Outline

• Deriving IS, LM
• Graphical depiction of policy
• Extreme cases
• An Extreme Case in Context
IS-LM equations

(13) \[ R = - \left( \frac{1-b(1-t)+m}{d + \tilde{n}} \right) Y + \left( \frac{1}{d + \tilde{n}} \right) A_0 \] <IS curve>

(17) \[ R = \frac{\mu}{h} - \left( \frac{1}{h} \right) \left( \frac{\overline{M}}{P} \right) + \left( \frac{k}{h} \right) Y \] <LM curve>
FIGURE 8.3 Graphic Derivation of the IS Curve (top)

Step 2: Lower spending line by the amount that investment and net exports fall when the interest rate rises by $\Delta R$.

Step 3: Reduce GDP to a new level of spending balance.

$\text{GDP is reduced by } \frac{1}{1 - b (1 - t) + m} (d' + n) \Delta R$

FIGURE 8.3 Graphic Derivation of the IS Curve (bottom)

Step 1: Mark new and old interest rates.

Step 4: Mark new and old levels of GDP.

Step 5: Draw a line through the dots to see the IS curve.
Step 1: Mark old and new levels of GDP.

Step 2: Shift money demand to the right when GDP rises.

Step 3: Increase the interest rate so money demand still equals money supply.

Step 4: Mark the new and old interest rates.

Step 5: Draw a line through the dots to see the LM curve.
Extreme Cases: Fiscal (I)
Extreme Cases: Fiscal (II)
Extreme Cases: Monetary (I)
Extreme Cases: Monetary (II)
Zero Interest Rate Bound

Source: St. Louis Fed FREDII, accessed 2/13/10
Policy in the ZIRP World