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Fall 2009, Intermediate Macroeconomics, section 1

ECON 2202 Final Exam

General recommendations:

- Read questions thoroughly.
- Please respond on this copy. There are six pages.
- Work individually.
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- You have two hours.
- Good luck!

Your name:

- 1. **[20 points]** Circle the appropriate answer on each of the following items. Circle multiple items or none if necessary:
 - (a) Aggregate output supply increases if
 - i. government expenses decrease,
 - ii. money supply increases,
 - iii. future total productivity increases,
 - iv. a permanent tax cut.
 - (b) Which of the following increases permanent income?
 - i. an increase in future total factor productivity,
 - ii. an increase in government expenses,
 - iii. a decrease in current taxes,
 - iv. an increase in the money supply.
 - (c) Consumption demand increases if
 - i. futur total factor productivity decreases,
 - ii. current government expenses increase,
 - iii. current money supply increases,
 - iv. current taxes decrease.
 - (d) In the intertemporal model with money,
 - i. money demand reacts to money supply,
 - ii. the optimal inflation rate is zero,
 - iii. the government influences GDP with a shift in money supply,
 - iv. drops in money demand lead to lower employment.

- (e) The Fisher relationship says
 - i. P = MC, ii. R = r + iiii. Y = C + I + G, iv. $i = \frac{P' - P}{P}$.
- (f) If the real interest rate increases,
 - i. labor supply increases,
 - ii. labor demand increases,
 - iii. labor supply decreases,
 - iv. labor demand decreases.
- (g) For a household at the endowment point, a decrease in current taxes financed by future taxes,
 - i. turns the household into a borrower,
 - ii. turns the household into a lender,
 - iii. increases both its current and future consumption,
 - iv. decreases both its current and future consumption.
- (h) The representative firm's future profits are discounted by the real interest rate r because
 - i. this is the target interest rate of the central bank,
 - ii. this is the market interest rate,
 - iii. this is the discount rate of households,
 - iv. this is the marginal return of capital.
- 2. [40 points] Stock market crashes.
 - (a) Suppose the value of stocks suddenly and unexpectly drops. What are the consequences for consumption demand and investment demand? Why?

(b) What about labor demand and supply? Why?

(c) Work out the impact of these shocks on the monetary intertemporal model. In the end, what is the impact on the real wage, the interest rate and the price level?

(d) Compare your results to the stylized facts about the business cycles. How well do stock market fluctuations fare as an explanation for economic fluctuations?

3. [20 points] Consumption.

(a) Explain the consequences of an increase in the real interest rate on consumption demand.

(b) Explain the consequences of an increase of future total factor productivity on consumption demand.

(c) Explain the consequences of an increase in government expenses financed by Treasury bonds on consumption demand.

- 4. **[20 points]** Suppose you want, as a government, achieve a higher level of equilibrium employment. Using the monetary intertemporal model, discuss the merits (impact on employment, unintended consequences) of the following policies:
 - (a) Monetary policy.

(b) Postponement of taxes.

(c) Increasing government expenses.

- 5. **Bonus question [10 points]** Remember the North Korean monetary policy experiment discussed in class: introduce a new currency and allow each citizen to convert only some deliberately small amount of old currency to new currency. Use the monetary intertemporal model as a starting point for your analysis.
 - (a) Suppose that it is credible that the government would never do this again. What are the consequences for consumption? Explain.

(b) What if now North Koreans realize this could happen anytime again?