2. Japan, the European Union, Canada, and Mexico have flexible exchange rates.

   (a) Suppose Japan attracts an increased amount of investment from the European Union.

      (i) Using a correctly labeled graph of the loanable funds market in Japan, show the effect of the increase in foreign investment on the real interest rate in Japan.

      (ii) How will the real interest rate change in Japan that you identified in part (a)(i) affect the employment level in Japan in the short run? Explain.

   (b) Suppose in a different part of the world, the real interest rate in Canada increases relative to that in Mexico.

      (i) Using a correctly labeled graph of the foreign exchange market for the Canadian dollar, show the effect of the change in real interest rate in Canada on the international value of the Canadian dollar (expressed as Mexican pesos per Canadian dollar).

      (ii) How will the change in the international value of the Canadian dollar that you identified in part (b)(i) affect Canadian exports to Mexico? Explain.

3. Sewell Bank has the simplified balance sheet below.

Assets		Liabilities	
Required reserves	\$2,000	Demand deposits	\$10,000
Excess reserves	\$0	Owner's equity	\$10,000
Customer loans	\$8,000		
Government securities (bonds)	\$7,000		
Building and fixtures	\$3,000		

   (a) Based on Sewell Bank's balance sheet, calculate the required reserve ratio.

   (b) Suppose that the Federal Reserve purchases \$5,000 worth of bonds from Sewell Bank. What will be the change in the dollar value of each of the following immediately after the purchase?

      (i) Excess reserves

      (ii) Demand deposit

   (c) Calculate the maximum amount that the money supply can change as a result of the \$5,000 purchase of bonds by the Federal Reserve.

   (d) When the Federal Reserve purchases bonds, what will happen to the price of bonds in the open market? Explain.

   (e) Suppose that instead of the purchase of bonds by the Federal Reserve, an individual deposits \$5,000 in cash into her checking (demand deposit) account. What is the immediate effect of the cash deposit on the M1 measure of the money supply?

STOP

END OF EXAM

Question 3

6 points (1 + 2 + 1 + 1+1)

(a) 1 point:

- One point is earned for calculating the correct required reserve ratio of 0.2.

(b) 2 points:

- One point is earned for stating that the excess reserves will increase by $5,000.
- One point is earned for stating that the change in demand deposits is zero.

(c) 1 point:

- One point is earned for calculating the increase in the money supply:
  5 × $5,000 = $25,000.

(d) 1 point:

- One point is earned for stating that the price of bonds will increase because the purchase of bonds increases the money supply, which decreases the interest rate.

(e) 1 point:

- One point is earned for stating that the cash deposit will not immediately change the money supply.