Basic IS/LM

Introduction

Sir John Hicks introduced the IS/LM Model to clarify the interpretation of the views of John Maynard Keynes. His goal was to contrast the Keynesian view from the previously dominant classical view. While not all economists (including Hicks) continued to appreciate the merits of the IS/LM Model, it continues to have its adherents and is a mainstay of introductory macroeconomics.

The Model

The supply and demand for loanable funds are given by:

$$LFs = -125 + 10\ R + 0.25\ Y,$$

$$LFd = 120 - 10\ R + \text{Govt Deficit}.$$

The equilibrium condition LFs = Lfd establishes a relation between Y and R for a given value of the Govt Deficit. This relation is the IS curve.

The demand for money is given by:

$$Md = 30 - 5\ R + 0.1\ Y.$$

The nominal money supply M is set by the central bank. The real money supply Ms is M / P. The equilibrium condition Ms = Md establishes a second relation between Y and R for a given money supply. This relation is the LM curve.

Exercises

1. Derive the IS curve algebraically. Graph the IS curve.

2. Derive the LM algebraically. Graph the LM curve.

3. Show what happens when the central bank increases or decreases M.

4. Show what happens when the government increases or decreases Govt Deficit.