Practice Problems: IS/LM Model

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You should be able to work through the effects of shocks in the IS/LM model

- graphically
- verbally, providing the sequence of events and intuition for the outcomes

1 Interest elasticity of investment

Suppose that investment becomes more responsive to interest rates.

- 1. How does this affect the IS curve?
- 2. Does this make monetary policy more or less effective?
- 3. Does this make fiscal policy more or less effective? Explain the intuition.

1.1 Answer

- 1. IS becomes flatter. The easiest way to work this out is a linear model.
- 2. A given shift in M/P has a larger effect on output. Intuition: a small drop in i produces a big rise in demand. That clears the money market. With low interest elasticity of I: the same demand stimulus would require a larger drop in i, but then there would be excess demand for money.

3. A given shift in G has a smaller effect on output. Intuition: Increasing Y requires higher i (along LM). That crowds out investment.

2 Interest elasticity of money demand

Suppose that money demand becomes more responsive to interest rates.

- 1. How does this affect the LM curve?
- 2. Does this make monetary policy more or less effective?
- 3. Does this make fiscal policy more or less effective? Explain the intuition.
- 4. What happens when the LM curve is vertical?

2.1 Answer

- 1. LM becomes flatter: a given change in i must be offset by a big change in Y.
- 2. A given shift in M/P has a small effect on Y.
- 3. A given shift in G has a large effect on Y.
- 4. With vertical LM: $L(i) = \bar{L}$ so that LM becomes $M/P = Y\bar{L}$, which determines Y independently of IS.