

Finance 40500
Group Assignment #5

- 1) Suppose that upon assuming the Fed chairmanship, Ben Bernanke decided to contract the US money supply by 10%.
 - a) Assuming that nothing else changes, what will the long run impact (i.e. a long enough time period for all prices to adjust) be on the dollar exchange rate?
 - b) What effect will this monetary contraction have on interest rates, output and the trade balance over the short run (i.e. while prices are fixed)
 - c) Describe the path of the dollar exchange rate. Does your answer depend on the degree to which capital is mobile internationally?

- 2) Suppose that technological advances allow US production to increase by 5%.
 - a) Assuming that nothing else changes, what will the long run impact (i.e. a long enough time period for all prices to adjust) be on the dollar exchange rate?
 - b) What effect will this increased productivity have on US savings and investment behavior? What effect will this behavioral change have on interest rates, output and the trade balance over the short run (i.e. while prices are fixed)
 - c) Describe the path of the dollar exchange rate. Does your answer depend on the degree to which capital is mobile internationally?

- 3) Suppose that the US is following a gold standard. The price of gold is pegged at \$100 per ounce.
 - a) What is the gold content of \$1?
 - b) Suppose that the US has 125 tons of gold on reserve at the NY Fed and \$925M worth of US currency in circulation. What is the current reserve ratio? (Hint: there are 2,000 pounds in one ton). Assuming the remainder of the Fed's assets are T-Bills, write down the T-Accounts of the Federal Reserve.
 - c) Suppose that the Fed wishes to increase the money supply by 10%. What are the options available and what are the problems associated with each option?
 - d) What would the impact be on the Fed's balance sheets and private gold markets if the Fed raised the price of gold to \$125?
 - e) Explain the following: "Under a gold standard, it's easier to contract the money supply than it is to increase the money supply."

- 4) Suppose that the US is on a gold standard. Explain the required response to the following events.
 - a) New gold deposits are discovered in Alaska.
 - b) Fears of a stock market crash cause a "flight to quality" – i.e. increased purchases of gold.
 - c) The US runs a sizeable trade deficit.