

- ❖ An increase in the exchange rate indicates that the price of foreign currency (dollar) in terms of domestic currency (rupees) has risen. This is referred to as depreciation of the domestic currency (rupees) in terms of foreign currency (dollars).
- ❖ Appreciation of the domestic currency (rupees) in terms of foreign currency (dollars) occurs when the price of domestic currency (rupees) increases in relation to foreign currency (dollars) (dollars).

Merits of Flexible Exchange Rate:

- ❖ There is no need to keep foreign exchange reserves.
- ❖ As a result, the 'balances of payments' are automatically adjusted.
- ❖ To remove impediments to capital and trade transfers.
- ❖ Improves resource allocation efficiency.
- ❖ It eliminates the issue of currency undervaluation or overvaluation.
- ❖ It encourages foreign exchange-based venture capital.

Demerits of Flexible Exchange Rate:

- ❖ Future exchange rate fluctuations.
- ❖ Is a deterrent to international trade and investment.
- ❖ Promotes speculation.
- ❖ It contributes to market uncertainty.

Fixed Exchange Rate:

The government fixes the exchange rate at a specific level in this exchange rate system. The goal of a fixed exchange rate system is to maintain the value of a currency within a narrow spectrum.

- ❖ Devaluation occurs in a fixed exchange rate system when a government action raises the exchange rate, causing the domestic currency to become cheaper.
- ❖ In a fixed exchange rate system, a revaluation occurs when the government lowers the exchange rate, making the domestic currency more expensive.

Merits of Fixed Exchange Rate:

- ❖ Exchange rate stability.
- ❖ There is no room for speculation.
- ❖ Encourages capital mobility and international trade.
- ❖ Attracts foreign investment.
- ❖ It forces the government to keep inflation under control.

Demerits of Fixed Exchange Rate:

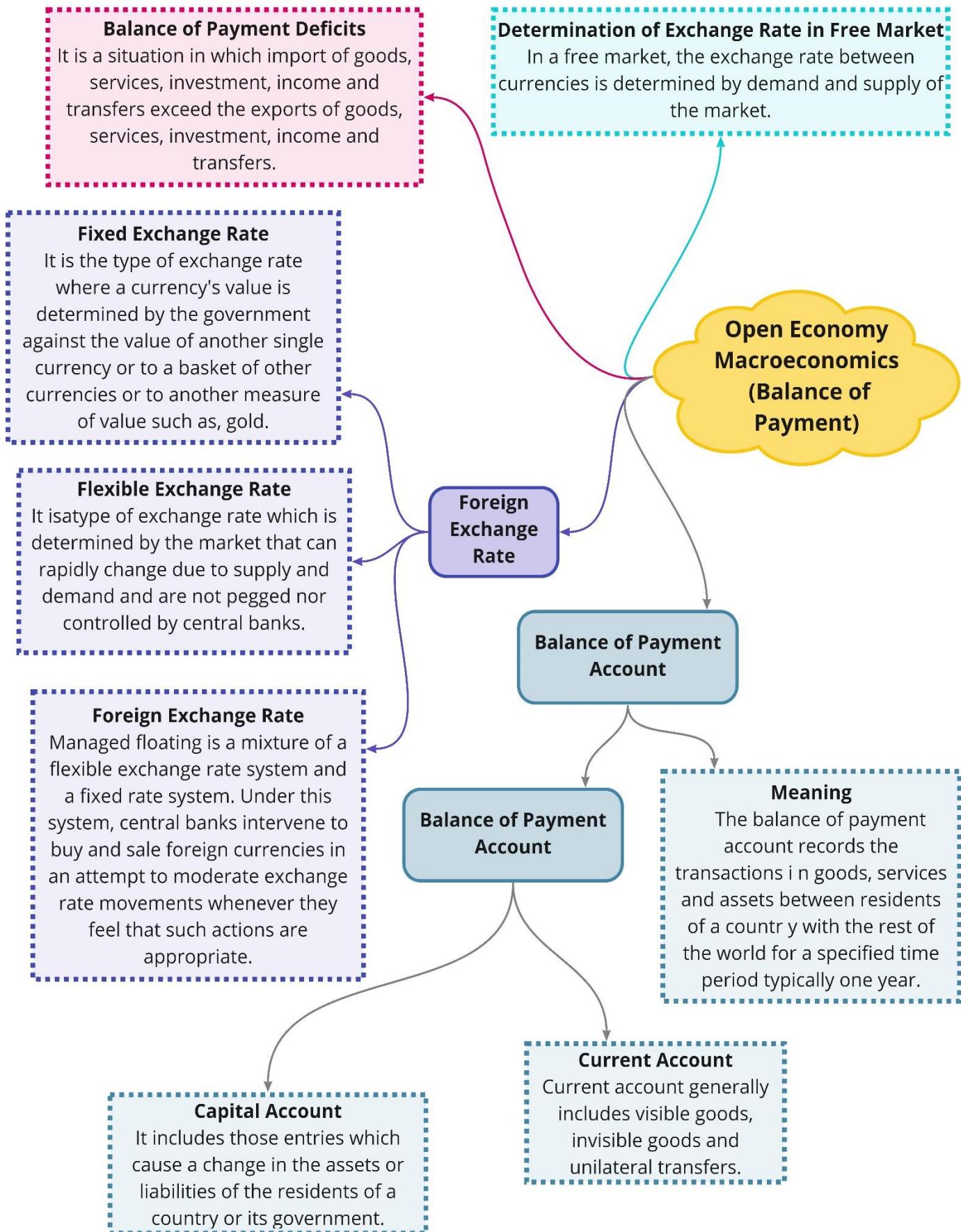
- ❖ In relation to the balance of payments, there are no automatic adjustments i.e., it forestalls changes for monetary standards that become under-or over-esteemed.
- ❖ Requiring a huge pool of reserves to help the currency of a country in the event that it goes under pressure.
- ❖ It could lead to currency undervaluation or overvaluation.
- ❖ It undercuts the goal of free markets.

Determination of Equilibrium Foreign Exchange Rate:

The equilibrium foreign exchange rate is the rate at which demand and supply of foreign exchange are equitable. It is determined by market forces, i.e., demand for and supply of foreign exchange, in a free market situation. The demand for foreign exchange and the exchange rate has an inverse relationship. There is a direct relationship between foreign exchange supply and exchange rate. Because of the aforementioned reasons, the demand curve is sloped downward, and the supply curve is sloped upward. The equilibrium foreign exchange rate is determined graphically by the intersection of the demand and supply curves.

 **Managed Floating:**

It is a hybrid of a flexible exchange rate system, known as the float, and a fixed rate system, known as the managed part. This exchange rate system enables a country's central bank to intervene on a regular basis in foreign exchange markets to moderate exchange rate movements whenever such actions are deemed appropriate.



Important Questions

Multiple Choice questions-

Q1. Foreign exchange transactions which are independent of other transactions in the Balance of Payments Account are called:

- (a) Current transactions
- (b) Capital transactions
- (c) Autonomous transactions
- (d) Accommodating transactions

Q2. What is the cause of the devaluation of any country's currency?

- (a) Increase in the domestic inflation rate
- (b) Domestic real interest rates are less than foreign interest rates
- (c) Much increase in the income
- (d) All of these

Q3. The operation of daily nature in the foreign exchange market is known as

- (a) Spot market
- (b) Forward market
- (c) Domestic market
- (d) International market

Q4. The operation of future delivery in the foreign exchange market is known as

- (a) Spot market
- (b) Current market
- (c) Forward market
- (d) Domestic market

Q5. Trade of visible items between the countries is known as

- (a) Balance of Payment
- (b) Balance of Trade
- (c) Deficit Balance
- (d) All of these

Q6. When the import and export of visible items are equal, the situation is known as

- (a) Balance of Trade
- (b) Balance of Payment
- (c) Trade Surplus

(d) Trade Deficit

Q7. When there is a favourable balance of trade?

(a) $X > M$

(b) $X = M$

(c) $X < M$

(d) None of these

Q8. The trade of visible and invisible items is known as

(a) Balance of Payments

(b) Balance of Trade

(c) Deficit of interest

(d) Profit

Q9. Other things remaining unchanged, when in a country the price of foreign currency rises, national income is:

(a) Likely to rise

(b) Likely to fall

(c) Likely to rise and fall both

(d) Not affected

Q10. Other things remaining the same, when in a country the market price of foreign currency falls, national income is likely:

(a) To rise

(b) To fall

(c) To rise or to fall

(d) To remain affected

Q11. Which one is the king of the exchange rate?

(a) Fixed Exchange Rate

(b) Flexible Exchange Rate

(c) Both (a) and (b)

(d) None of the above

Q12. Which of the following is true?

(a) Fixed exchange rate is determined by the government

(b) Flexible exchange rate is determined by market forces (demand and supply of foreign exchange)

(c) Both (a) and (b)

(d) None of the above

Q13. Which one is a kind of fixed exchange rate?

- (a) Gold Standard System of Exchange Rate
- (b) Bretton Woods System of Exchange Rate
- (c) Both (a) and (b)
- (d) None of the above

Q14. Which one is a merit of the fixed exchange rate?

- (a) Promotes Foreign Trade
- (b) Induces Foreign Capital
- (c) Increases Capital Formation
- (d) All the above

Q15. Which one is a demerit of the fixed exchange rate?

- (a) Ignores National Interests
- (b) Restricted Movement of Capital
- (c) Sudden Fluctuations in Exchange Rates
- (d) All the above

Very Short Questions-

1. What do you mean by Foreign exchange market?
2. Define a flexible exchange rate.
3. What is meant by appreciation of currencies?
4. What is the balance of visible items in the balance of payments account called?
5. What is meant by managed floating?
6. When does a situation of deficit in BOP arise?

Short Questions-

1. Why does demand for foreign exchange rise when price falls?
2. Give two examples and explain why there is a rise in demand for a foreign currency when its price falls.
3. Distinguish between fixed and flexible exchange rate.
4. Distinguish between autonomous and accommodating transaction of balance of payment account.
5. What determines the flow of foreign exchange into the country?

Long Questions-

1. Give the meaning of foreign exchange and foreign exchange rate. Giving reason, explain the relation between foreign exchange rate and demand for foreign exchange.

2. Explain the distinction between autonomous and accommodating transactions in balance of payments. Also explain the concept of balance of payments deficit in this context.

3. Distinguish between balance of trade account and current account balance of BOP account.

MCQ Answers-

1. (c) Autonomous transactions
2. (d) All of these
3. (a) Spot market
4. (c) Forward market
5. (b) Balance of Trade
6. (a) Balance of Trade
7. (a) $X > M$
8. (a) Balance of Payments
9. (A) Likely to rise
10. (b) To fall
11. (b) Flexible Exchange Rate
12. (c) Both (a) and (b)
13. (c) Both (a) and (b)
14. (d) All the above
15. (d) All the above

Very Short Answers-

Ans 1: The foreign exchange market is the marketplace where international currencies are exchanged for one another.

Ans 2: The flexible exchange rate, also known as free exchange rate is a rate which is governed by the free play of demand and supply forces in a foreign exchange market.

Ans 3: Currency appreciation refers to an increase in the exchange value of a currency as compared to the currency of another country. For example, if earlier 1 was equal to Rs75, but later, the value of 1 moves from Rs 75 to Rs 72, In such a situation, we can say that the value of rupee is appreciating.

Ans 4: Balance of trade

Ans 5: It is a system that allows exchange rate modifications based on a set of rules and regulations that are publicly published in the foreign exchange market. It is an effort to keep the exchange rate within a specific limit.

Ans 6: When the payments in respect to the economic transactions of a country with the

rest of the world surpasses its receipts, it is called a BOP deficit.

Hence, a BOP shortfall occurs when autonomous receipts are fewer than autonomous payments.

Short Answers-

Ans 1: When the price of foreign exchange falls, the exchange value of domestic currency rises while the value of foreign currency declines. This indicates that foreign goods become less expensive and domestic demand increases. Rising domestic demand for international goods indicates increased need for foreign currency. As a result, there is a link between foreign exchange pricing and demand.

For example, When the price of 1 US Dollar falls from Rs 75 to Rs 70, It means that the imports will rise, and domestic demand for US goods will increase as the US products will be cheaper to purchase. Hence, a demand for the US dollar will also rise.

Ans 2: The two examples are:

1. When the price of foreign exchange falls, the exchange value of domestic currency rises while the value of foreign currency falls, and foreign goods become cheaper in comparison to domestic goods. Rising domestic demand for foreign goods implies increased demand for foreign currency.
2. As the value of the foreign currency falls, tourists from the home country find it less expensive to travel abroad. As a result, demand for foreign currency rises.

Ans 3: The differences between fixed and flexible exchange rate are as follows:

Basis	Fixed Exchange Rate	Flexible Exchange Rate
Meaning	A fixed exchange rate is one that is set and maintained by the central government.	A market-determined exchange rate is referred to as a flexible exchange rate.
Controlled by	An apex bank or monetary authority controls a fixed exchange rate.	The demand and supply forces govern a flexible exchange rate.
How it affects currency	A fixed exchange rate devalues and evaluates a currency.	A flexible exchange rate allows a currency's value to depreciate and appreciate.
Hedging	If the country uses a fixed exchange rate, there is no need for hedging.	Hedging is used to reduce currency risks in a flexible exchange rate environment.

Ans 4: The difference between autonomous and accommodating transaction of balance of payment account is as follows:

Basis	Autonomous Items	Accommodating Items
Meaning	Autonomous items are international economic transactions that take place for some economic reason,	Transactions that are done to cover a deficit or surplus in autonomous transactions are referred to as

	such as profit maximization.	accommodating items.
Effects on BOP account	Autonomous transactions are unaffected by the state of the payment account's balance.	To keep the balance in the BOP account, accommodating transactions are carried out.
Current/capital account	Autonomous transactions occur on both the current and capital accounts.	Only capital accounts are subject to accommodating transactions.
Alternate Name	These are also called "above the line items".	These are also called "below the line items,"

Ans 5: The following variables contribute to the flow of foreign exchange into the country:

- Foreigners purchasing domestic goods, in terms of exports.
- Foreigners buying the assets of the home country.
- In-country foreign direct investment and portfolio investment.
- Foreign exchange speculative buying, that will lead to inflow of the foreign exchange.
- Foreign tourists visiting various locations in India.

Long Answers-

Ans 1: Foreign Exchange: It refers to the amount of foreign currency held in relation to the amount of domestic currency. Foreign exchange is important in international transactions. All currencies other than the Indian rupee are considered as foreign exchange in India.

Foreign Exchange Rate: The rate at which one currency is exchanged for another is referred to as the foreign exchange rate. As a result, an exchange rate can be defined as the cost of one currency in terms of another. The exchange rate is often expressed in terms of rupees per unit of foreign currency. As a result, an exchange rate represents the external purchasing power of money.

There are two approaches for determining foreign exchange rates- one technique is based on the conventional gold standard mechanism, while the other is based on the classical paper currency system. Because no standard monetary unit is currently exchanged for gold, the gold standard mechanism no longer operates. Foreign exchange demand is created when Indians and commercial firms desire to make payments to US nationals for purchasing US goods and services, make gifts to US individuals, or buy assets in the US. The greater the amount of imports, the greater the demand for foreign currency.

Relation between foreign exchange rate and demand for foreign exchange:

- An inverse relationship exists between the foreign exchange rate and the demand for foreign exchange.
- The foreign currency demand curve is always downward sloping, indicating an

inverse relationship between demand and exchange rate.

- When the exchange rate rises, more units of domestic currency are required to be paid for the same unit of foreign money. This raises the cost of import. As a result, imports reduce, causing a drop in demand for foreign exchange.
- In the figure given below, the demand for foreign currency is represented by the DD curve. When the exchange rate reaches R1, the demand for foreign money decreases to Q1. And, when the exchange rate falls to R2, the demand for foreign currency rises to Q2

(Image will be uploaded soon)

Ans 2: The distinction between autonomous and accommodating transactions in balance of payments are as follows:

Basis	Autonomous Transactions	Accommodating Transactions
Meaning	Autonomous items are international economic transactions that take place for some economic reason, such as profit maximization.	Accommodating Items refers to transactions which are those that are undertaken to cover a deficit or surplus in autonomous transactions.
Effects on BOP account	Autonomous transactions are unaffected by the state of the payment account's balance.	To keep the balance in the BOP account, accommodating transactions are carried out.
Current/capital account	Autonomous transactions occur on both the current and capital accounts.	Only capital accounts are subject to accommodating transactions.
Alternate Name	These are also called "above the line items."	These are also called "below the line items."

BOP deficit:

- When a country's payments for autonomous transactions exceed its receipts, the gap is referred to as the BOP deficit. It can be calculated as follows:
- Deficits in BOP occur when the receipts on account of autonomous transactions are fewer than payments on account of autonomous transactions.
- If the home country's receipts are Rs. 500 crore and payments are Rs. 600 crore, the BOP deficit will be calculated $600-500= 100$ Crore.
- When a country has a balance of payments deficit, it imports more products, services, and capital than it exports.
- The country has to borrow from other countries in order to pay for its imports..
- In the short run, this contributes to the country's economic growth. It's analogous to taking out a student loan to pay for college, as ultimately college will help in shaping the future of the student.

Ans 3: The following are the differences between the trade balance and the current account balance:

Basis of differences	Balance of Trade	Balance on current amount
Meaning	It only covers objects that are visible. It is the gap between the country's exports and imports.	It is the difference between the sum of credit and debit items on the current account.
Coverage	It does not keep track of any transactions involving invisible items or transfers.	It contains the balance of visible objects, the balance of invisible items, and the balance of unilateral transfer.
Concept	It is a limited concept that accounts for only a portion of the payment account balance.	It is a broad idea. The current account balance includes the trade balance.
Financing of deficit	A trade deficit can be compensated for by a current account surplus.	Current-account deficits cannot be offset by balance-of-trade surpluses.