

**Economics 30220
Practice Final Exam**

- 1) Over the past 30 years, the personal savings rate in the US has dropped from its high of 12% in the mid 1970's to its current level of essentially 0%.
 - a) Analyze the immediate impact of a drop in savings on employment, output and the interest rate.
 - b) What will happen to interest rates, employment, and output once prices have a chance to adjust? Do prices rise or fall?
 - c) If the Federal Reserve were following a fixed interest rate target, how should they respond to this drop in savings? Would your answer be different if the Fed's primary concern was inflation? Explain.
 - d) What are the long run growth effects of a lower savings rate in the US? Explain.

- 2) Consider the following Tax Cut (assume a standard deduction/exemption of \$5,000):

Taxable Income	Old Tax Code	New Tax Code
\$0 - \$10,000	15%	10%
\$10,001 - \$40,000	20%	15%
\$40,001 -	30%	25%

- a) Median income in the US is around \$40,000 per year. Calculate the impact of this tax cut on the marginal and average tax rates for the median household.
 - b) How will the average household respond to this tax cut? What happens to employment and output?
 - c) How will this change in the tax code affect interest rates?
 - d) If the Fed was interested in maintaining a constant price level, what action would be required?

- 3) Suppose that the Federal Reserve was following a Gold standard. How would the Fed need to respond to the following events? What would be the impact on the economy?
 - a) An evil super villain builds a gold machine and floods markets with new gold. (As in "Hudson Hawk")
 - b) A terrorist steals all the gold from the NY Fed and blows it up (as in "Die Hard with a Vengeance" – although the terrorist didn't really blow up the gold!)

- 4) Suppose that Congress passes a new budget that increases spending on public education by \$300 billion (or, approximately \$1,000 per person). Assume that this spending is completely wasteful in the sense that it produces no discernable improvement in the public education system (a pretty fair assumption given the empirical evidence).
- Explain the impact of this policy on employment and interest rates assuming that the spending is financed by an immediate lump sum tax of \$1000 per person. Does it matter if the spending is perceived as permanent?
 - How would your answer to (a) change if the spending was financed by a proportional increase in all marginal income tax rates.
 - How would your answer to (a) change if the spending was financed by an increase in the capital gains tax (think of the capital gains tax as a tax on savings)?
 - How would your answer to (a) change if the new spending was deficit financed?
- 5) Suppose that the economy is hit by a negative productivity shock. This shock is perceived to be temporary and, hence, capital investment is unaffected.
- Explain the impact of this shock on the economy in the short run – what happens to output and interest rates? What happens in the long run to prices?
 - If the Fed was following a constant interest rate target, what should the Fed's response be?
 - If the Fed's goal was to contain inflation, how should the Fed respond?
- 6) Suppose that an increase in immigration dramatically increases the workforce in the US. Explain the long run effect on US economic growth.