

GS FOUNDATION FOR CSE 2024

ECONOMY-2

CIRCULAR FLOW OF INCOME, NATIONAL INCOME

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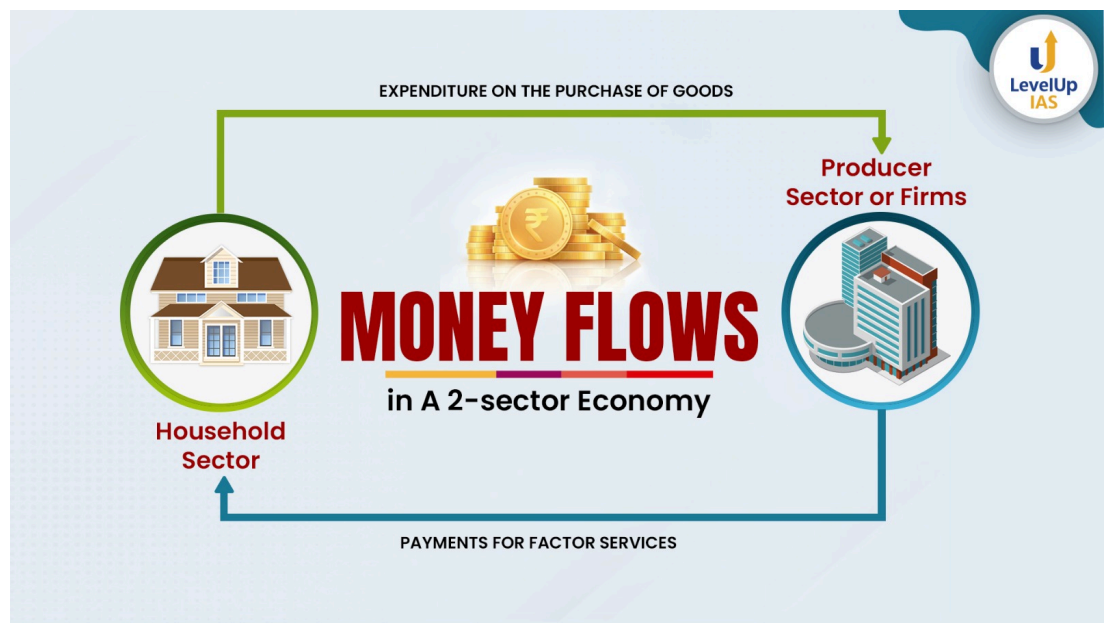
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1) INTER-SECTORAL FLOW

- The four sectors of economy depend on each other. This is called **inter-sectoral dependence**.
 - The household sector depends on business sector for supply of goods and services, needed for the consumption.
 - The Producer sector/Business sector depend on household sector for the supply of factors of production.
 - The government sector depends on household sector and business sector for tax and non-tax revenue.
 - Producer and Household depend on government for administrative services, law & order, defence etc.
- This intersectoral dependence leads to **intersectoral flow**, either in the form of goods and services or in the form of money.
- Intersectoral flow in the form of money is called **money flow** and intersectoral flow in the form of goods and services is called '**Real flow**.'
 - E.g., of **real flow**:
 - **Household sector** supplies Factor Services (Land, Labour, Capital and Entrepreneurship) to **Producer Sector** and **Producer Sector** supplies goods and services to household sector.



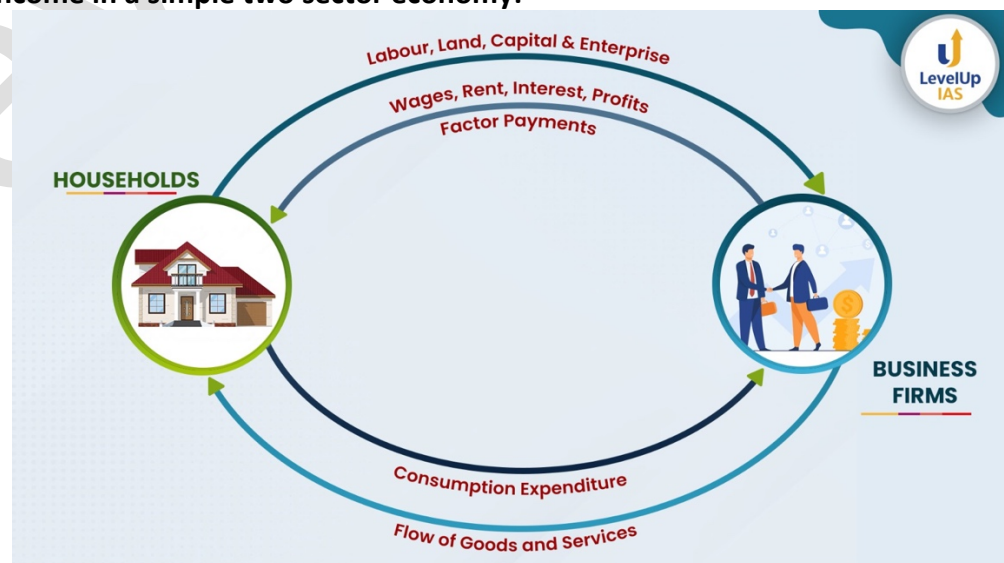
- E.g., of money flow:
 - Following figure shows money flow in terms of (i) flow of money in households to the producers (firms) for the purchase of goods, and (ii) flow of money from the producers to the households for the purchase of factor services.



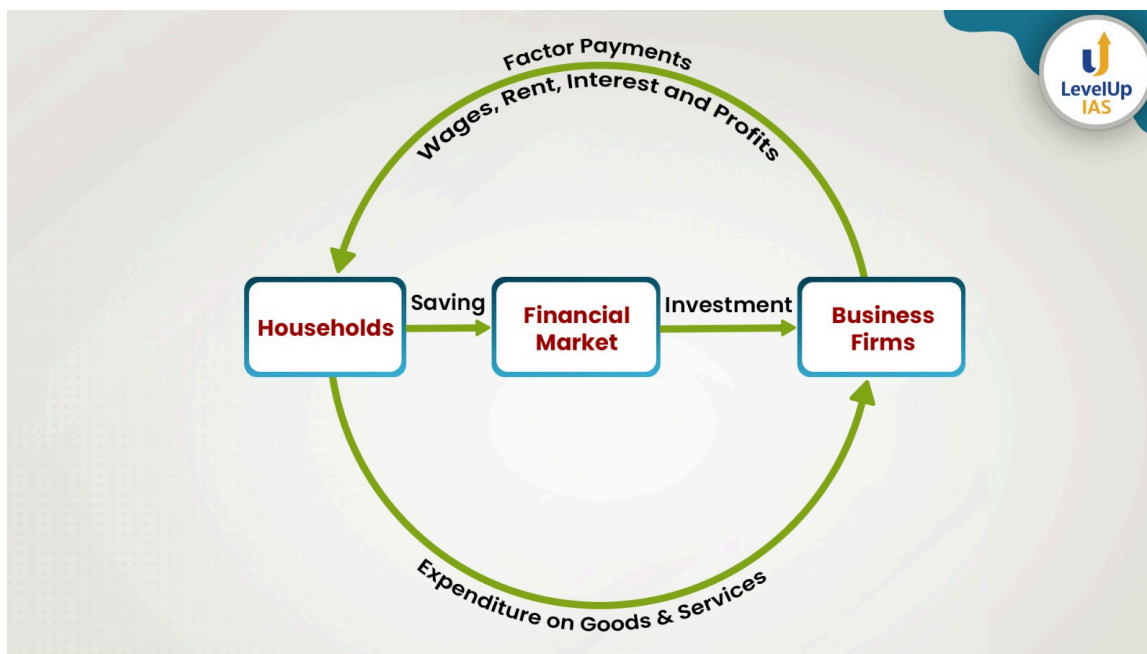
- Money flow is reciprocal of the real flow. Thus, money flow from households to the producers (for the purchase of goods) is a reciprocal of the real flow of goods from the producer to the households. Likewise, money flow from producer to household (as payment for factor services) is a reciprocal of the real flow of factor services from the household to the producers.
- **Note: Money flows are opposite to real flows** as they are in response to the real flows.

2) CIRCULAR FLOW OF INCOME

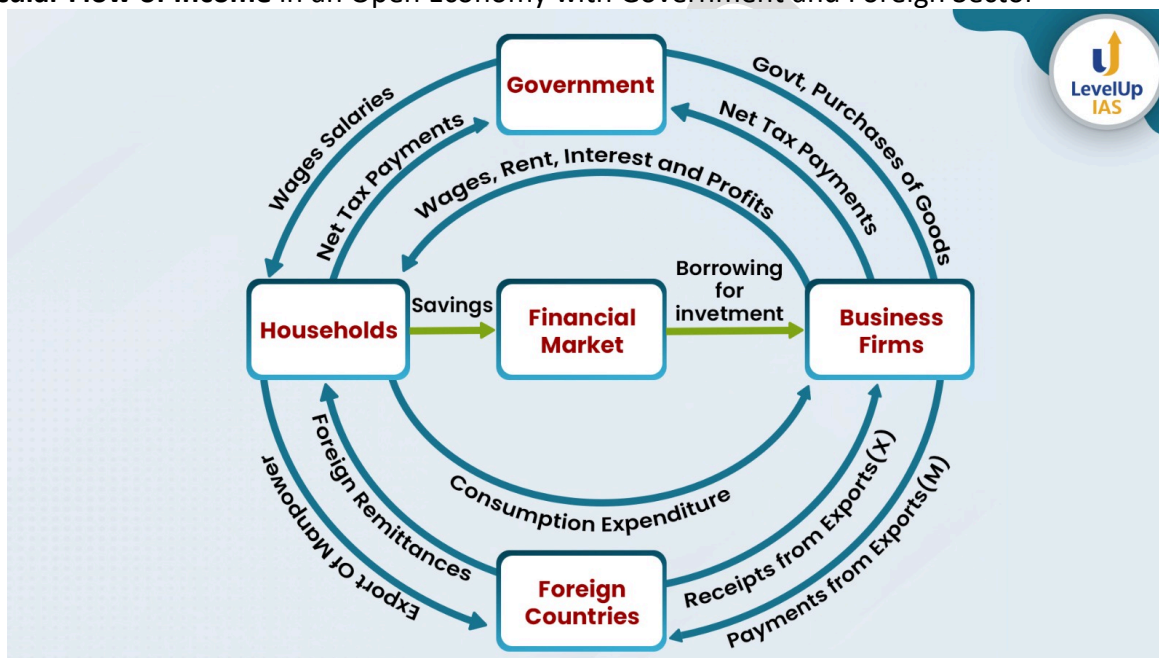
- For simplification purpose, let's assume that there are only two sectors in an economy - the Household sector and the Producer Sector (firms/Businesses).
- In every economy three activities never stop:
 1. **Production of Goods and Services**
 2. **Generation of Income** (in terms of wages, interest, rent and profit)
 3. **Expenditure** (in terms of consumption expenditure and investment expenditure)
- **Circular Flow of Income in a simple two sector economy:**



- Circular flow of income refers to the unending flow of the activities of production, income generation and expenditure involving different sectors of economy.
 - **Phase of Production:** It refers to value addition done by business firms. The producing sector hires/purchases factors of production from the household who are the owners of these factors (land, labour, capital and entrepreneur). The factor inputs are used along with non-factor inputs (e.g., raw material etc.) for the production of goods and services.
 - **Phase of Income Generation:** For rendering their factor services to the producers, the household get factor payments: rent for land, interest for capital, wages for labour and profit for entrepreneurship.
 - **Phase of Expenditure:** The income generated is disposed of on the purchase of final goods and services.
 - When households buy the final goods, there is consumption expenditure.
 - When producers buy the final goods, there is investment expenditure.
- This expenditure (both consumption and investment) will generate demand for goods and services which will again cause production, which will in turn cause income generation further leading to expenditure (consumption + investment) and this process goes on and on. Therefore, it is called circular flow.
- **Also note that, the three types of flows, Production (output), Income and Expenditure (in terms of C and I) are always equal to each other** for a particular period of time giving rise to what is called the **triple identity**:
 - Production (the value of goods and services) = Income Generated = Expenditure (in terms of C and I).
- **Significance of Circular Flow:**
 - **Estimation of Nation Income:** Circular flow model facilitates the estimation of national income. National income is the sum total of factor incomes (rent + profit + wages + interest) flowing from producers to households of a country.
 - It may be defined as market value of goods and services flowing from producers to other sectors of the economy.
 - Further, it may be defined as the sum total of all expenditure on the goods and services produced by the producer sector.
 - **Knowledge of inter-sectoral dependence:** A circular flow model helps understand interdependence among different sectors of the economy.
- **Circular Flow of Income** (where some saving and thus investment is there)



- **Circular Flow of Income** in an Open Economy with Government and Foreign Sector



2. NATIONAL INCOME (GDP, NDP, GNP, NNP ETC.)

- Gross Domestic Product is the **total monetary or market value of all the finished goods and services** produced **within a country's domestic territory (economic territory)** in a **specific time period** (usually a year)
- **What are the components of a domestic territory?**
 - **Note:** Physical geographical area of a country is different from its Domestic/Economic territory.
 - **Components of Domestic Territory:**
 - » Territory lying within the political frontier (including the territorial waters)
 - » **Ships and Aircrafts** operated by residents of the country across different parts of the world.
 - E.g., Indian aircrafts moving between Singapore and USA are also part of domestic territory.
 - » **Fishing Vessels, Oil and Natural gas rigs and floating platforms** operated by the residents of the country in the international waters or engaged in extraction in areas in which the country has the exclusive right of exploitation.
 - » **Embassies, consulates and military establishments** of the country located abroad.
 - For e.g., Indian embassy in USA is part of India's domestic territory and US embassy located in India is not part of domestic territory of India.
 - **The domestic territory** refers to areas of operation where our persons, our goods, and our capital can circulate freely to serve our economic interest. Thus, factor income generated within the domestic territory of a nation amounts to domestic income.

1) GROSS DOMESTIC PRODUCT (GDP)

- The final value of all goods and services produced within the domestic territory of the country within a specific time period.
- **Net Domestic Product (NDP)** = GDP - Consumption of Fixed Capital (depreciation)

2) GROSS NATIONAL PRODUCTION (GNP)/ GROSS NATIONAL INCOME (GNI)

- As per SNA 2008, GNI is equal to GDP less primary income payable to non-resident units plus primary incomes receivable from non-resident units.
- **GNP = GDP + Net Primary income from rest of the world (ROW).**
- **What is Primary Income?**
 - » Primary income is the income accrued to institutional units as a consequence of their involvement in processes of production or ownership of assets that may be needed for the purpose of production. It basically includes **income from all the factors of production** (wages, property income, interest, profit etc.).

- **What is not included in primary income?**
 - » Primary incomes don't include the payments of social contributions to social insurance schemes and the receipt of benefits from them, current taxes on income, wealth etc. and other current transfers. In short, **it doesn't include current transfers**.
- **So, Net primary income from rest of the world include:**
 - » ***Net Compensation of Employees + Net Property Income + Net Entrepreneurial Income.***
 - » So, $GNP = GDP + \text{Net Factor Income from Abroad (NFA)}$
- **Question -> To be discussed in class.**
 - » What will be higher GDP or GNI??
 - » Whose growth rate will be higher GDP's or GNP's?
- **Net National Income (NNI) = GNI - Consumption of Fixed Capital (Depreciation)**
 - So, **National Income** is the sum total of factor incomes accruing to normal residents of a country. It doesn't account for transfer incomes.
 - » **Transfer Income** are unrelated income. These include gifts in cash, scholarships to the students, old age pensions to the senior. They are not included in the estimation of national income.
 - » **Normal Resident of a country** are the people who (i) normally reside in the country concerned, and (ii) whose centre of economic interest lies in the country concerned.
 - **Remember:** This is also known as **net national income** and by dividing it by population of the country we can get **per-capital income**.

3) GROSS NATIONAL DISPOSABLE INCOME (GNDI)

- It refers to **income that is available (which can be disposed (spent))**. It measures the income available to the nation for final consumption and gross saving.
- **GNDI = GNI + Net Current Transfers from ROW** (Current transfers receivable by resident units from the Rest of the World - Current Transfer payable to non-Resident units to the Rest of the World)
 - **Note:** GNI doesn't include current transfers, the GNDI is arrived at by adding it to GNI.
 - **Note: Understanding Current Transfers:**
 - **Current Transfer** is a transaction in which one institutional unit provides a good or service to another unit. It is provided without receiving any good or service directly in return. It doesn't oblige one or both parties to acquire or dispose off an asset.
 - **Three main kinds of current transfers are:**
 - a. **Current Taxes on Income, wealth, etc.,**
 - b. **Social contribution and benefits.**
 - c. **Other Current Transfers**

- **Current Taxes on Income, wealth etc.,**
 - It consists of income tax and wealth tax payable by households and corporations.
- **Social Contributions and Benefits:**
 - **Social Contributions:** These are payments to social insurance schemes and other social security payments like provident fund, payment to new pension scheme, etc. These payments may be made by employers/employees or both.
 - **Social benefits** are current transfers received by households. They are intended to provide for the needs that arise from certain events or circumstances (e.g. sickness, unemployment, retirement, housing, education etc.)
- **Other Current Transfers:**
 - The current transfers other than current taxes and social contributions and benefits:
 - i. **Premium and claims** under non-life insurance policies.
 - ii. Current transfers between different kinds of government units, usually at different levels of government, and also between general government and foreign governments, such as transfers under aid programs intended to sustain the consumption levels of populations affected by war or natural disasters such as droughts, floods or earthquakes.
 - iii. Current transfers between resident and non-resident households i.e., foreign remittances between resident and non-resident households.

- **Note:** To calculate Net Current Transfers from ROW, we only consider net current transfer paid to and received from non-resident units.

4) NET NATIONAL DISPOSABLE INCOME

- $NNDI = NNI + \text{Net other current transfers or,}$
- $NNDI = GNDI - \text{Consumption of Fixed Capital (Depreciation)}$

5) GROSS DISPOSABLE INCOME OF HOUSEHOLD (GDIH)

- The GDIH can be arrived from Gross National Disposable Income by deducting Gross Disposable Income of Government and Gross Saving of All corporations.
- $GDIH = GNDI - GDIG \text{ (Gross Disposable income of Government) - Gross Saving of All Corporations}$

6) SUMMARY

GDP	Market value of final goods and services produced within the domestic territory of the country in an accounting year
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NDP	GDP – Depreciation
GNP	GDP + NFIA
NNP	GNP – Depreciation
GNDI	GNP + Net Current Transfer from Abroad
NNDI	GNDI – Depreciation
GDIH	GNDI – Gross Domestic Income of Government (GDIG) – Gross Saving of all Corporations

Levelup IAS