

## Suggested Solutions to Assignment 6

### Part B True/ False/ Uncertain Questions

*Explain why the following statement is True, False, or Uncertain according to economic principles. Use diagrams and / or numerical examples where appropriate. Unsupported answers will receive no marks. It is the explanation that is important*

**B-1. According to fundamental analysis, a rise in U.S. GDP and a fall in Canadian interest rates relative to U.S. interest rates jointly would lead to an increase in price of U.S. dollars in terms of Canadian dollars.**

#### Uncertain

The joint effect of a rise in U.S. GDP and a fall in Canadian interest rates relative to U.S. interest rates on the price of U.S. dollars in terms of Canadian dollars is ambiguous. The price of U.S. dollars can increase or decrease or remain unchanged depending on the magnitudes of the shift in the demand and supply curves of U.S. dollars.

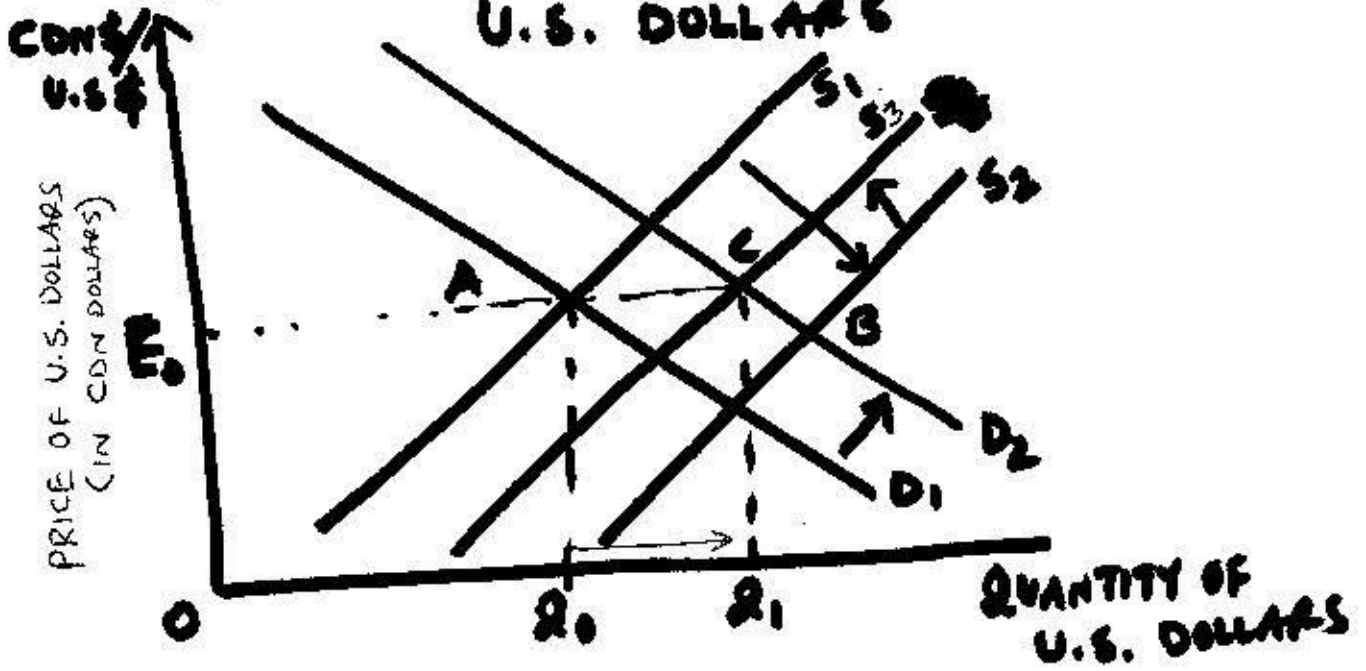
Figure-1, Figure-2, and Figure-3 display three cases of the foreign exchange market of U.S. dollars. The vertical axis of the diagram shows the price of U.S. dollars in terms of Canadian dollars and the horizontal axis shows the quantity of U.S. dollars traded in the market.  $D_1$  is the initial demand curve for U.S. dollars and  $S_1$  is the initial supply curve. The initial equilibrium of this foreign exchange market is at A with  $E_0$  as the equilibrium price of U.S. dollars in terms of Canadian dollars and  $Q_0$  as the equilibrium quantity of U.S. dollars sold in the market.

A rise in U.S. GDP would lead to an increase in the U.S. demand for imports. Hence the demand for foreign currency to buy those imports increases, which means that the supply of U.S. dollars to buy the foreign currency rises. The supply curve shifts right from  $S_1$  to  $S_2$  in all three figures. A fall in Canadian interest rates relative to U.S. interest rates implies a rise in U.S. interest rates relative to Canadian interest rates. Other things remaining constant, this would lead to a rise in the demand for U.S. financial assets (stocks, bonds, etc.) and a fall in the demand for Canadian financial assets. As a result, demand for U.S. dollars will increase, while simultaneously the supply of U.S. dollars will decrease as fewer U.S. citizens sell their dollars to buy Canadian assets. So, the demand curve shifts right from  $D_1$  to  $D_2$  and the supply curve shifts left from  $S_2$  to  $S_3$ , offsetting the rightward shift in the supply resulted from the increase in U.S. GDP. Hence the equilibrium moves from point A to point C. The actual magnitudes of the shifts will determine what will happen to the price of U.S. dollars at the new equilibrium.

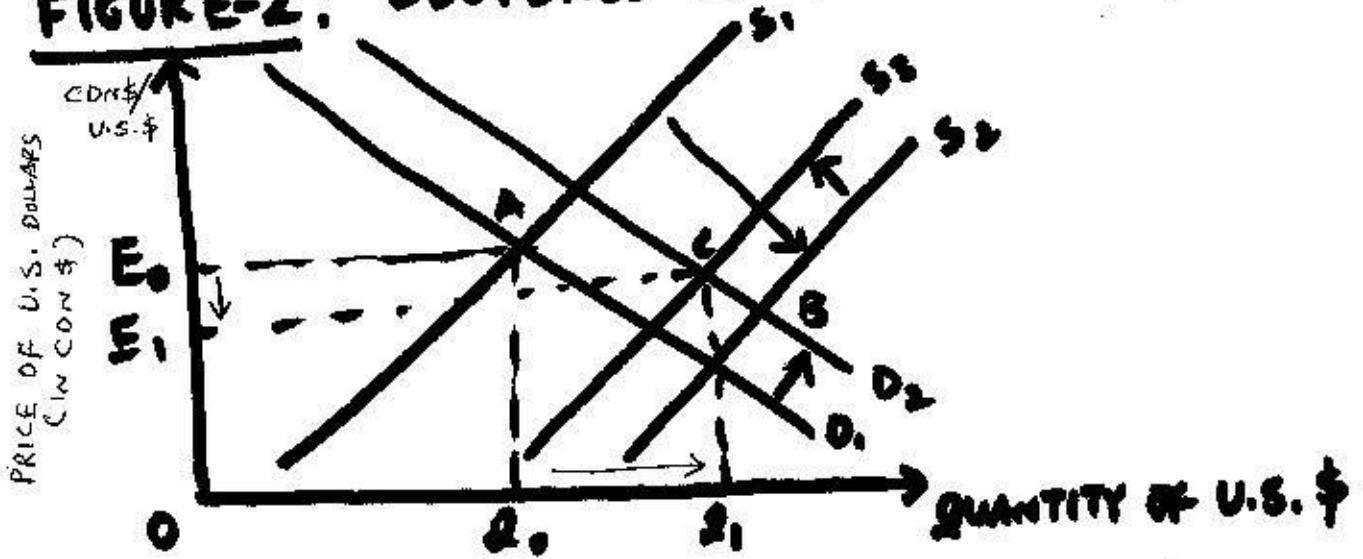
Figure-1 shows the case where the magnitude of the net rightward shift in supply curve is equal to the rightward shift in demand curve. Consequently, the price of U.S. dollars at the new equilibrium **C** remains unchanged. Figure-2 illustrates the case where the magnitude of the net rightward shift in supply curve is higher than the rightward shift in demand curve. Consequently, the price of U.S. dollars at the new equilibrium **C** decreases to  $E_1$ . Figure-3 displays the case where the magnitude of the net rightward shift in supply curve is lower than the rightward shift in demand curve. Consequently, the price of U.S. dollars at the new equilibrium **C** increases to  $E_1$ .

# ASSIGNMENT 6 - SOLUTION

## FIGURE-1: NO CHANGE IN PRICE OF U.S. DOLLARS



## FIGURE-2: DECREASE IN PRICE OF U.S. \$



## FIGURE-3: INCREASE IN PRICE OF U.S. \$

