

Name: _____

Student id: _____



College of Business Administration
Department of Economics
Aggregate Economic Conditions & Analysis
Lecturer: O. Mikhail
ECO 6206-0001
Spring 2001

Final Exam

- This closed book exam is worth 100 points.
- Questions I and II are worth 15 points each.
Questions III and IV are worth 20 points each.
Question V is worth 30 point.
The Bonus Question is worth 15 points.
Allocate your time accordingly.
- Including the cover page, the exam totals 6 pages.
- Answer all questions and write clearly.
- Non-Programmable calculators and language dictionaries are allowed.
- DO NOT forget to write your name, your student id on the exam booklet.

7:00 p.m. – 9:50 p.m.

Classroom BA 212

April 25, 2001

Question I: (15 points)

Show the effect in the labor market of an increase in the interest rate? (Decide on which interest rate to choose: real or nominal? And explain why?)

Question II: (15 points)

An individual borrows \$1000 for one period. If the nominal interest rate R equals six percent, the actual inflation equals 4 percent and the current price level equals \$1 per good.

- a) How many dollars does the person borrow? How many goods?
- b) What is the dollar price of a good next period?
- c) How many dollars will the person repay next period? How many goods?
- d) What is the real rate of interest paid in terms of dollars? In terms of goods?

Question III: Government (20 points), Each part is worth 10 points.

A) Assume people find that 1 additional government provided good causes them to reduce their private spending by $\frac{1}{4}$ good. Further, assume that an additional government provided good boosts output by $\frac{1}{8}$. Then, what is the direct response (before the real interest rate changes) of a *temporary* 1 good increase in government consumption on:

- a) Private consumption.
- b) Private investment.
- c) Government consumption.
- d) Total aggregate demand.
- e) Total aggregate supply.

B) Could government services be a substitute for leisure? If so, what additional channel of effect arises in the commodity market?

Question IV: Welfare (20 points), Each part is worth 10 points.

In the model, a permanent increase in government consumption raises output but lowers private consumption and leisure.

- a) If the government wants to maximize the typical person's utility, then where should it set its consumption? Explain why.
- b) Should the government set its consumption level to maximize aggregate output? Explain why.

Question V: Monetary Growth Rate and Inflation (30 points)

Assume that for each percentage point increase in the nominal interest rate, people want to hold 100 goods fewer real cash balances. During period 2 people (correctly) become aware that the growth rate of money supply will increase from 5 percent to 10 percent per year. Fill in the market clearing values in the table below **(15 points)**.

Time Period	Real Interest Rate, r	Expected Inflation, π	Nominal Interest Rate, R	Nominal Money Supply, M	Price Level, P	Real Money Supply, M/P
0	3%	5%	8%	\$5714.29	\$2.86/good	2000 goods
1	3%	5%	8%	\$6000.00	\$3.00/good	2000 goods
2	3%	10%		\$6300.00		
3	3%	10%		\$6930.00		
4	3%	10%		\$7623.00		

(15 points) In period 2, the price level ‘jumps’ to its new, higher level. In details, explain why?

Optional Question: BONUS (15 points)

Illustrate the relationship between the tax rates & tax revenues. Show the optimal tax rate. Discuss the usefulness of the relationship.