

ECON 423 - IS/LM Lab II

Objectives

This lab uses Excel to increase your understanding of the IS/LM Model with dynamics.

Goals

1. Work with dynamic IS/LM Model
2. Understand a simple dynamic macroeconomic model
3. Use Excel as a simulation tool

Model

- Consumption Function: $C = \alpha_1 + \beta_1(Y - T)$
- Disposable Income: $Y_d = Y - T$
- Investment Function: $I = \alpha_2 + \beta_2Y - \gamma_2R$
- Import Function: $M = \alpha_3 + \beta_3Y$
- Income Identity: $Y \equiv C + I + G + X - M$
- Money Demand Function: $M_D = \alpha_4 + \beta_4Y - \gamma_4R$
- Money Market Equilibrium: $M_D \equiv M_S$
- Phillips Curve: $\frac{\Delta P}{P} = \frac{P_t - P_{t-1}}{P_{t-1}} = \alpha_6 + \beta_6(Y_t - Y_{fe})$

Model Parameterized

- Consumption Function: $C = 2.0 + 0.7Y_d$
- Investment Function: $I = 3.0 + 0.12Y - 0.20R$
- Income Identity: $Y \equiv C + I + G + X_M$
- Money Demand Function: $M_D = 4.0 + 0.2Y - 0.4R$
- Money Market Equilibrium: $M_D \equiv M_S$
- Phillips Curve: $\frac{\Delta P}{P} = \frac{P_t - P_{t-1}}{P_{t-1}} = 1.0 + 0.1(Y_t - Y_{fe})$
- Exogenous Variables: $G = 12, T = 10, M_S = 12, Y_{fe} = 45$