## 2.1 The level of overall activity

## - Economic activity

**Syllabus item: 78 Weight: 3**

### IB Question

- Describe, using a diagram, the circular flow of income between households and firms in a closed economy with no government.
- Identify the four factors of production and their respective payments (rent, wages, interest and profit) and explain that these constitute the income flow in the model.
- Outline that the income flow is numerically equivalent to the expenditure flow and the value of output flow.

### Definition:

- Macroeconomics: The study of national economy. It's concerned with the allocation of a nation's resources and is concerned with 5 main variables:

| Variable | Macroeconomic objective |
|---|---|
| **Economic growth** | A steady rate of increase of national output |
| **Employment** | A low level of unemployment |
| **Price stability** | A low and stable rate of inflation |
| **External stability** | A favorable balance of payments position |
| **Income distribution** | An equitable distribution of income |

→ These constitute the income flow in the model.

The circular flow of income model

### Main idea 1

- Circular flow of income model - 2 sectors: Households and firms

("Closed" economy means that it is closed to international trades.)

| F.o.p (provided by firms) | Payment to the factor (provided by households) |
|---|---|
| Labour | Wages |
| Land | Rent |
| Capital | Interest |
| Entrepreneurship | Profits |

## Main idea 2

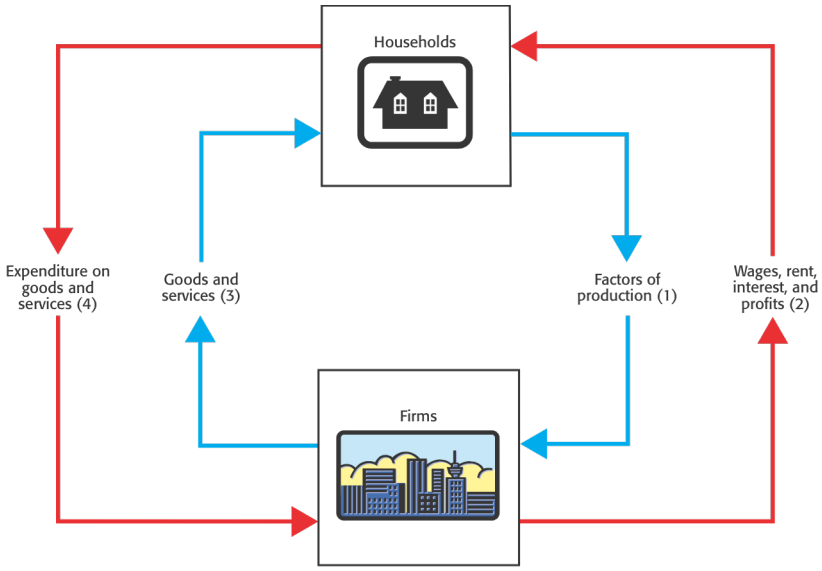



Figure 13.1 Two-sector circular flow of income model

Two-sector circular flow of income model

1) Households provide the f.o.p
2) Households receive income
3) Firms produce goods and services
4) Using the income received, households buy the goods and services produced by the firms

*The circular flow of income shows that in any given time period, the value of output produced in an economy is equal to the total income generated in producing that output, which is equal to the expenditures made to purchase that output.

## IB Question

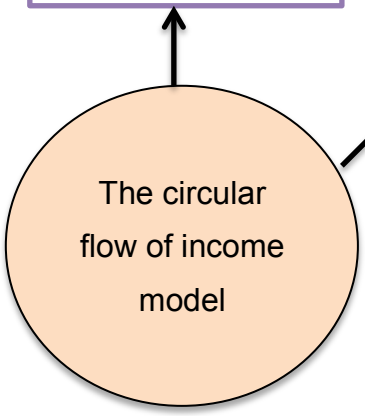
- Describe, using a diagram, the circular flow of income in an open economy with government and financial markets, referring to leakages/ withdrawals (savings, taxes and import expenditure) and injections (investment, government expenditure and export revenue).
- Explain how the size of the circular flow will change depending on the relative size of injections and leakages.

## Main idea 1

• Leakages and injections are paired together:

("Open" economy refers to an economy which has international trade through imports and exports)

| Leakages | Injections |
|---|---|
| Saving<br>It is income that is not spent to buy goods and services | Investment<br>Firms obtain funds from financial markets (e.g. banks) to finance investment, or the production of capital goods |
| Taxes<br>Paying taxes to the government→ It is income that is not spent to buy goods and services | Government spending<br>The government uses the tax funds to finance government expenditures (on education, health, defense etc.) |
| Imports<br>Household spending that leaks out as payments to the other countries that produced the goods and services | Exports<br>Spending by foreigners who buy goods and services produced by the domestic firms |



**Main idea 2**

Four-sector circular flow with leakages and injections

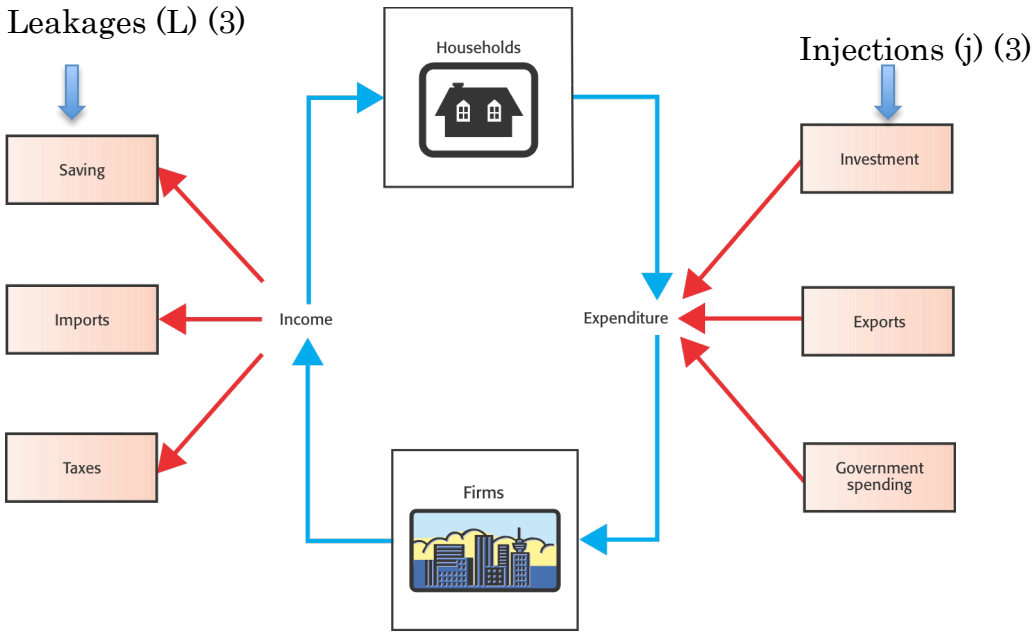



Figure 13.2 Four-sector circular flow with leakages and injections

→ The economy is in equilibrium where leakages = injections

*Although leakages from the circular flow of income are matched by injections into the circular of income, these do not need to be equal to each other.

- If Injections < Leakages = income flow becomes smaller (national output falling)
- If Injections > Leakages = income flow becomes bigger (move to a new equilibrium)

# Syllabus item: 79 Weight: 5

## IB Question

- Distinguish between GDP and GNP/GNI as measures of economic activity.
- Distinguish between the nominal value of GDP and GNP/GNI and the real value of GDP and GNP/GNI.
- Distinguish between total GDP and GNP/GNI and per capita GDP and GNP/GNI.
- Examine the output approach, the income approach and the expenditure approach when measuring national income.

Measures of economic activity: GDP, GNP, GNI

## Main idea 1

- GDP (Gross Domestic product) : total of all economic activity in a country, regardless of who owns the productive assets
- GNP (Gross national product): total income that is earned by a country's f.o.p regardless of where the assets are located

  GNP/GNI =GDP + net property income from abroad (income eared from assets abroad – income paid to foreign assets operating domestically)

- Nominal GDP: the value at current prices, and adjusts It for inflation to get the GDP at constant prices, making it possible to compare data over time
- Real GDP = Nominal GDP adjusted for inflation
- GDP per capita: Total GDP ÷ size of population

  → Appropriate compared to GDP, if one is to make any judgments about the progress of a country in comparison with other countries in terms of raising living standards

GDP is measured by:

1) The output method: summing all of the value added (costs of inputs) by all the firms in an economy
2) The income method: measures the value of all the incomes earned in the economy
3) The expenditure method: summing up the spending on goods and services by all the different sectors in the economy

   These include:

   - Spending by households, known as consumption
   - Spending by firms, known as investment
   - Spending by government
   - Spending by foreigners on exports – spending on imports → Net exports (X-M)

Definition: National output = National income = National expenditure

## IB Question

• Evaluate the use of national income statistics, including their use for making comparisons over time, their use for making comparisons between countries and their use for making conclusions about standards of living.

• Explain the meaning and significance of "green GDP", a measure of GDP that accounts for environmental destruction.

Measures of economic activity: GDP, GNP, GNI

## Main idea 2

Limitations of the data of GDP

- Inaccuracies

→ The data that are used to calculate the various measures of rational income come from a vastly wide range of sources

→ If data is reliable, then it improves the validity of comparisons

- Unrecorded or under-recorded economic activity – informal markets

→ Most significant for developing countries, where much of the output does not make it to any recorded market (GDP figures are under-valued)

→ "Hidden economy" → Illegal economy, such as drug trafficking

- External costs: GDP figures do not take into account the costs of resource depletion

Ex) GDP figures do not make deductions for the negative consequences of air and water pollution and traffic congestion

- Other quality of life concerns

→ GDP does not include free activities such as volunteer work or people caring for the elderly and children at home

- Composition of output

→ it is possible that a large part f a country's output is in goods that do not benefit consumers (it would be hard to argue that a higher GDP will raise living standards

Green GDP:

→ A measure of GDP that takes into account any environmental costs incurred from the production of goods and services included in the GDP figures

Green GDP = GDP – environmental costs of production

(ex. Health, agricultural and industrial costs caused by air pollution and water pollution)

**Syllabus item: 81 Weight: 4**

## IB Question

- Explain, using a business cycle diagram, that economies typically tend to go through a cyclical pattern characterized by the phases of the business cycle.
- Explain the long-term growth trend in the business cycle diagram as the potential output of the economy.
- Distinguish between a decrease in GDP and a decrease in GDP growth.

Short-run fluctuations and long-term trend

## Main idea 1

The business cycle/ trade cycle:

→ Periodic fluctuations in economic activity measured by changes in real GDP

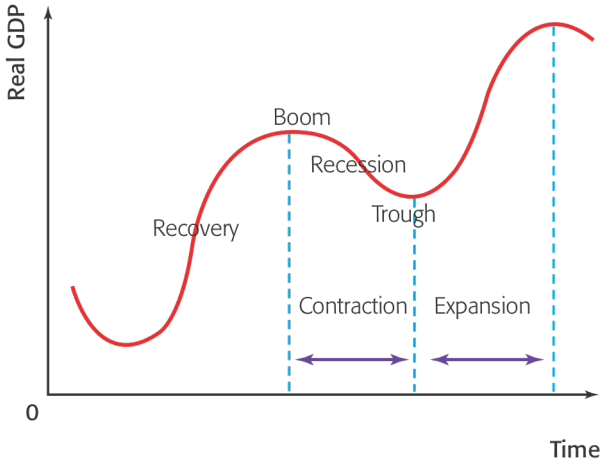



Figure 13.3 The standard business cycle

**1. Recovery phase**

→ Economic expansion, with GDP increasing at a rising rate

→ Largely driven by an increase in aggregate demand

- To meet the increase in demand, firms increase output, taking on more workers
- The newly employed workers spend their incomes on goods and services
- As the economy "booms", it is likely that inflationary pressure will build up and the rate of growth of GDP will fall

**2. Recession**

→ The two consecutive quarters of negative GDP growth, that is, falling GDP. (meaning that the economy actually gets smaller)

→ Falling aggregate demand

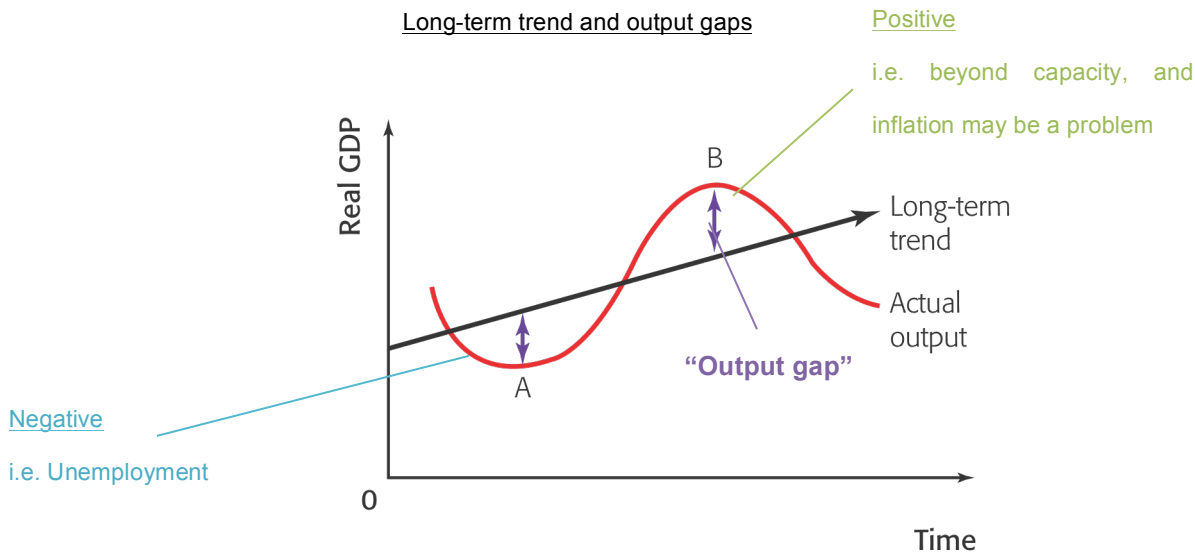
- Firms lay off workers, rising umployment rate
- Less spending
- Lower rates of inflation, or even deflation

**3. Trough**

→ Output cannot fall forever as there will be always some people with jobs to maintain a given level of consumption, etc.

*Second recovery is at a higher level of GDP than the first and each boom is higher than the last. → economies tend to go through periodcic fluctuations in real GDP around their long-term growth tend (Shown in Figure 13.4)

**Main idea 2**

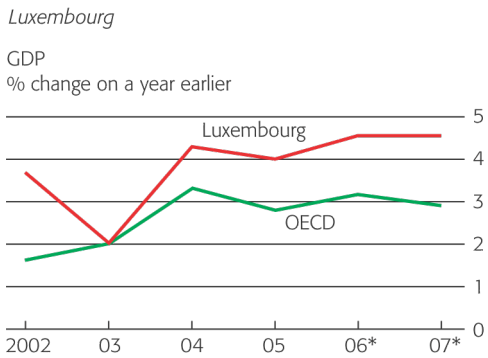



(Figure 13.4)

→ Represents the growth rate that the economy can sustain over time (≠sustainable development)

- Distinguish between a decrease in GDP and a decrease in GDP growth.

Example:




Source: *The Economist,* 15–21 July 2006

- From 2002 to 2003 the rate of growth of GDP fell from 3.5% to 2% → this does NOT mean that the actual output of GDP was less in 2003bthan it was in 2002. It means that GDP grew, but a slower rate than it had the previous year.
- In all years, the GDP of Luxemburg was rising