The financial account

- **Financial account**: The part of the balance of payments that records purchases of physical and financial assets a country has made abroad and foreign purchases of physical and financial assets in the country.
  - Contains direct investment, portfolio investment, financial derivatives, other investments and Reserve Bank assets.
  - For Australia, the financial account must always be in surplus, to balance the current account deficit.
- **Net foreign investment**: The difference between capital outflows from a country and capital inflows, also equal to net foreign direct investment plus net foreign portfolio investment.
  - Money AUS send to other countries – money other countries send to AUS.

Why is the balance of payments always zero?

- A current account deficit will be exactly offset by a capital and financial account surplus.
- Some countries have current account surpluses, which are exactly offset by capital and financial account deficits.

The Foreign exchange market & exchange rate

- **Nominal exchange rate**: The value of one country’s currency in terms of another country’s currency.
- The market exchange rate in Australia and in many other countries is usually determined by the interaction of demand for and supply of currency.
  - Flexible exchange rate
  - In some countries it could be fixed exchange rate due to policy etc.

<table>
<thead>
<tr>
<th>Three sources of foreign currency demand for the Australian dollar:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Foreign firms and consumers that want to buy goods and services produced in Australia.</td>
</tr>
<tr>
<td>- Foreign firms and consumers that want to invest in Australia (direct or portfolio investment).</td>
</tr>
<tr>
<td>- Currency traders who believe that the value of the dollar in the future will be greater than its value today</td>
</tr>
</tbody>
</table>

- **Currency appreciation**: Occurs when the market value of a currency rises relative to another currency.
- **Currency depreciation**: Occurs when the market value of a currency falls relative to another currency.
How do shifts in demand and supply affect the exchange rate?

Three main factors cause the demand and/or supply curves in the foreign exchange market to shift:

- Changes in the overseas demand for Australian-produced goods and services (exports) and changes in Australian demand for foreign-produced goods and services (imports)
- Changes in the desire to invest in Australia and changes in the desire of Australian firms and individuals to invest in foreign countries.
- Changes in the expectations of currency traders about the likely future value of the dollar and the likely future value of foreign currencies

Causes of shifts in the demand for and supply of foreign exchange:

- Changes in income levels and economic growth rates in Australia and in other countries.
- Changes in relative interest rates between countries.
- Speculation
  - Speculators: Currency traders who buy and sell foreign exchange in an attempt to profit from changes in exchange rates

Some exchange rates are not determined by the market:

- While many countries have a market-determined exchange rate, some do not.
- Some countries have fixed exchange rates, where the value of their currency is fixed against the value of another currency, and it does not change for long periods of time

How movements in the exchange rate affect exports and imports:

Exchange rate appreciation:

- Revenue in Australian dollars falls for exporters whose goods are traded in $US.
- Exports of goods and services fall for goods whose prices are determined in Australia, as they are now more expensive to overseas buyers.
- Imports become cheaper.
- Net exports fall, ceteris paribus, reducing the rate of increase of aggregate demand and real GDP
Exchange rate depreciation

- Revenue in Australian dollars rises for exporters whose goods are traded in $US.
- Exports of goods and services increase for goods whose prices are determined in Australia, as they are now less expensive to overseas buyers.
- Imports become more expensive.
- Net exports rise, ceteris paribus, increasing the rate of increase of aggregate demand and real GDP.

The real exchange rate

- **Real exchange rate**: the price of domestic goods & services in terms of foreign goods & services

\[
\text{Real exchange rate} = \text{Nominal exchange rate} \times \left( \frac{\text{domestic price level}}{\text{foreign price level}} \right)
\]

  - E.g. the global price for big mac, taking U.S. as standard (?)
    - If the price in that country > U.S., it means their money is under value
      - Good for export, but getting less value
    - If the price in that country < U.S., it means their money is over value

The International Sector & National Saving & Investment

**Current account balance (CAB) equals net foreign investment**

- CAB = NX + NPI
  - (For simplicity, assuming NSI is zero as it is so small).
  - Current Account Balance + Financial Account Balance = 0, or,
  - Current Account Balance = - Financial Account Balance, or,
  - Net Exports (NX) + Net Primary Income (NPI) = Net Foreign Investment
  - **Note**: Assumes capital account balance is zero.

Domestic saving, domestic investment and net foreign investment

- **Private saving = national income – consumption - taxes**
  - or, \( S_{\text{private}} = Y - C - T \)
  - (for simplicity, assume transfer payments are zero).
    - Government saving = taxes – government spending
    - or, \( S_{\text{public}} = T - G \)
    - National saving = private saving + public saving
    - or, \( S = S_{\text{private}} + S_{\text{public}} \)

- **Remember the basic macroeconomic equation for GDP or national income:**
  - \( GDP = C + I + G + NX \)

- **Gross national income (GNI):** Is equal to GDP \((C+I+G+NX)\) plus net income received from non-residents. It measures the total income that a country has for expenditure and saving.
  - \( GNI = C + I + G + NX + NPI \)
  - \( GNI = GDP + NPI \)
Monetary policy & Fiscal policy in an open economy

<table>
<thead>
<tr>
<th>Monetary policy in an open economy</th>
<th>Fiscal policy in an open economy</th>
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<tbody>
<tr>
<td>Monetary policy has a greater impact on aggregate demand in an open economy than in a closed economy.</td>
<td>Fiscal policy has a smaller impact on aggregate demand in an open economy than in a closed economy</td>
</tr>
</tbody>
</table>

- **Example:** Expansionary monetary policy—interest rates are reduced.
  - Domestically, lower interest rates tend to increase investment and consumption spending (create extra demand)
  - In an open economy, lower interest rates also tend to lead to an exchange rate depreciation, which increases net exports, increasing aggregate demand

- **Example:** Expansionary fiscal policy—increases in government purchases or tax cuts.
  - To fund expansionary policy more government bonds will be sold, putting upward pressure on interest rates.
  - Higher interest rates may lead to an exchange rate appreciation, reducing net exports, and reducing the rate of increase of aggregate demand