

**PART A:**

**Macroeconomics Qualifying Examination, Econ 7007, Qualifier, June 11, 2002**

**LONG QUESTION:**

Consider the following model:

$$(1) \quad C = C(Y - T) \quad 0 < C' < 1$$

$$(2) \quad I = I(i - \pi) \quad I' < 0$$

$$(3) \quad Y = C + I + G$$

$$(4) \quad \frac{M}{P} = L(Y, i) \quad L_Y > 0, L_i < 0$$

$$(5) \quad \frac{\dot{P}}{P} = H\left(\frac{Y - Y^*}{Y^*}\right) + \pi \quad H' > 0$$

$Y$ : Output;

$C$ : consumption;

$I$ : Investment;

$T$ : Tax revenue;

$P$ : Price level;

$\dot{P}/P$ : price inflation;

$G$ : Government expenditure;

$M$ : Money stock;

$Y^*$ : Potential output;

$\pi$ : Expected rate of inflation

Endogenous variables:  $Y, C, I, i$ .

Exogenous variables:  $Y^*, M, G, T$ .

The rate of inflation is endogenous in the short run.  $P$  is exogenous in the short-run, but endogenous in the long-run.

Expected rate of inflation is also assumed to be exogenous in the short-run, but is constant and equal to the actual rate of inflation in the long-run.

Short-run analysis:

- Derive the IS and LM equations. Derive reduced form equation for  $Y$ .
- Use the IS, LM and price adjustment equations to evaluate the impacts of changes in  $G$ ,  $M$  and  $\pi$  on  $Y$ ,  $i - \pi$ , and  $\dot{P}/P$ . Derive multipliers algebraically and illustrate your answers with graphs.
- Does the Fisher hypothesis hold in this model? Explain why or why not.

Long run analysis:

- Evaluate the impact of changes in  $G$  and  $M$  on  $i - \pi$  and  $P$ . Explain your answers and illustrate with graphs.
- Explain whether the Fisher hypothesis holds in the long-run.
- Suppose that the monetary authority decided to peg the nominal interest rate. Discuss the consequences of this policy in the context of this model (you may assume that the rate of inflation is zero).

Macroeconomics Qualifying Exam  
June 11<sup>th</sup> 2002

Part B:

Professor Erturk

19

19

Instructions:

Do not write your name anywhere on your blue book.

Put your ID number on your Blue Books ONLY.

For xeroxing purposes, please use **BLACK INK** or #2 PENCIL and write **ONE SIDE** of the page only.

Write **Macro/Part B** on your Blue Book.

$$u_1 \left\{ \frac{\dot{P}}{P} \left( \frac{dP}{P} - \frac{dP}{P} \right) - \frac{1}{Y^2} H' dY \right\} = \frac{M}{P} \left( \frac{dM}{M} - \frac{dP}{P} \right)$$

$$\left( u_1 \frac{\dot{P}}{P} + \frac{M}{P} \right) \frac{dP}{P} = u_1 \frac{\dot{P}}{P^2} \cdot dP + \frac{1}{Y^2} H' dY + \frac{dM}{M} - \frac{dM}{M}$$

$$\frac{dP}{dG} =$$

$$\frac{dP}{dG} = \frac{1}{-u_1 \frac{\dot{P}}{P} + \frac{M}{P}}$$

~~Write Macro/Part B on your Blue Book.~~

**PART B:**

**Macroeconomics Qualifying Examination, Econ 7008, Qualifier, June 11, 2002**

Long question.

1. Explain how the structure of the argument in the *General Theory* has changed in relation to that in the *Treatise*. Emphasize the role financial variables play in Keynes' arguments and their implications for the 'quantity theory of money.'

Short Question. (Answer **one** of the following)

1. Discuss and contrast Samuelson's (or Hick's) multiplier-accelerator model with Metzler's inventory cycle model.
2. Discuss the Steindl-Kalecki view of long term dynamics of capitalist economies.