Agenda

I. Review

II. Purchasing Power Parity (PPP)

III. Exchange Rates

IV. Balance of Payment

V. Crisis Management
Review

Monetary Policy
- Money supply and interest rates

Fiscal Policy
- Government spending and taxation

GDP Accounting
- Consumption (Multiplier), Investment (Accelerator), Government Expenditures, Net Exports (Exports – Imports)
Purchasing Power Parity (PPP)

Explains the currency exchange rates between two countries using price levels:

\[ P_{us} = (E)(P_E) \]
- \( P_{us} \) = US price level
- \( E \) = exchange rate $/Euro
- \( P_E \) = European price level

Take away: If price level of the goods in one country becomes more expensive, the demand for that country’s currency and product will fall, causing the exchange rate to adjust until the above equation holds true again.
Relative PPP

The “Big Mac” Index

\[
\frac{E - E(t-1)}{E(t-1)} = \text{Inflation US} - \text{Inflation Europe}
\]

Example 1: if US prices rises 10%, European Prices rises 3%
US dollar will depreciate 7% against the euro

<table>
<thead>
<tr>
<th>Measure</th>
<th>U.S.</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Rate</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Productivity Growth</td>
<td>4%</td>
<td>1%</td>
</tr>
</tbody>
</table>
## Exchange Rates

<table>
<thead>
<tr>
<th>Factor in country A</th>
<th>Change</th>
<th>Effect on Country A’s currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate in A</td>
<td>Increase</td>
<td>appreciate</td>
</tr>
<tr>
<td>Inflation rate in A</td>
<td>Increase</td>
<td>depreciate</td>
</tr>
<tr>
<td>Demand for A’s goods</td>
<td>Increase</td>
<td>Appreciate</td>
</tr>
<tr>
<td>Country A output growth</td>
<td>Increase</td>
<td>Appreciate</td>
</tr>
</tbody>
</table>
Balance of Payments

Record of the transaction of the residents of a country with the rest of the world.

• Current account – trades in goods and services, and transfer of payments

• Capital account – purchase and sale of capital assets (stocks, bonds, and land)

Current account + Capital account surplus = 0
ie: you must balance a deficit in the current account with a surplus in capital account.
Exchange Rate Systems

Least Flexible
Dollarization
Currency board
Fixed exchange rate
Crawling peg
Dirty flexible rate

Most Flexible
Clean flexible rates
Crisis Management

IMF List

Privatize
Deregulate
Run a budget surplus (crowding in)
Run a Provident Fund (increase savings)
Free trade
Free the exchange rate
Control Population growth