

# GS FOUNDATION FOR CSE 2024

## ECONOMY-17

### EXTERNAL SECTOR-1

# BALANCE OF PAYMENT: FOREX, EXCHANGE RATE, INTERNATIONALIZATION OF RUPEE ETC.

#### 1. TABLE OF CONTENTS

<b>2. Basics of External Sector .....</b>	<b>1</b>
<b>1) Balance of Payment in One Table .....</b>	<b>1</b>
A) Current Account.....	3
B) Capital Account.....	4
C) Errors and Omissions .....	7
D) Overall Balance/ Balance of Payments .....	7
<b>3. Forex Reserves .....</b>	<b>7</b>
<b>1) Composition of India's forex Reserves .....</b>	<b>7</b>
<b>2) WHO manages Forex Reserves? .....</b>	<b>8</b>
<b>3) Significance of Forex Reserves .....</b>	<b>8</b>
<b>4) Other Aspects Related to Forex Reserves .....</b>	<b>9</b>
<b>4. Exchange Rate .....</b>	<b>11</b>
<b>1) Basics of Exchange Rate.....</b>	<b>11</b>
<b>2) Effective Exchange Rate Indices of Indian Rupees .....</b>	<b>12</b>
<b>3) Depreciation and Associated Issues .....</b>	<b>14</b>
<b>5. Internationalization of Rupee .....</b>	<b>16</b>

## 2. BASICS OF EXTERNAL SECTOR

- **External sector** deals with import and export of goods and services, and financial capital between nations.
  - » The sector in which domestic economy has an advantage over other countries, goods and services of these sector are exported.
  - » The sector in which the domestic economy has a disadvantage over other countries, goods and services of these sectors are imported.
- **Balance of Payments (BOP)**
  - » BOP, also known as the **Balance of International Payments**, is a statement of all transactions between entities in one country and rest of the world over a defined period of time such as a quarter or a year.
  - » **Note:** Balance of payment thus summarizes all transactions that a country's individuals, companies, and government bodies complete with individuals, companies and government bodies outside the country.

### 1) BALANCE OF PAYMENT IN ONE TABLE

<b>A. Current Account: (A.1 + A.2)</b>		
	<b>A.1: Merchandize Trade Balance</b>	
		<b>A.1(a): Merchandize Exports</b>
		<b>A.1(b): Merchandize Imports</b>
	<b>A.2: Invisibles</b>	
		<b>A.2(a): Services</b>
		<b>A.2(b): Transfers</b>
		<b>A.2(C): Income</b>
<b>B. Capital Account: B1+B2+B3+B4+B5</b>		
	<b>B.1) Foreign Investment</b>	
		<b>B.1.a) Foreign Direct Investment (FDI)</b>
		<b>B.1.b) Foreign Portfolio Investment (FPI)</b>
	<b>B.2) Loans</b>	
		<b>B.2.a) External Assistance</b>
		<b>B.2.b) Commercial Borrowings (MT &amp; LT)</b>
		<b>B.2.c) Short term Credit to India</b>
	<b>B.3) Banking Capital</b>	

	<b>B.4) Rupee Debt Service</b>	
	<b>B.5) Other Capital Flow</b>	
<b>C. Errors and Omissions</b>		
<b>D. Overall, Balance ( A + B + C )</b>		
<b>E. Reserve Change</b>	<b>-(A + B +C)</b>  <b>(-) indicates increase and (+) indicates decrease</b>	Explanation -> <b>Positive Balance of payment</b> would lead to <u>increase in a nation's net foreign asset</u> . And <b>Negative Balance of Payment</b> would mean <u>decrease in a nation's net foreign asset</u> .

**Real Life Example** (see below table from ESI 2021-22)

(US\$ Billion)										
Year / Item (Net)	2019-20				2020-21				2021-22 (P)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>A. Current Account</b>	<b>-15.0</b>	<b>-7.6</b>	<b>-2.6</b>	<b>0.6</b>	<b>19.1</b>	<b>15.3</b>	<b>-2.2</b>	<b>-8.2</b>	<b>6.5</b>	<b>-9.6</b>
<b>A 1 Merchandise Trade Balance</b>	<b>-46.8</b>	<b>-39.6</b>	<b>-36.0</b>	<b>-35.0</b>	<b>-11.0</b>	<b>-14.8</b>	<b>-34.6</b>	<b>-41.7</b>	<b>-30.7</b>	<b>-44.4</b>
A 1 a Merchandise Exports	82.7	80.0	81.2	76.5	52.2	75.6	77.2	91.3	97.4	104.8
A 1b Merchandise Imports	129.5	119.6	117.3	111.6	63.2	90.4	111.8	133.0	128.2	149.3
<b>A 2. Invisibles</b>	<b>31.8</b>	<b>32.1</b>	<b>33.4</b>	<b>35.6</b>	<b>30.0</b>	<b>30.1</b>	<b>32.4</b>	<b>33.6</b>	<b>37.2</b>	<b>34.8</b>
A 2.a) Services	20.1	20.9	21.9	22.0	20.8	21.1	23.2	23.5	25.8	25.6
A 2.b) Transfers	18.0	20.0	18.9	18.4	17.0	18.4	19.3	18.8	18.9	18.9
A 2.c) Income	-6.3	-8.8	-7.4	-4.8	-7.7	-9.4	-10.1	-8.7	-7.5	-9.7
<b>B) Capital Account</b>	<b>28.6</b>	<b>13.6</b>	<b>23.6</b>	<b>17.4</b>	<b>1.4</b>	<b>15.9</b>	<b>34.1</b>	<b>12.3</b>	<b>25.5</b>	<b>40.1</b>
<b>B.1) Foreign Investment</b>	<b>18.8</b>	<b>9.8</b>	<b>17.6</b>	<b>-1.8</b>	<b>0.1</b>	<b>31.4</b>	<b>38.6</b>	<b>10.0</b>	<b>12.1</b>	<b>13.3</b>
B.1.a) Foreign Direct Investment	14.0	7.3	9.7	12.0	-0.5	24.4	17.4	2.7	11.7	9.5
B.1.b) Foreign Portfolio Investment	4.8	2.5	7.8	-13.7	0.6	7.0	21.2	7.3	0.4	3.9
<b>B.2) Loans</b>	<b>9.6</b>	<b>3.1</b>	<b>3.1</b>	<b>9.9</b>	<b>2.8</b>	<b>-3.9</b>	<b>0.3</b>	<b>7.7</b>	<b>2.8</b>	<b>7.6</b>
B.2.a) External Assistance	1.5	0.4	1.3	0.6	4.1	1.9	1.2	4.0	0.3	1.1
B.2.b) Commercial Borrowings (MT & LT)	6.1	3.3	3.2	10.3	-1.2	-4.0	-1.1	6.1	0.6	4.1
B.2.c) Short Term Credit to India	2.0	-0.6	-1.4	-1.0	-0.2	-1.8	0.2	-2.3	1.9	2.4
<b>B.3) Banking Capital</b>	<b>3.4</b>	<b>-1.8</b>	<b>-2.3</b>	<b>-4.6</b>	<b>2.2</b>	<b>-11.3</b>	<b>-7.6</b>	<b>-4.4</b>	<b>4.1</b>	<b>0.4</b>
<b>B.4) Rupee Debt Service</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>
<b>B.5) Other Capital</b>	<b>-3.1</b>	<b>2.5</b>	<b>5.2</b>	<b>13.8</b>	<b>-3.7</b>	<b>-0.3</b>	<b>2.8</b>	<b>-1.0</b>	<b>6.6</b>	<b>18.8</b>
<b>C) Errors and Omissions</b>	<b>0.4</b>	<b>-0.9</b>	<b>0.6</b>	<b>0.9</b>	<b>-0.6</b>	<b>0.4</b>	<b>0.6</b>	<b>-0.7</b>	<b>-0.2</b>	<b>0.7</b>
<b>D) Overall Balance</b>	<b>14.0</b>	<b>5.1</b>	<b>21.6</b>	<b>18.8</b>	<b>19.8</b>	<b>31.6</b>	<b>32.5</b>	<b>3.4</b>	<b>31.9</b>	<b>31.2</b>
<b>E) Foreign Exchange Reserves (Increase - / Decrease +)</b>	<b>-14.0</b>	<b>-5.1</b>	<b>-21.6</b>	<b>-18.8</b>	<b>-19.8</b>	<b>-31.6</b>	<b>-32.5</b>	<b>-3.4</b>	<b>-31.9</b>	<b>-31.2</b>

## A) CURRENT ACCOUNT

- Current account records a nation's net trade in goods and services, its net earnings on cross border investments, and its net transfer payments over a defined period.
- Current Account (like revenue receipt and revenue expenditure) transactions are single time and one way transaction. It means that the transaction (like receipt of payment) happens once and transaction ends there. There is no future liability/asset created.
  - » For e.g., when Tata Motors export a car and receives money for that, the transaction comes to an end with respect to this car being exported.

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### TRADE BALANCE:

- **Export:**
  - » It includes export of merchandise goods to other countries and receipts against it.
  - » Please note that, while considering trade balance, export/import of services are not considered.
- **Import:**
  - » It includes import of merchandise goods from other countries and payments for it.
- **Trade Balance** is the difference between exports receipt and import payments.
  - » In case the trade balance is positive, it is called trade surplus or favorable trade balance.
  - » In case the trade balance is negative, it is called trade deficit or unfavorable trade balance.

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### INVISIBLES (NET)

- The invisible (net) is that part of balance of trade that refers to services and other products that doesn't result in transfer of physical assets.
- **Invisibles** may include Services, Income and transfer payments.

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### SERVICES

- I) Travel
- II) Transportation
- III) Insurance
- IV) Government not included elsewhere (GNIE)
- V) Miscellaneous Services
  - a. It encompasses communication service, construction services, financial services, software services, news agency services, royalties copyright and license fees and business services.

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### INCOME (I.E. INVESTMENT INCOME)

- This income may be from financial assets, labour and property.
- These transactions are in the form of interest, dividend, profit for servicing capital transactions.
- **Interest Payment** represent servicing of debt liabilities. E.g. interest earned (paid) from bank loans to foreign country.
- **Dividend or profit** represent servicing of non-debt (FDI, FPI) liabilities.
- **Compensation** of employees are also included in "income" category.

## TRANSFERS

- They represent one sided transaction i.e. transaction that don't have quid-pro-quo, such as grants, gifts, migrants transfers by way of remittances for family maintenance, repatriation of savings, and transfer of financial and real resources linked to change in resident status of migrants.
- They may be private or official.
- E.g.
  - Grants, donations and other assistance received by government from bilateral and multilateral institutions.

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## CURRENT ACCOUNT BALANCE = TRADE BALANCE + NET INVISIBLES

- **Positive (+)** Current Account (Current Account Surplus) means that the country is a net exporter of goods and services.
- **Negative (-)** Current Account (Current Account Deficit) means that the country is a net importer of goods and services.
- For e.g.
  - » **USA** had the world's largest Current Account Deficit in 2020 at US\$ 616 billion.
  - » **China** had the world's largest Current Account Surplus in 2020 at US\$ 274 billion.

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## B) CAPITAL ACCOUNT

- Capital account transactions are two-way transactions. It means paid money can be recovered through periodical income and/or by disposal of the asset created. Similarly, the loan has to be repaid periodically and has to be settled finally by paying the full amount.
- It includes: **Loans, Banking Capital, Investments (FPIs, FDIs)**,

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## LOANS

**External Assistance** (official bilateral and multilateral loans), **External Commercial Borrowing** and **Short-term debt**.

- » **External Assistance (net)** means transaction of official (government) bilateral and multilateral loans.
- » **External Commercial Borrowings (ECBs)**:
  - It means loan transaction by commercial enterprises.
  - » It includes commercial loans in the form of bank loans, buyers' credit, suppliers' credit, securitized instruments availed from non-resident lenders with a **minimum average maturity of three years**.
  - » **ECB** can be raised only for specific purposes, such as the import of capital goods, implementation of new projects, etc. These restrictions are called **end use restrictions**.

### Extra Gyan:

**Buyers Credit** and **suppliers' credit** are called trade credits. Depending on the source of finance, such trade credits are classified as suppliers' Credit or Buyers' Credit.

- **Supplier's Credit** relates to credit for imports into India extended by the overseas supplier.

- **Buyers' credit** refers to loans for repayment of imports into India arranged by the importer from a bank or financial institution outside India.
- Note: Both these credits are for the purpose of import and loan availed by importer.
  - In supplier's credit only two parties namely exporter and importer are involved.
  - In Buyer's credit, a third party namely a bank or financial institution comes into the picture to finance import.

**Securitized instruments** refer to debt securities like bonds, debentures and preference shares which are not fully or compulsorily convertible.

**Bonds and Debentures** are debt instruments i.e. means the owner of debt/debentures are creditors to the company and doesn't have any ownership.

**Bonds** are generally secured by a collateral.

**Debentures** is a debt security issued by a corporation or government entity that is not secured by an asset. Debentures have higher seniority for liquidation repayment than preferred shares.

**Preference Shares** are equity instruments known for giving owners preferential rights in the event of dividend payments or liquidation by the underlying company.

» **ECB** also covers **Foreign Currency Convertible Bonds (FCCB)** and **Foreign Currency Exchangeable bonds (FCEB).**

- » FCCB and FCEB are both types of bonds issued by companies in foreign currency i.e. principal and interest in respect of these bonds are payable in foreign currency.
- » **FCCB:** It provides bondholder with the option to convert the bonds into a predetermined number of shares of the issuing company's stocks at a specified conversion price during or end of bond's maturity.
- » If the equity conversion option is used, the bondholder becomes a shareholder of the company, giving them ownership in the form of equity. Conversion Ratio determines the number of shares to be allotted upon conversion, which is usually determined based on a formulae or fixed ratio. FCCBs typically pay regular interest to bondholders until conversion or maturity, similar to conversion bonds.
- » **FCEB:** They are exchangeable into equity shares of another company called the offered company. The word 'Exchangeable' refers to the facility to convert bonds of one company into equity shares of another company.

- » Its other features are similar to FCCB. The key difference lies in the type of equity ownership that results from the exercise: direct ownership of the issuing company's shares in the case of FCCBs and ownership of shares in a different company for FCEBs.

- » **Short term Debt:** These are trade credits for a maturity less than three years.

## BANKING CAPITAL

- It comprises of three components: Foreign assets of Commercial Banks, Foreign Liabilities and Others.
- **Foreign assets of commercial banks.** It consists of:
  - » Foreign Currency holdings
  - » Rupee overdrafts to non-residents
- **Foreign liabilities** of commercial banks. It consists of:
  - » **Non-Resident Deposits:**
    - The deposits received from non-resident Indians comes under this head. At present there are three types of NRI deposit schemes. They are:
      - i. **Foreign Currency Non-Resident (Banks) FCNR (B):** These deposits are held in the following foreign currencies - US Dollar, Pound Sterling, Euro, Japanese Yen, Australian Dollar and Canadian Dollar; only term deposits of 1-3 years of maturity are allowed. The interest rates are pegged to LIBOR/ SWAP rate.
        - **Note:** LIBOR (London Interbank Offered Rate) is a benchmark interest rate at which major global banks lend to one another in the international interbank for short-term loans.
      - ii. **Non-Resident External Rupee Account NR (E) A:** These deposits are held in Indian rupees. Term deposits with maturity of one to three years as well as saving deposits are allowed under the scheme. Its interest rate is also pegged to the LIBOR/SWAP rate.
      - iii. **Non-Resident Ordinary Rupee Account:**
        - It is the account held by Indians ordinarily living abroad.
        - An Indian who was an Indian resident but migrated abroad can shift this account to this category. It is held in Indian rupees.
        - It can be opened in current, saving, recurring or fixed deposit accounts.
  - » **Liabilities other than non-resident deposits**, which comprise of rupee and foreign currency liabilities to nonresident banks and official and semiofficial institutions.
- **Others**
  - » "Others" under banking capital include transactions in balances of foreign central banks and international institutions like the IBRD, IDA, ADB, IFC, IFAD etc. maintained with deposit



account departments (DAD) of RBI as well as transactions in balances held abroad by the embassies of India in London and Tokyo.

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## FOREIGN INVESTMENT (FDI AND FPI)

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### OTHER CAPITAL FLOWS

These include delayed export receipts, leads and lags in export receipts (the difference between custom data and banking channel data), funds held abroad, and other capital transactions not included elsewhere such as flows arising from cross-border financial derivatives and commodity hedging transactions, and sale of intangible assets such as patents, copyrights, trademarks etc.

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### CAPITAL ACCOUNT BALANCE:

- **Loans** (External Assistance + External Commercial Borrowing (net) + Short term debt (net)) + **Banking Capital** (net) + Foreign Investment (net) + Other outflows (net)
  - **Capital Account Surplus** -> If Capital Account Balance is positive.
  - **Capital Account Deficit** -> If Capital Account Balance is negative.

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### C) ERRORS AND OMISSIONS

- It includes the differences between debit and credit entries of all transactions.
- Capital Account balance is calculated with and without errors and omissions.

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### D) OVERALL BALANCE/ BALANCE OF PAYMENTS

- **Balance of Payment** = Current Account Balance + Capital Account Balance
- If the BoP is positive -> it would lead to increase in foreign exchange reserve and vice-versa.

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## 3. FOREX RESERVES

### 1) COMPOSITION OF INDIA'S FOREX RESERVES

- India's foreign exchange reserves comprise of four components:
  1. **Foreign currency assets (US\$, Euro, Pound, and Yen)**: It is expressed in US Dollar or Indian rupee terms.
    - It also includes foreign currency deposits held by RBI with foreign central banks, the BIS and non-resident deposit taking institutions as well as deposit agreements with IMF Trust Accounts that are readily available to meet a BoP financing needs.



- Securities issued by non-residents and financial derivatives having underlying foreign currency assets also form part of foreign currency assets.
2. **Gold reserves of RBI:** The RBI has gold stocks as a backup to issue currency and to meet unexpected balance of payment problems.
3. **Reserve Tranche:**
- It consists of India's quota (member subscription fee) to IMF and lending to the General Resource of IMF.
    - Note: The General Resource Account is the pool of member countries' quota payment.
4. **Special Drawing Rights (SDR)** holdings of the government
- The IMF member countries are entitled to get a loan from IMF's SDR Account. This loan amount is upto 200% of the member's quota with the IMF. It is also known as **Paper Gold**.
    - In this arrangement IMF doesn't lend directly. It is the member countries, who are in a strong position, lend their SDR holdings to member countries who are in problems for balance of payment.

## 2) WHO MANAGES FOREX RESERVES?

- **RBI Act and Foreign Exchange Management Act, 1999** set up the legal provisions for governing the foreign exchange reserves.
- **The RBI** functions as the custodian and manager of forex reserves and operates within the overall policy framework agreed upon with the Centre. It allocates the dollars for specific purposes.
  - For e.g., under the Liberalized Remittances Scheme, individuals are allowed to remit up to \$2,50,000 every year.
- The Central bank uses its forex kitty for orderly movement of the rupee. It sells the dollar when the rupee weakens and buys dollar when the rupee strengthens.

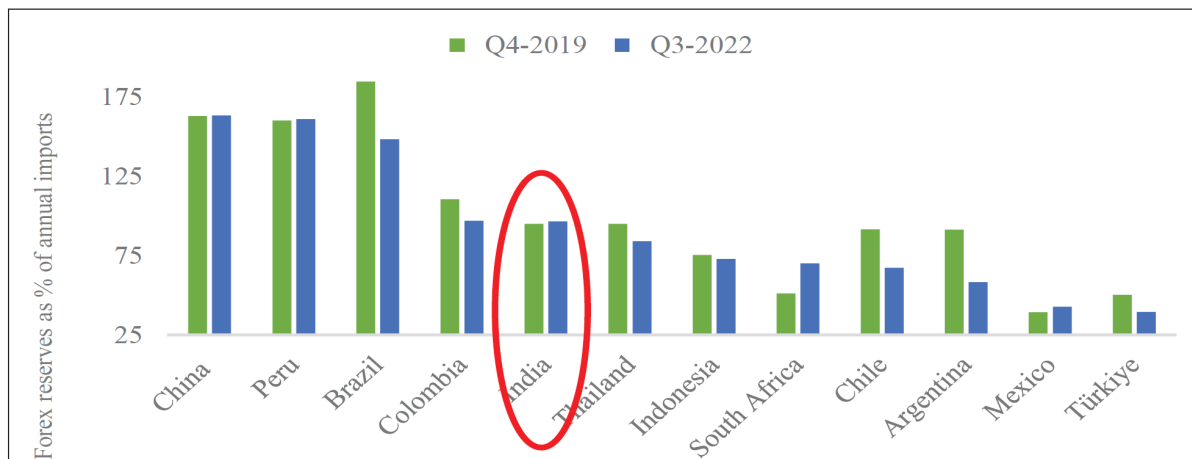
## 3) SIGNIFICANCE OF FOREX RESERVES

- It acts a **cushion against domestic currency volatility** once the global exchange rate start rising.
- It increases the confidence in the monetary and exchange rate policies of the government.
- During balance of Payment crisis foreign exchange reserve come to the rescue of any country so as to absorb the distress related to such crisis.
- Strong forex reserves also helps a country to adopt more aggressive countercyclical measures and emerge from a short-lived recession.
- It also **adds to the comfort of market participants** that domestic currency is backed by external assets and hence it also helps the equity markets of the country, because due to strong reserves many people from foreign countries are willing to invest in the country.

#### 4) OTHER ASPECTS RELATED TO FOREX RESERVES

- However, holding too much foreign exchange reserves is also not advisable -> (Opportunity Cost)
- How much Foreign Reserve do we have?
  - India's forex reserve at \$602 billion as of Aug 2023: RBI
    - **Foreign Currency Assets (FCAs):** \$534.40 billion
    - **Gold Reserves:** \$44.34 billion
    - **SDR:** \$18.32 billion
  - **Note:** India's foreign reserve had peaked in Sep 2021 at \$642.45 billion.
  - **Note:** The import coverage of foreign currency reserves has declined since the pre-pandemic levels in most emerging market economies; however, that of India has increased from 95% in Q4 2019 to 96.5% in Q3 2022.

**Figure XI.15 Adequacy of India's Forex Reserves (as a percentage of Annual Imports):  
A Cross-country perspective**



Source: IMF (forex reserves) and WTO (for imports data)

- How did India's foreign exchange reserves increase till Sep 2021?
  - Generally, the current account surpluses result in a building of reserves, as the central bank mops up all the excess foreign currency flowing into the country. **But, India is an outlier.** From 2011 to 2021, there was **only one year i.e. 2020 when India had run a surplus**. India accumulated forex reserves despite having aggregate deficit of \$400 billion during 11 years.
  - The reserve was built through **import of capital**.
  - **Another source** of reserve accretion or depletion: **Valuation Effect**. Foreign exchange reserves are held in the form of dollars as well as non-dollars currencies and gold, whose value is, in turn, influenced by movements in exchange rates and gold prices. A depreciation of US\$ or higher gold prices cause valuation gains.

## SOURCES OF INCREASE IN INDIA'S FOREIGN EXCHANGE RESERVES (IN BILLION US DOLLARS)

	1990-91 TO 1997-98	1998-99 TO 2005-06	2006-07 TO 2013-14	2014-15 TO 2021-22
1 Trade Balance (1a - 1b)	-72.469	-165.135	-1051.316	-1176.895
(a) Exports	207.273	472.412	1857.615	2555.150
(b) Imports	279.742	637.547	2908.931	3732.045
2 Net invisibles	37.527	165.189	713.252	967.989
3 Current Account Balance (1 + 2)	-34.942	0.054	-338.064	-208.907
4 Capital Flows*	57.887	117.133	479.750	544.290
5 Overall Balance (3+4)	22.945	117.187	141.686	335.383
6 Valuation Effect	2.460	5.068	10.915	-32.297
7 Rise in Reserves (5+6)	25.405	122.255	152.601	303.086

\*Including from International Monetary Fund.

Source: Reserve Bank of India.

### - Why the recent drop in the reserves?

- Largely due to steps taken by the Reserve Bank of India to support the rupee.
- Increasing trade deficits (and Current Account Deficits)
- Capital outflow (FIIs have pulled out) [given the rising global interest rates and bond yields on the back of monetary policy tightening by the US Fed and other major central banks.

### - Some Recent Steps by RBI:

- » In July 2022, RBI has announced a series of measures including relaxation in:
  - i. **Foreign investment in debt:**
    - FPIs in government securities and corporate debt made till 31st Oct 2022, will be exempted from this short-term limit. These will not be reckoned for the short-term limit of one year till maturity or sale of such investments.
  - ii. **External Commercial Borrowings**
    - Increase the limit under automatic route for ECBs from \$750 million or its equivalent per financial year to \$1.5 billion.
  - iii. **NRI Deposits:**
    - RBI has allowed banks temporarily to raise Fresh Foreign Currency Non-Resident Bank i.e., (FCNR (B)) and Non-Resident External (NRE) deposits without reference to the current regulations on interest rates. This relaxation is available till 31st Oct 2022.
    - From July 30, 2022, incremental FCNR(B) and NRE deposits with reference base date of 1st July 2022, will be exempt from the maintenance of CRR and SLR.

### - Conclusion:

- » With reserve bank of India showing willingness to use reserves to defend the rupee - ensuring "orderly evolution" of the exchange rate with "zero tolerance for volatile and bumpy

movements" - a further drawdown of foreign exchange reserve is possible. The forex reserve were, after all, accumulated as a buffer against currency volatility, external shocks and sudden stop in capital flows. As RBI Governor Shaktinath Das has recently put it, "**You buy an umbrella to use it when it rains**".

## 4. EXCHANGE RATE

### 1) BASICS OF EXCHANGE RATE

- 'Exchange rate is the price of a nation's currency in terms of another currency'. Thus, an exchange rate has two components, the domestic currency and a foreign currency and can be quoted either directly or indirectly.
  1. **Direct Quotation**
    - The price of a unit of foreign currency is expressed in terms of domestic currency.
      - For e.g., in India's context:  $1\$ = 80 \text{ Rs.}$
  2. **Indirect Quotation**
    - The price of a **unit of domestic currency** is expressed in terms of the foreign currency.
      1. For instance,  $1\text{Rs} = 0.0125\%$
- Generally, exchange rate is quoted in value against US dollar. However, exchange rates can also be quoted against another nations currency.
- **Floating vs Fixed Exchange Rate**
  - A floating exchange rate is where a currency rate is determined by market forces. This is generally followed by most major economies.
  - **Fixed Exchange Rate:** In this case, the exchange rate is fixed or peg their currencies to a widely accepted currency like the US dollar.
    - This is done to reduce volatility or better manage trade relations. For e.g. Most GCC countries including Saudi Arabia fixes its currency Riyal to US\$ because its main export is oil, which is priced in US\$.
- **Depreciation or Appreciation of Exchange Rate**
  - **Depreciation:** Increase in the direct exchange rate (i.e., fall in the external value of domestic currency because of more demand for foreign currency or less supply of foreign currency or more supply of domestic currency or less Demand of Domestic currency).
    - For e.g., rupee depreciation would mean rupee falling from  $1\$ = 50 \text{ rupee}$  to  $1\$ = 52 \text{ rupee}$ .
  - **Appreciation:** Decrease in the direct exchange rate ( due to more demand or less supply of home currency; or less demand or more supply of foreign currency).
    - For e.g. Rupee appreciation would mean Rupee appreciating from  $1\$ = 50 \text{ Rupees}$  to  $1\$ = 48 \text{ rupees}$ .

- **Devaluation**
  - Reduction in the external value of home currency is called Devaluation.
    - This is done to increase export and is usually resorted to correct the deficit in the balance of payment.
    - How?
- **Revaluation**
  - Increase in the external value of home currency is called revaluation.
  - It is usually resorted to correct the surplus in the balance of payment. This reduces deficit for other countries. This is very rarely done.
- **Note:**
  - Depreciation and Appreciation takes place automatically due to movement in the demand and supply of currencies in the market (i.e. by market forces). If dollar demand exceeds supply, the rupee depreciates with respect to it and vice versa.
  - Devaluation and revaluation are done voluntarily either by the government or monetary authority.
- **Relation between Inflation and Exchange Rate**
  - Class Discussion

## 2) EFFECTIVE EXCHANGE RATE INDICES OF INDIAN RUPEES

- EER is a summary indicator of movements of home currency against a basket of currencies of trading partners.
- EERs serve as a gauge for assessing the fair value of currency, the external competitiveness of an economy and even serve as guideposts for setting monetary and financial conditions.
- **The Nominal Effective Exchange Rate (NEER)** is an index of the weighted average of bilateral exchange rates of home currency vis-a-vis currencies of trading partners, with weights derived from their shares in the trade basket of the home currency.
- **A Real Effective Exchange Rate (REER)** is the NEER adjusted by relative prices and costs, typically captured in inflation differentials between the home economy and trading partners.
- **RBI** is responsible for compilation and dissemination of NEER and REER Indices of the Indian rupee (both trade and export oriented).
- **Key Changes made 2021:**
  - **Base year** was moved from 2004-05 to **2015-16** for NEER/REER indices.
  - **Coverage of NEER/REER basket** has been expanded from 36 to 40 currencies (8 new additions and 4 removals)
    - The selections is based on **two criterias**:

- i. **Trading partners with extremely high and volatile inflation** are excluded as their currencies tend to experience rapid nominal declines which undermines the stability of NEER/REER indices.
  - ii. Data on inflation and exchange rates of trading partners should be available on a regular basis.
- The new basket **represents 88% of India's total trade** as compared to 84% in the case of older 36 currency basket.

- **Note:** To calculate trade weights, geometric means of India's trade (exports plus imports) with trading partners during the preceding three years are computed and then normalized to 100. While the Euro area retains its top position in the trade basket, the US assigned the highest weight in the export basket in 2015-16.

**Table 1: New 40-Currency NEER/REER Basket – Normalised Weights**

Country/Area	(Per cent)			
	2015-16		2020-21 (P)	
	Trade-based Weight	Export-based Weight	Trade-based Weight	Export-based Weight
1. Euro Area	11.4	14.0	11.6	14.7
2. China	10.0	5.0	12.0	5.6
3. UAE	9.4	12.4	7.8	10.4
4. US	9.1	14.7	11.6	18.4
5. Saudi Arabia	6.4	4.1	4.4	2.1
6. Switzerland	3.7	0.5	2.7	0.4
7. Hong Kong	2.9	4.8	3.9	4.6
8. Indonesia	2.9	1.8	2.8	1.6
9. Singapore	2.8	4.4	3.2	3.7
10. Iraq	2.7	0.4	3.2	0.6
11. Korea	2.5	1.6	2.9	1.7
12. Kuwait	2.5	0.4	1.3	0.5
13. Japan	2.5	2.3	2.3	1.7
14. Qatar	2.4	0.3	1.5	0.5
15. Nigeria	2.3	1.0	1.8	1.0
16. UK	2.2	3.5	2.2	3.3
17. Malaysia	2.2	1.8	2.2	2.2
18. Iran	2.1	1.5	1.4	1.1
19. Australia	2.0	0.9	2.2	1.2
20. South Africa	1.8	1.9	1.5	1.4
21. Brazil	1.5	2.2	1.1	1.3
22. Thailand	1.3	1.4	1.6	1.5
23. Vietnam	1.1	1.9	1.8	2.3
24. Bangladesh	0.9	2.2	1.3	3.1
25. Taiwan	0.9	0.9	0.9	0.8
26. Angola	0.9	0.2	0.6	0.1
27. Russia	0.9	0.8	1.3	0.9
28. Turkey	0.9	1.7	1.0	1.9
29. Mexico	0.9	0.8	1.2	1.3
30. Israel	0.9	1.3	0.7	1.3
31. Sri Lanka	0.8	1.9	0.7	1.6
32. Canada	0.8	0.8	0.9	1.0
33. Egypt	0.7	1.1	0.6	0.9
34. Oman	0.7	1.0	0.8	0.8
35. Nepal	0.6	1.4	1.1	2.6
36. Kenya	0.6	1.5	0.3	0.7
37. Tanzania	0.5	1.0	0.4	0.6
38. Chile	0.5	0.2	0.3	0.3
39. Ukraine	0.4	0.2	0.4	0.1
40. Ghana	0.2	0.3	0.5	0.2
Total	100.0	100.0	100.0	100.0
Memo Items:				
AE Currencies	41.7	49.7	45.0	52.6
EMDE Currencies	58.3	50.3	55.0	47.4

AE: Advanced economies. EMDE: Emerging market and developing economies. P: Provisional.

Source: RBI staff calculations.

- The **methodology of computing** NEER/REER indices:
  - The NEER is calculated as the geometric weighted average of bilateral exchange rates of the home currency in terms of trading partner currencies.

Specifically the NEER can be calculated as follows:	$NEER = \prod_{i=1}^n \left( \frac{e}{e_i} \right)^{w_i} \quad (1)$
REER, which is NEER adjusted by weighted average ratio of the domestic price to foreign prices, is calculated as:	$REER = \prod_{i=1}^n \left[ \left( \frac{e}{e_i} \right) \left( \frac{P}{P_i} \right) \right]^{w_i} \quad (2)$
<p>'e' represents the exchange rate of rupee against the IMF's SDR</p> <p>'e' is the exchange rate of the foreign currency 'i' against the IMF's SDR.</p>	<p>A rise in e or (e/e<sub>i</sub>) represents an <u>appreciation of the rupee relative to currency 'i' and vice versa</u>.</p> <p>'P' and 'P<sub>i</sub>' represent <u>price indices</u> of the home economy and the trading partner 'i', respectively. '<u>w<sub>i</sub></u>' denotes <u>trade-/export-based weight assigned to foreign currency/trading partner 'i'</u>, while '<u>n</u>' is the <u>number of currencies (other than home currency) included in NEER/REER basket</u></p>

### 3) DEPRECIATION AND ASSOCIATED ISSUES

- **Why does depreciation take place?**
  - » **Core Reason - Demand supply gap of foreign currency (US\$)**
    - **Increasing Current Account Deficit** (More imports, less exports).
    - **Monetary and Interest rate hikes by the US Fed**
      - This makes US treasury investment more attractive and leads to **FII's moving funds from emerging economies back to US**.
  - » **Other traditional factors affecting India's exchange rates**
    - Mounting External Debt
    - Tightening global liquidity
  - » Further, since India is an emerging market, **inflation rate** here would be higher when compared to developed countries and there will be a long term depreciation.
- **Why the recent depreciation in rupee?**
  - » Since March 2022, the US Federal Reserve has been raising its benchmark interest rate causing investors seeking higher returns to pull capital away from emerging markets such as India and back into the USA. This puts pressure on emerging market economies.
  - » India's Current Account Deficit is expected to hit a 10-year high of 3.3% of GDP in the current financial year.



» Consistently high domestic inflation

- **Negative Impacts**

1. **Decline in forex reserves**
2. **Negatively impacts Current Account Deficit -> Vicious Cycle**
3. **Pulling out of Foreign Portfolio Investments**
4. **Inflation: Increased prices of imported products**
  - Further, increases the cost of crude oil import.
5. **Negatively impacts business' taking loans from abroad**
  - With banks already not willing to lend because of increasing NPAs depreciating rupee makes it difficult for business' to borrow from abroad.
6. **Difficulty in financing external debt**
7. **Increase in RBI's monetary policy rates**
  - Thus impacting economic growth negatively
8. **Challenges for students studying or wanting to study abroad**

- **Positives of declining rupee**

- » Depreciation helps in increasing exports as exports become cheaper for importing foreign country.
  - Therefore, some sectors like IT, Pharma, hospitality can actually benefit from depreciating rupee.
  - This may help in chipping away of trade deficit imbalance.
- » **Tourism and hospitality** sector may get a boost
- » **Remittances tend to increase** during the depreciating phase

- **Sectoral Impact**

1. **Export based industry would benefit**
  - Depreciation acts as booster for IT and Pharma sector which are export based. Further hospitality sectors such as tourism, hotel etc can benefit as foreign tourists would now find it cheaper to visit India.
2. **Problems for Oil Marketing Companies**
  - Rise in crude oil prices and depreciation of rupee is a double jeopardy for oil marketing companies. The lack of pricing power during major elections further exacerbate the problems for OMCs.
3. **Auto sector**
  - Companies having high export shares will benefit from this depreciation.
  - On the other hand, operating procedure margins of vehicle manufacturers such as Maruti Suzuki which import most of their components and focus on domestic market are going to face problems.
4. **Aviation sector will be hit**
  - Increasing cost of Crude oil (thus Aviation Turbine Fuel)
  - The big capacity additions on the anvil will also face problems.

- **Steps taken by Government.**

- » Steps to fight trade deficit [see Trade Deficit Topics]
- » Steps to attract investments [See currency depreciation topic]

#### - Conclusion

- » Most of the reasons for depreciation in rupee are not due to development internal to India and thus the problem is not India specific.
- » Further, though a depreciating rupee may be beneficial for a few sectors, but it doesn't bode well for the country's macro-economic stability, unless export growth increases.
- » In long run, India should focus on decreasing its energy dependency, expanding its manufacturing sector to reduce current account deficit, and to make India less vulnerable to these external factors.
  - We will need to remove policy barriers that are impeding the growth of export oriented sectors.
- » And finally, there is a need of reform in the monetary policy framework of RBI to reduce the continuous inflationary pressure on rupee.

## 5. INTERNATIONALIZATION OF RUPEE

#### - What is Internationalization of Rupee?

- Internationalization is a process that involves increasing the use of the rupee in cross-border transactions. It involves promoting the rupee for import and export trades, and then other current account transactions, followed by its use in capital account transactions.
- It will also require:
  - » **Full capital account convertibility** (currently India allows only full current account convertibility, capital account convertibility is limited).
  - » **Availability in sufficient quantities**
  - » **Opening up of currency settlement and a strong swap and forex market.**

#### - Advantages of Internationalization of Rupee:

- **Reduces exchange rate risks**, while curtailing the demand for US dollar.
  - **Reduces risk to economy** due to sudden withdrawal of capital from market
- **Reduces the need of forex war chest** to meet the external vulnerabilities.
- **Lower cost of capital** due to better access to international financial markets.
- **Promotes ease of doing business** but also improves the chances for Indian businesses to grow globally.
  - **Bargaining power of Indian businesses** will increase, adding weight to Indian economy and enhancing India's global stature and respect.
- **Reduced transaction costs**: They will not have to incur exchange rate fees.
- **Geopolitical Significance**: US-dollar dominated global currency system can become limitations for the economy if India's relations with US and Europe becomes tense in future. In that scenario, business in domestic currency can be a savior.

- **Internationalization of currency is closely linked with a nation's economic progress.**
  - Currently, the US \$, the Euro, the Japanese Yen and the pound sterling are the leading reserve currencies in the world. China's efforts to make its currency renminbi (yuan) a reserve currency has met with only limited successes so far.
  - US\$ is said to enjoy a 'exorbitant privilege', which refers to the innumerable benefits that accrue to the US on account of all other countries of the world using the US\$ as their currency in most of their international transactions, among global currencies.
  - **Factors behind US\$ being the most common currency of reserve and exchange:**
    - **Size of US Economy** (largest in the world)
    - **Reach of its trade and financial market**
    - **Depth and liquidity** of the US financial market
    - History of macro-economic stability
    - Currency convertibility
    - Lack of viable alternative.
  - **Is there are challenger to US dominance?**
    - The obvious challenger to US dominance is the Chinese Renminbi. However, its ability to rival the US dollar will depend on future policies in both the US and China and the ability of Chinese economy and its financial system to demonstrate long term resilience, integrity, transparency, openness and stability.
- **China's Experience:**
  - Before 2004, RMB couldn't be used outside China.
    - By 2007, the **"Dim Sum" bond** and offshore RMB bond market had been created.
  - **Post 2008**, China pursued a phased approach:
    - **First**, it allowed use of RMB outside China for Current account transactions and for select investment transactions (FDI, outward direct investment) etc.
    - **By 2009**, it had signed currency swap agreements (i.e., an exchange of an equivalent amount of money, but in different currencies) with countries like Brazil, UK etc.
    - Then, **Central banks, offshore clearing banks and offshore participating banks** were allowed to invest excess RMB in debt securities.
    - **Sanghai Free Trade Zone** was launched in 2013, to allow free trading between non-resident onshore and offshore accounts.
  - **In this way**, overtime RMB was internationalized, with reserve currency status increasingly enabled. For e.g. in Q2, 2022, the RMB's share of international reserves had reached around 2.88%.
- **Steps Taken towards Internationalization of Rupee:**
  - **Liberalization of Capital Account:** Over the years, government has relaxed FII and FDI norms, facilitating greater cross-border investment and trade.
  - Enabling of **ECB in rupee**.

- **Currency Swap Agreements** with several countries, which allow for the exchange of rupee and foreign currency between the central banks of the two countries.
- RBI allowed banks from 18 countries to open **Special Vostro Rupee Accounts (SVRAs)** for settling payments in Indian Rupees.
- RBI constituted Inter-departmental group (IDG) headed by RBI Executive Director **Radha Shyam Ratho** to frame roadmap for the Internationalization of Indian Rupee has submitted its report.
- During PM Modi's visit to UAE in July 2023, Reserve Bank of India (RBI) signed two MoUs with Central Bank of UAE. One of the MoU focuses on establishing a framework to promote the use of local currencies from cross-border transactions, the other was for linking payment systems.

- **Challenges in achieving internationalization:**

- **Little traction for international trade in rupee:**
  - The daily average share of Rupee in the global foreign exchange market hovers around 1.6%, while India's share of global goods trade is around 2%.
    - For e.g. Russia reportedly preferred Yuan or Dirham as a medium of transaction for Indian imports of oil, rather than rupee.
- **Large Trade Deficit:** It would make acceptance of Rupee in global economy would be limited due to its depreciation problem.
- **Lack of Liquidity:** For now, Indian rupee is not as liquid as other major global currencies and thus it may be difficult to buy and sell large amounts of rupees.
- **Underdeveloped Financial Markets:** India's financial market are still relatively under-developed when compared to major economies, which can limit the range of products and services available to international investors.
- **IDG has also highlighted following limitations that may arise due to internationalization of Rupee:**
  - Exchange rate volatility in rupee's exchange rate will increase in initial stages of internationalization
  - **Triffin Dilemma:** Obligation of a country to supply its currency to meet the global demand may come in conflict with its domestic monetary policies.
  - Accentuation of external shock may take place due to open channel of flow of funds into and out of the country and from one currency to another.
- However, the IDG itself said that the advantages of internationalization far outweigh the above limitations. Moreover, the internationalization of rupee will be a long drawn process and would enable timely redressal of these challenges.

- **Recommendations given by RBI's Inter-Departmental Group:**

- **Short term measures:**
  - » Adoption of Standardized approach for examining the proposals on bilateral and multilateral trade arrangements for invoicing, settlement, and payment in the rupee and local currencies.

- » Encouraging the opening of the rupee accounts for non-residents both in India, and outside India.
- » Incentivizing exporters to use Indian currency for trade settlements.
- » Integrating payment systems to provide seamless cross border transactions.
- » Strengthening the financial markets by fostering a global 24X5 rupee market
- » Recalibration of FPI regime.

▫ **Medium Term Measures (2-5 years targets)**

- » Synchronizing tax regimes of India and other financial centres.
  - A review of taxes on masala bonds
- » Allowing banking services in the rupee outside the country
  - Allowing international use of RTGS for cross border trade
- » Inclusion of Indian government bonds in global bond indices

▫ **Long Term**

- » Measures to have rupee included in the IMF's SDR.

- **Other steps that can be taken:**

- » **Focus on increasing exports** - As India increases exports and accepts money in rupee, it will lead to more acceptance of rupee internationally.
- » **Rupee should be made fully convertible** - letting financial investments move freely between India and abroad.
- » **Deeper and more liquid rupee bond market** - This will allow foreign investors and Indian trade partners to have more investment options in rupees, enabling its international use.
- » **Additional Currency Swap Agreements** (as with SL) would further allow India to settle trade and investment transactions in rupees, without resorting to a reserve currency like dollar.
- » **Tax incentives to foreign businesses** to utilize rupees in operations in India would also help.
- » **Currency Management Stability:** RBI and Finance Ministry has to ensure currency management stability through consistent and predictable issuance/retrieval of notes and coins).
- » **Improvement in general macro-economic parameters** - The Tarapore Committee's recommendations must be pursued including a push to reduce fiscal deficits lower than 3.5%, a reduction in gross inflation rate to 3%-5% and a reduction in gross banking NPAs to less than 5%.

- **Conclusion:**

- » As the Indian economy grows in size, as its trade linkages with other countries grow stronger, more space will be created for using the rupee in international transactions.