Advances from The Bank of Canada

Suppose the reserve rates at the chartered banks fall below the desired ratio. They borrow funds from the Bank of Canada:

<table>
<thead>
<tr>
<th>Chartered Banks</th>
<th>Bank of Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves: +100 (DD at Bank of Canada)</td>
<td>Advances from Bank of Canada: +100</td>
</tr>
<tr>
<td>Advancing to Chartered Banks: +100</td>
<td>DD: +100 (Chartered Banks)</td>
</tr>
</tbody>
</table>

- No direct increase in the money supply – rare case, usually repaid quickly.
- Bank Rate: Interest rate charged by the Bank of Canada for advances.
  - Reflects the short-term interest rates – influences the interest rates.
  - Can either encourage/discourage banks to keep reserves – indirectly expand or contract money supply.

Foreign Exchange Market

<table>
<thead>
<tr>
<th>Canadian Dollars</th>
<th>Foreign Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import ↑: Supply ↑</td>
<td>Demand ↑</td>
</tr>
<tr>
<td>Export ↑: Demand ↑</td>
<td>Supply ↑</td>
</tr>
<tr>
<td>Capital Inflow ↑: Demand ↑</td>
<td>Supply ↑</td>
</tr>
<tr>
<td>Capital Outflow ↑: Supply ↑</td>
<td>Demand ↑</td>
</tr>
</tbody>
</table>

Exchange Rate Systems

Consider a rise in Can/F. Foreign exchange is now more valuable:

- $S$ is positively sloped: $X↑$, FE supplied ↑.
- $D$ is negatively sloped: $M↓$, FE demanded ↓.
- Depreciation in Canadian dollars.

Flexible Exchange Rates

Government doesn’t intervene – demand and supply determine the exchange rate.
Canadian dollars appreciates:
- Increase in export demand.
- Capital inflow.
- Increase in Canadian interest rates – attracts lenders.

Canadian dollars depreciates:
- Increase in import demand.
- Capital outflow.

**Fixed Exchange Rate**

Government intervenes to keep a fixed exchange rate.

Suppose there is a huge increase for exports:
- $AB$ excess supply of foreign exchange.
- Bank of Canada buys foreign exchange and sells Canadian dollar.
- Foreign Exchange Reserves increases.

Suppose Canada wants to travel more (increase in imports):
- $EF$ excess demand for foreign exchange.
- Bank of Canada sells foreign exchange and buys Canadian dollar.
- Foreign Exchange Reserves decreases.