Chapter 24

Monetary and Fiscal Policy in the ISLM Model
Shift in the IS Curve

1. C ↑: at given $i_A$, $Y^{ad}$ ↑, $Y$ ↑ ⇒ IS shifts right
2. Same reasoning when $I$ ↑, $G$ ↑, $NX$ ↑, $T$ ↓
Shift in the *LM* Curve from a Rise in $M^s$

(a) *Shift of the LM curve*

(b) *Effect on the market for money when aggregate output is constant at $Y_A$*

1. $M^s \uparrow$: at given $Y_A$, $i \downarrow$ in panel (b) and (a) $\Rightarrow$ *LM shifts to the right*
Shift in the *LM* Curve from a Rise in $M^d$

1. $M^d \uparrow$: at given $Y_A$, $i \uparrow$ in panel (b) and (a) ⇒ *LM* shifts to the left
Response to an Increase in $M^s$

1. $M^s \uparrow$: $i \downarrow$, $LM$ shifts right $\Rightarrow Y \uparrow i \downarrow$
Response to Expansionary Fiscal Policy

1. $G \uparrow$ or $T \downarrow$: $Y^{ad} \uparrow$, $IS$ shifts right $\Rightarrow Y \uparrow i \uparrow$
Summary: Factors that Shift IS and LM Curves

<table>
<thead>
<tr>
<th>Factor</th>
<th>Autonomous Change in Factor</th>
<th>Response</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer expenditure C</td>
<td>↑</td>
<td>Y↑, i↑</td>
<td>C↑ ⇒ Y^ad↑ ⇒ IS shifts right</td>
</tr>
<tr>
<td>Investment I</td>
<td>↑</td>
<td>Y↑, i↑</td>
<td>I↑ ⇒ Y^ad↑ ⇒ IS shifts right</td>
</tr>
<tr>
<td>Government spending G</td>
<td>↑</td>
<td>Y↑, i↑</td>
<td>G↑ ⇒ Y^ad↑ ⇒ IS shifts right</td>
</tr>
<tr>
<td>Taxes T</td>
<td>↑</td>
<td>Y↓, i↓</td>
<td>T↑ ⇒ C↓ ⇒ Y^ad↓ ⇒ IS shifts left</td>
</tr>
<tr>
<td>Net exports NX</td>
<td>↑</td>
<td>Y↑, i↑</td>
<td>NX↑ ⇒ Y^ad↑ ⇒ IS shifts right</td>
</tr>
<tr>
<td>Money supply M^s</td>
<td>↑</td>
<td>Y↑, i↓</td>
<td>M^s↑ ⇒ i↓ ⇒ LM shifts right</td>
</tr>
<tr>
<td>Money demand M^d</td>
<td>↑</td>
<td>Y↓, i↑</td>
<td>M^d↑ ⇒ i↑ ⇒ LM shifts left</td>
</tr>
</tbody>
</table>

Note: Only increases (↑) in the factors are shown. The effect of decreases in the factors would be the opposite of those indicated in the “Response” column.
Effectiveness of Monetary and Fiscal Policy

1. \( M^d \) is unrelated to \( i \Rightarrow i \uparrow, M^d = M^s \) at same \( Y \Rightarrow LM \) vertical
2. Panel (a): \( G \uparrow, IS \) shifts right \( \Rightarrow i \uparrow, Y \) stays same (complete crowding out)
3. Panel (b): \( M^s \uparrow, Y \uparrow \) so \( M^d \uparrow, LM \) shifts right \( \Rightarrow i \downarrow Y \uparrow 

Conclusion: Less interest sensitive is \( M^d \), more effective is monetary policy relative to fiscal policy
$M^S$ vs. $i$ Targets When $IS$ Unstable

1. $IS$ unstable: fluctuates from $IS'$ to $IS''$
2. $i$ target at $i^*$: $Y$ fluctuates from $Y_i'$ to $Y_i''$
3. $M$ target, $LM = LM^*$: $Y$ fluctuates from $Y_M'$ to $Y_M''$
4. $Y$ fluctuation is less with $M$ target

**Conclusion:** If $IS$ curve is more unstable than $LM$ curve, $M$ target is preferred
1. $LM$ unstable: fluctuates from $LM'$ to $LM''$
2. $i$ target at $i^*$: $Y = Y^*$
3. $M$ target: $Y$ fluctuates from $Y_M'$ to $Y_M''$
4. $Y$ fluctuation is less with $i$ target

**Conclusion:** If $LM$ curve is more unstable than $IS$ curve, $i$ target is preferred
The ISLM Model in the Long Run

(a) Response to a rise in the money supply M
1. $M^s \uparrow$, LM right to $LM_2$, go to point 2, $i$ to $i_2$, $Y$ to $Y_2$
2. Because $Y_2 > Y_n$, $P \uparrow$, $M/P \downarrow$, LM back to $LM_1$, go back to point 1

(b) Response to a rise in government spending $G$
1. $G \uparrow$, IS right to $IS_2$, go to point 2 where $i = i_2$ and $Y = Y_2$
2. Because $Y_2 > Y_n$, $P \uparrow$, $M/P \downarrow$, LM left to $LM_2$, go to point 2', $i = i_2'$ and $Y = Y_n$. 

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Deriving AD Curve

(a) ISLM diagram

P ↑, M/P ↓, LM shifts in, Y ↓
Points 1, 2, 3

(b) Aggregate demand curve
At given $P_A$, IS shifts right: $Y \uparrow$ in panel (b) $\Rightarrow$ AD shifts right in panel (a)
Shift in \( AD \) from Shift in \( LM \)

At given \( P_A \), \( LM \) shifts right: \( Y \uparrow \) in panel (b) \( \Rightarrow \) \( AD \) shifts right in panel (a)