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: \( G = 12, T = 10, M_S = 12, Y_{fe} = 45 \)