## PROBLEM SET 1

(Due September 25)

1. Go to the U.S. Bureau of Economic Analysis website (at www.bea.gov). Under the "International" section click on the Balance of Payments link. Then find the Interactive Tables link and click on Detailed Estimates. Finally, click on Table 1: U.S. International Transactions. This gives you a regional breakdown of U.S. international transactions. Download and print the annual U.S. current account balance with Canada and China (note, China's data only begins in 1999). You should be able to retrieve the data in Excell format. (Note: To pick off just the current account balance, you may need to use the Customize link at the top of the page).
2. Briefly describe how each of the following transactions affects the Canadian Balance of Payments accounts. (Hint: Remember double-entry book-keeping!)
(a) A Canadian resident buys shares of German stock, paying with a check drawn on a Canadian bank.
(b) A Canadian resident buys shares of German stock, paying with a check drawn on a British bank.
(c) A group of Canadians travel to Mexico and rent a vacation home for C $\$ 5,000$. They pay with a Canadian credit card.
(d) A Canadian-owned factory in China uses local (i.e., in China) earnings to buy additional equipment from a Chinese firm.
3. Read the article "America's Dark Materials" (The Economist, January, 2006), which is available on the class webpage. Suppose that, contrary to the argument of Hausmann and Sturzenegger, there is no dark matter in the U.S. net foreign asset position. Using the information in the article, and taking into account that foreign-owned assets in the U.S. were about $\$ 12.5$ trillion in 2004 and assuming an interest rate on U.S. assets of 2 percent, find the rate of return on foreign assets that can explain the size of the observed U.S. net investment income in 2004.
4. Consider a two-period economy that has at the beginning of period 1 a net foreign asset position of -100 (i.e., $B_{0}^{*}=-100$ ). In period 1 , the country runs a current account deficit of 5 percent of GDP, where GDP in both periods is 120 . Assume the interest rate is constant at 10 percent.
(a) Calculate the trade balance in period $1\left(T B_{1}\right)$, the current account balance in period $1\left(C A_{1}\right)$, and the country's net foreign asset position at the beginning of period $2\left(B_{1}^{*}\right)$.
(b) Is the country living beyond its means? To answer this, calculate the country's current account balance in period 2 and the associated period 2 trade balance. Is the required trade balance feasible? (Hint: Remember, the trade balance cannot exceed GDP!).
(c) Now suppose that in period 1, the country runs a larger current account deficit, of 10 percent of GDP. Find the country's net foreign asset position at the end of period 1 in this case. Is the country now living beyond its means? If so, show why.
