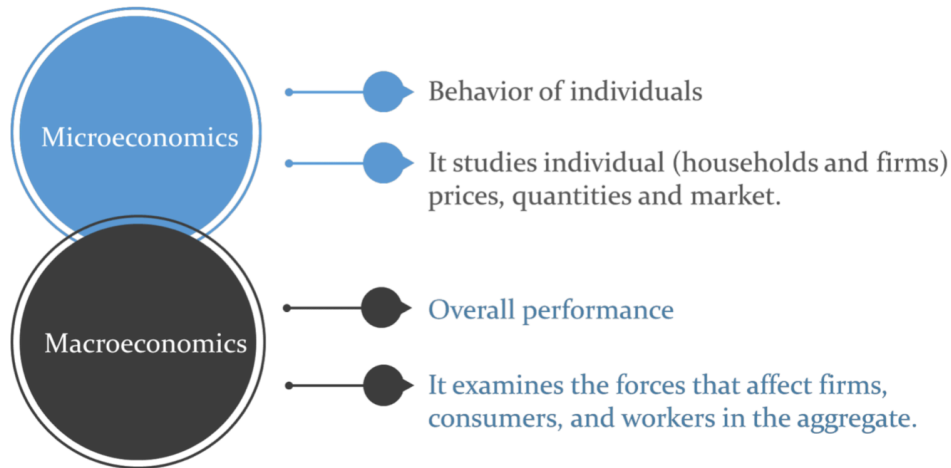


Macro Unit 2 提纲 for 期中考 only

2.1 The circular flow and GDP

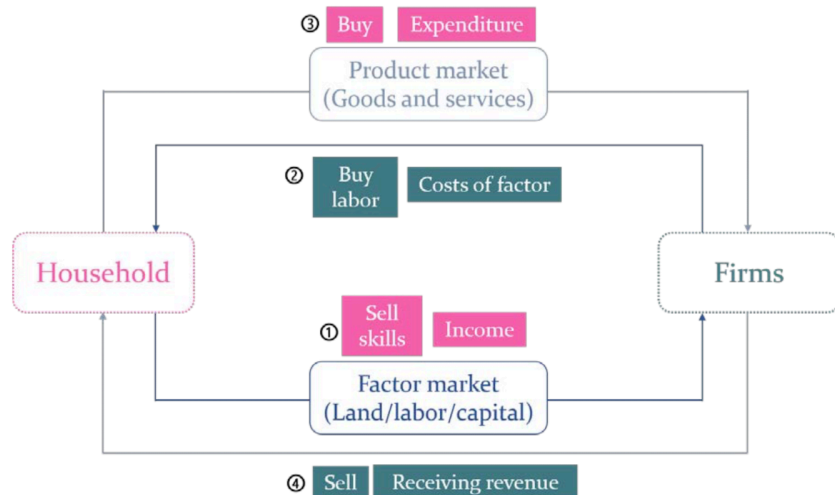
➤ Introduction of Macro-economy



- The macroeconomics focus on analysing the big picture of the economy such as growth, inflation, trade, and unemployment.
- On the contrast, the microeconomics studies the behaviour of individual markets, households, and businesses.

➤ The circular flow of income

⇒ National income



- This is a highly simplistic model: 1. where the government is not available, and no income will be saved. 2. The closed economy produces one good from one input(labour).
- Suppose there is only one household (A) and one firm (B) in the economy. The national output is measured by the value of the output of B's factory, say \$100. A is hired by B as a production worker (②) and receives a wage of \$100 (①), then A spends his income \$100 (③) on purchasing the product and B receives the revenue \$100(④). In this simplified example, total production costs (labour) = national

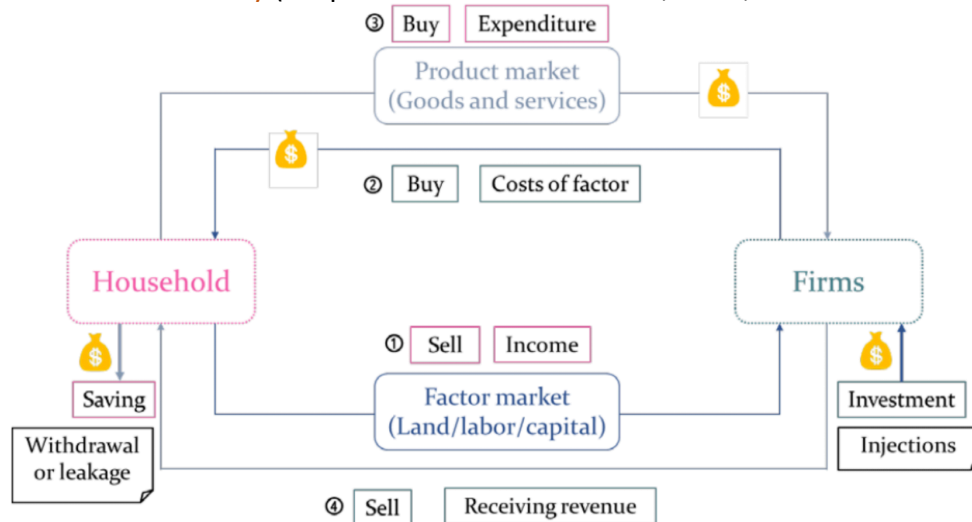
income①/② = national expenditure③ = national revenue = GDP (national output④).

The **circular flow of income** (as shown in the previous explanation of the measurement of GDP) is a model that represents the exchange flow of money and products between different economic sectors.

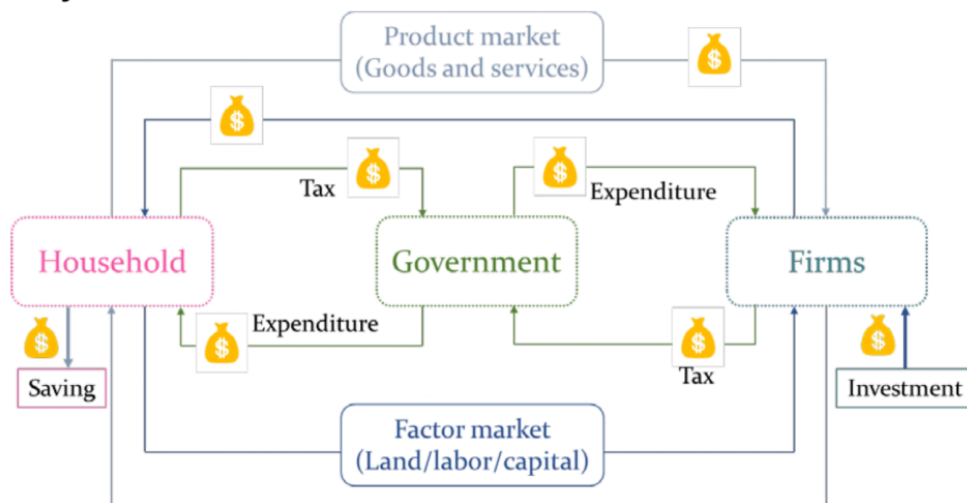
⇒ Injection and Withdrawal

- The figure implies a highly simplistic model where all income is spent. However, in reality, there are exceptions.
- On the one hand, **leakages (withdrawal)** in terms of saving will leave the flow.
- On the other hand, if extra money is not directly received from households, it is called an **injection**.

a. **Two-sector economy** (simplest model – households, firms, and closed economy)

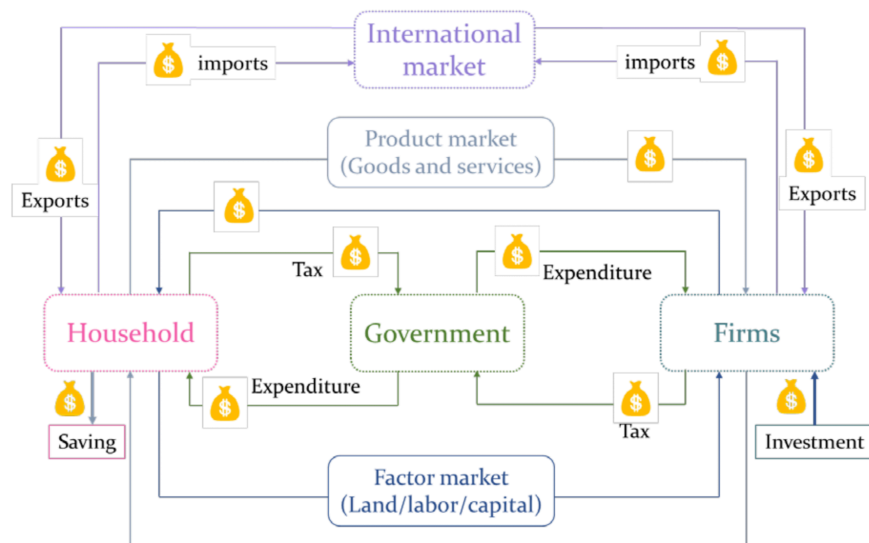


b. **Three-sector economy** (households, firms, government, and closed economy)



The new sector, government, gives an extra **injection G (expenditure)** and leakage **T (tax payment)**.

c. **Four-sector economy** (households, firms, government, and open economy)



The new sector, external market, gives an extra **injection X (exports 出口)** and **leakage M (imports 进口)**.

2.2 Limitations of GDP

➤ Problems when using GDP to compare economic performance

- Official real GDP is usually underestimated due to the existence of the **shadow economy**. The size of the **hidden economy** differs from countries to countries, making it difficult to compare the real GDP growth between nations. If adjustments are made to show the difference in the size of the hidden economy, the real GDP will be more reliable.

Underground, hidden, or undeclared economic activity

- Evasion of tax
- Illegal activity

- GDP only measures the tradable goods and services. Products that are not traded is not included in the GDP calculation (i.e., 1. home produced products especially in subsistence agriculture (consuming what they produced); 2. Output from public sector).
- Inflation (price changes): inflation should be adjusted to reflect 'real' changes in output
- Population changes: a large population can be seen as an important factor to increase GDP growth
- If GDP per head increase, it is generally accepted that the citizen of a country will experience a higher living standard. However, GDP/head is an average figure. Therefore a rise in GDP per head does not guarantee that everyone will be better off.
- Whether a rise in GDP per head will improve the living standard also depends on the type of products produced. More consumer goods per head raise people's living standard. There will be a trade-off between producing consumer goods and capital goods.

2.3 Unemployment

➤ Employment and unemployment

Employed 就业 – being involved in a productive activity for which a payment is received

Unemployed 失业 – those who are jobless but are actively looking for a job.

Full employment 完全就业 – Unemployment at its lowest possible rate

Underemployed 未充分就业的 – The underemployed are people who work part time because they cannot find full-time jobs.



Labour force is the sum of employed and unemployed people in the economy.

Out of labour force: people who are **not** working and **not** looking for a job (neither employed nor unemployed). Housewives, retirees, disabilities or full-time students (under 16/18).



Discouraged workers 丧志工人 are nonworking people who are capable of working but have given up looking for a job due to the state of the job market.
Not included in labor force.

Marginally attached workers 边际状态的工人 would like to be employed and have looked for a job in the recent past but are not currently looking for work.
Not included in labor force.

$$\text{Unemployment rate} = \frac{\text{Numbers of unemployed people}}{\text{Labor force (employed + unemployed)}}$$

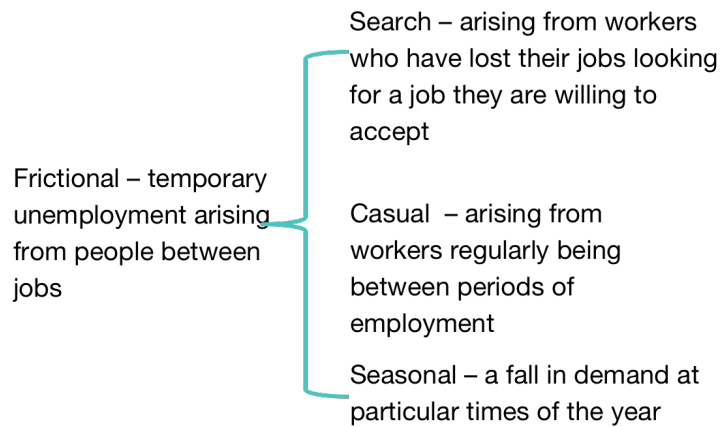
➤ The causes of unemployment

Frictional 摩擦性失业	Structural 结构性失业	Cyclical 周期性失业
Search unemployment	Regional unemployment	Cyclical unemployment
Casual unemployment	Technological unemployment	
Seasonal unemployment		

More and more serious

⇒ **Frictional unemployment** 摩擦性失业

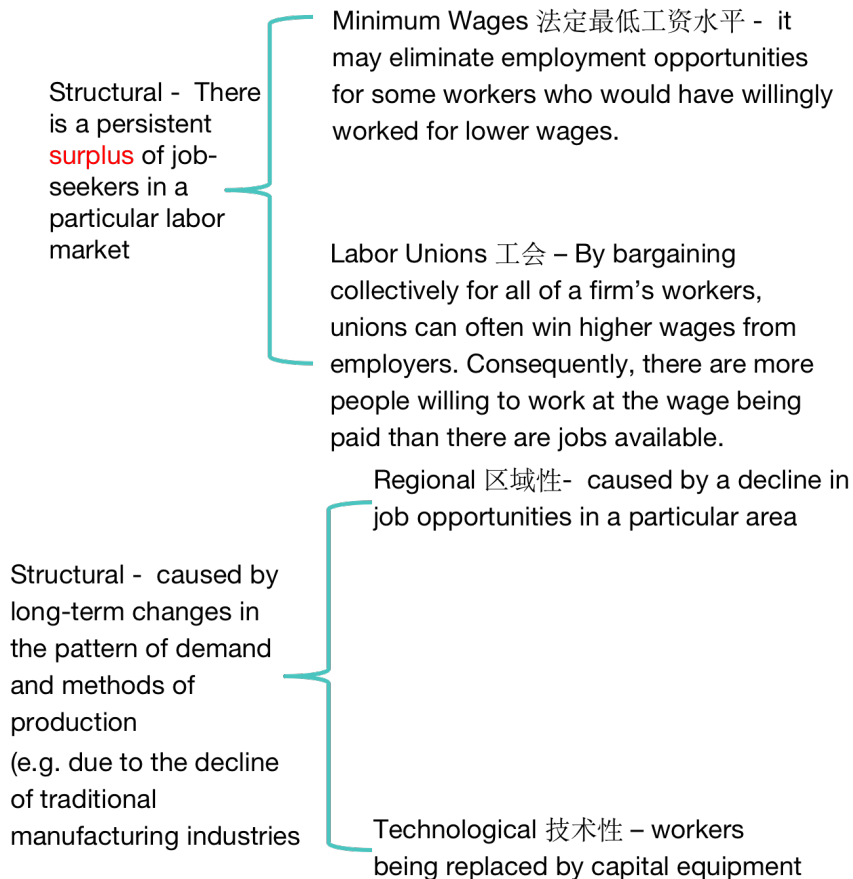
Frictional unemployment is unemployment due to the time workers spend in job search.



⇒ Structural unemployment 结构性失业

Structural unemployment is unemployment that results when there are more people seeking jobs in a labor market than there are jobs available at the current wage rate.

There is a **persistent surplus** of job-seekers in a particular labor market



⇒ cyclical unemployment 结构性失业

Cyclical unemployment is the deviation 偏离 of the actual rate of unemployment from the natural rate. Cyclical unemployment is regarded as the most severe unemployment. It occurs when the aggregate demand falls off (i.e., recession) and firms cut back on production and lay off workers.

➤ The effects of unemployment

- i. Frictional unemployment is usually **short-term**, i.e., **temporary**, so its social impact and economic impact are **minimal**.
- ii. A period of frictional unemployment may result in a **better** match between jobs and skills, which may increase **productivity** in the future.
- iii. Structural unemployment can last for **longer** periods: In the case of technological improvements, low-skilled workers who fail to acquire the necessary skills may remain structurally unemployed for years. Long periods of involuntary unemployment will eventually develop into a **psychological toll** (leads to stress and health problem) and creates more difficulty for those workers to get back to work as they lose skills.
- iv. **Lower GDP**: when the unemployment rate goes up, the economy 'voluntarily' forgives the products that could have been produced by those unemployed workers.
- v. Cyclical unemployment can turn into a **downward spiral**. That's because when unemployment is high, it is possible that the capital (factors of production that are used with labour) is also idle, and therefore, slowing down the economic growth.

➤ Full employment and the natural rate of unemployment

⇒ **Full employment 完全就业**: historically it is known as a situation where there is no (or minimal) involuntary unemployment exists.

In practice, full employment can **never** exist because it is always possible to see unemployment happens (even the economy is operating normally) **inevitably** when people switch between jobs (frictional unemployment) or when the demand for different skills (labour) changes (structural unemployment). Therefore, full employment is *not equivalent* to **zero** unemployment but zero cyclical unemployment.

⇒ **Natural rate of unemployment 自然失业率(NRU)**: is the unemployment rate that arises from the effects of frictional plus structural unemployment. NRU represents the lowest possible unemployment rate in the economy. It is the level of unemployment where aggregate demand for labour is equal to aggregate supply of labour at the current wage rate (there is no excess or deficiency of demand for labour).

⇒ **Actual rate of unemployment 真实失业率(ARU)**:

Actual unemployment = Natural unemployment + Cyclical unemployment

2.6 Real v.s Nominal GDP

⇒ **Nominal GDP** measures the market value of total output using the current market price. Thus, 2018 nominal GDP measures the value of the goods produced in 2018 at the current market prices in 2018.

*Sometimes, an increase in nominal(money) GDP can be misleading as the market value of the total product can be affected by both changes in price level and changes in output. Thereby, nominal GDP could increase just because the price level has

⇒ **Real GDP** removes the influence of changing price (growth in the price of GDP) and therefore showing a 'true' changes of total output.

➤ Definition of business cycle

- Performance in business cycle



During periods of real GDP growth, employment of resources increases, and the general price level of the economy (which is an average over all prices) usually begins to rise more rapidly.

- **Peak.**

When the economy reaches a peak, unemployment of resources has fallen substantially, and the general price level may be rising quite rapidly; the economy is likely to be experiencing inflation.

- **Contraction.**

If the contraction lasts six months (two quarters) or more, it is termed a **recession** 衰退期, characterized by falling real GDP and growing unemployment of resources. Increases in the price level may slow down a lot, and it is even possible that prices in some sectors may begin to fall.

- **Trough**

There may now be widespread unemployment. A trough is followed by a new period of expansion (also known as a recovery), marking the beginning of a new cycle.