Problem 4.5

dom. Chile f: US

$r > r_a \Rightarrow$ dem. $\$ \downarrow$

P_n : $R \uparrow$ $F \downarrow$

costly / limits:

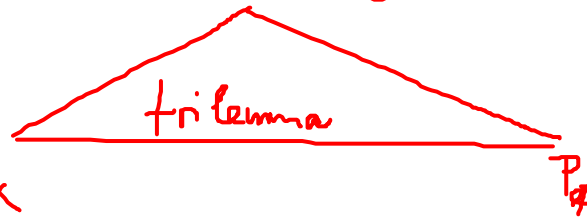$\rightarrow F = 0 \Rightarrow F < 0$ loans from comm. banks at rate r

$\rightarrow$ earn only r_a from R

$\rightarrow$ policy fails $\Rightarrow w \downarrow \Rightarrow R$ is worth less

$\Rightarrow$ capital controls can help to maintain P_n

IS_0

$P_0 = P_n$

$r_a = r_0$ — FX_0

MP_0

P_x P_β

attract. $\downarrow$ rat

$FX_1 = FX_2 = \cdots$

Y_0 — Y

P_n no free capital flows control over r, w

no control of w control over r P_x

trilemma

P_ϕ

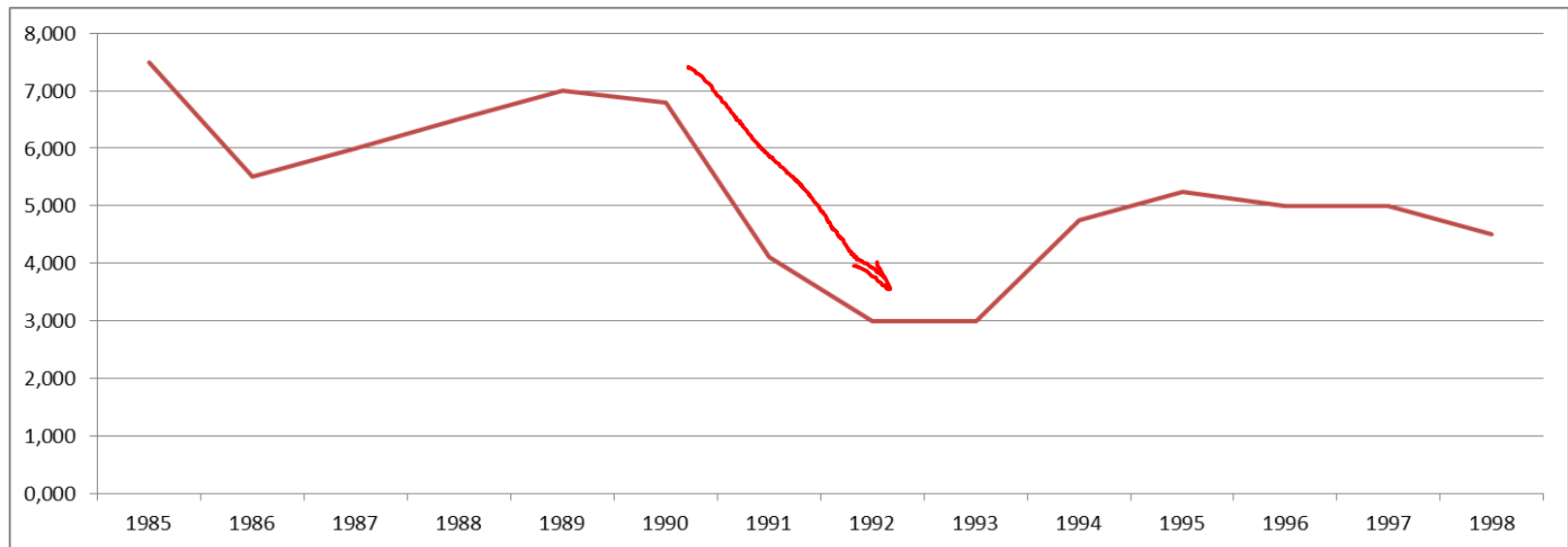no autonomous MP control over w
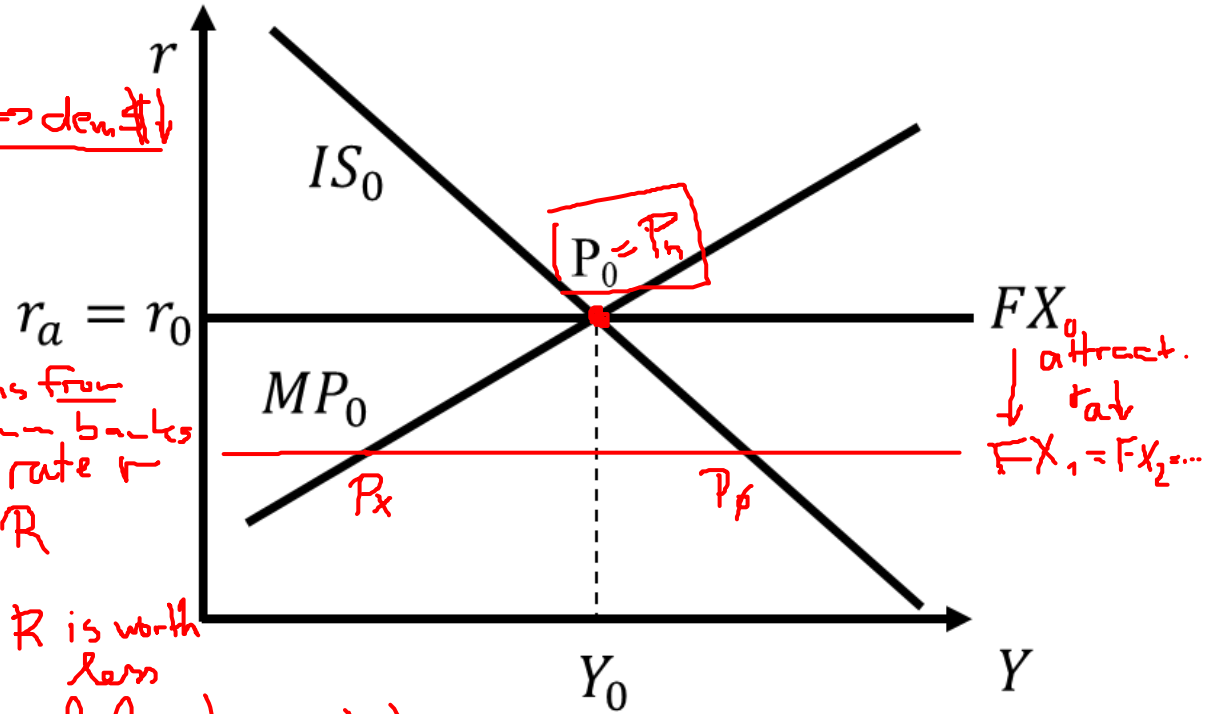
Interest rates US
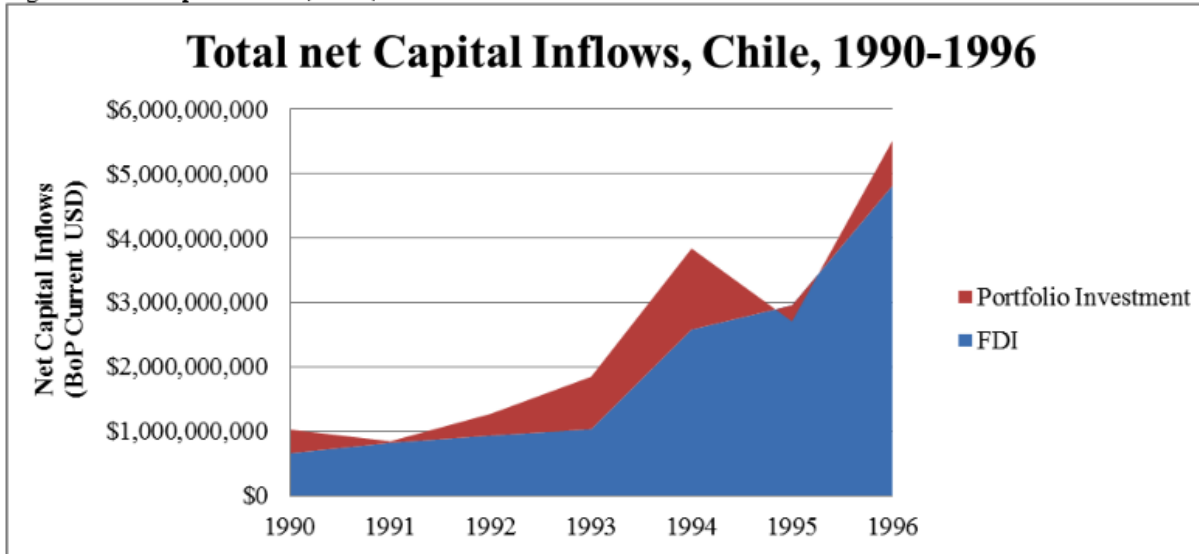
Figure 1 Total Capital Inflows, Chile, 1990-1996
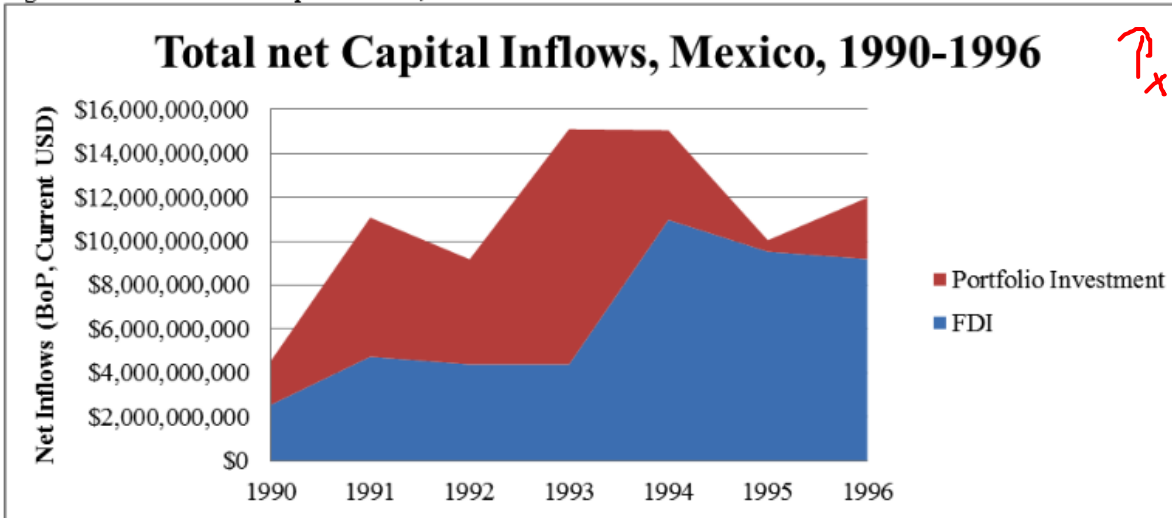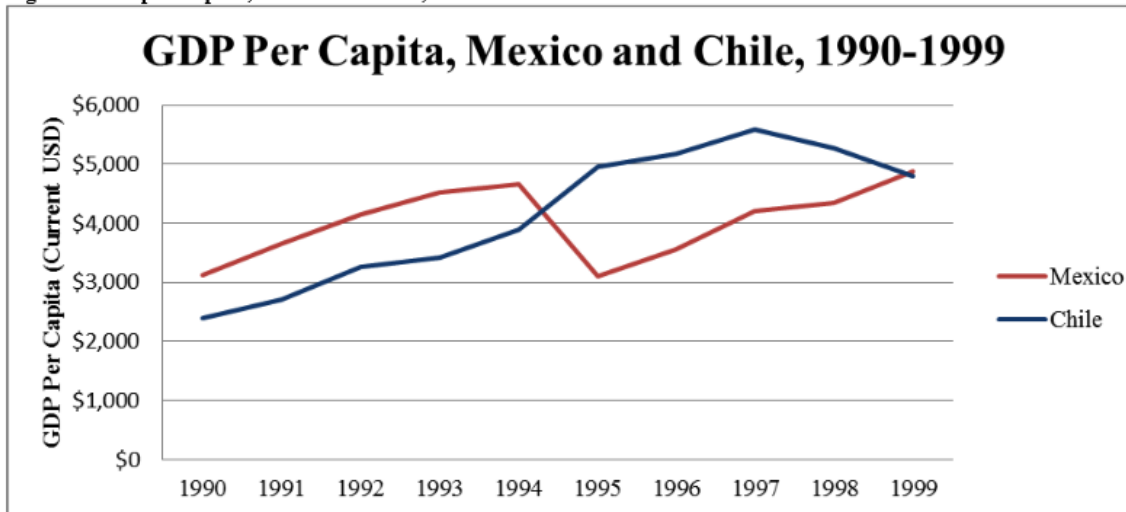

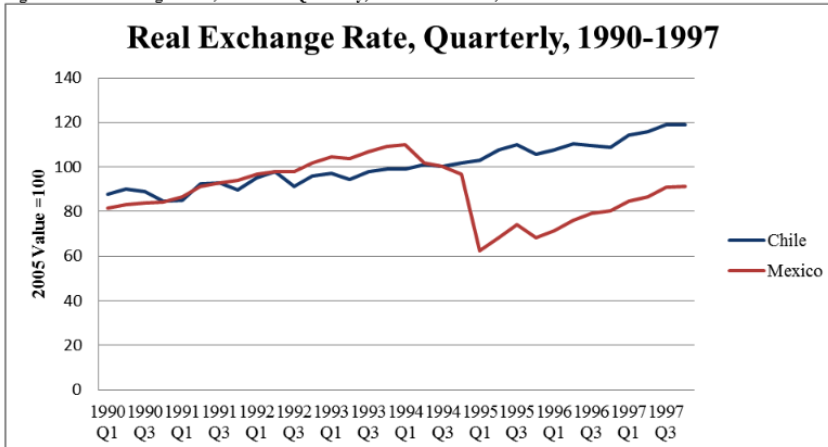**Figure 3 Mexico Total net Capital Inflows, 1990-1996**

Source: International Monetary Fund. International Financial Statistics. Accessed via World Databank.

Figure 6 GDP per Capital, Mexico and Chile, 1990-1999
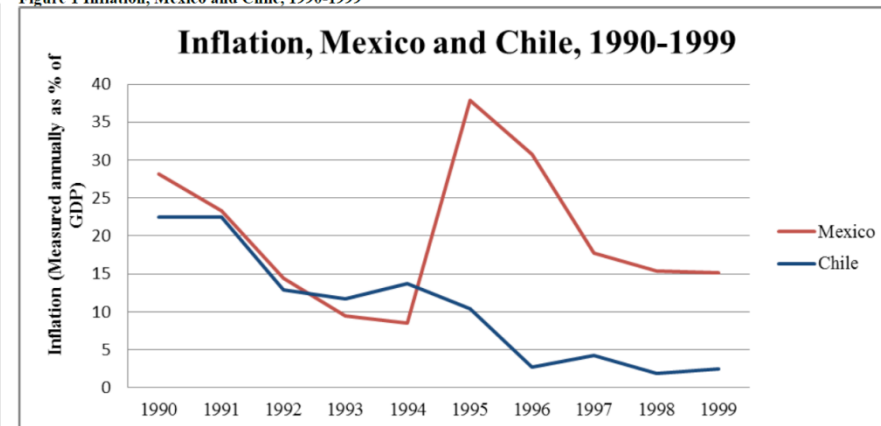

GDP Per Capita, Mexico and Chile, 1990-1999

Source: International Monetary Fund. International Financial Statistics. Accessed via World Databank.

Figure 5 Real Exchange Rates, Measured Quarterly, Chile and Mexico, 1990-1997

Real Exchange Rate, Quarterly, 1990-1997

Source: International Monetary Fund. International Financial Statistics. Accessed via World Databank.

Figure 1 Inflation, Mexico and Chile, 1990-1999

Inflation, Mexico and Chile, 1990-1999

Source: International Monetary Fund. International Financial Statistics. Accessed via World Databank.

Quelle: http://people.carleton.edu/~amontero/Travis%20Nordgaard.pdf

Additional exercise

Assume that the *FX*-curve is affected by a random shock u_t in period 1. Let the shock be white noise such that it is independent and identically distributed $u_t \sim IID(0, \sigma^2)$. This implies that today's shock will not persist in period 2. In period 1, the shock shifts the *FX*-curve downwards.

a. Explain the adjustments in period 1 and 2.
b. Describe how managed floating can help to prevent the disturbances.

Additional exercise
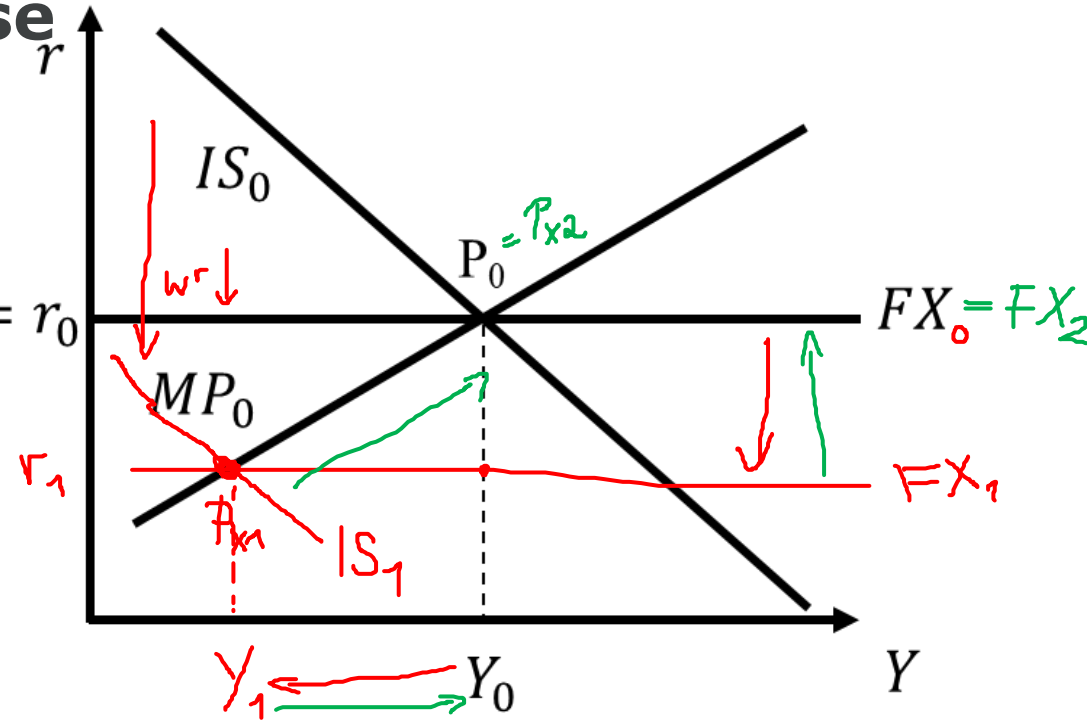
dom: Canada   for: US

a) **Period 1:**

$FX\downarrow \Rightarrow r > r_a \Rightarrow$ dem $\$\downarrow$

$\Rightarrow w\downarrow \Rightarrow w^r\downarrow \Rightarrow X'\downarrow \left.\begin{matrix}\\ \end{matrix}\right\} J'\uparrow$

$\Rightarrow Y\downarrow \Rightarrow$

CB: $Y\downarrow \Rightarrow r\downarrow \Rightarrow I\uparrow$

Period 2

$FX\uparrow \Rightarrow r < r_a \Rightarrow$ dem $\$\uparrow$

$\Rightarrow w\uparrow \Rightarrow w^r\uparrow \Rightarrow X'\uparrow \left.\begin{matrix}\\ \end{matrix}\right\} J'\downarrow \Rightarrow Y\uparrow \Rightarrow$

CB: $Y\uparrow \Rightarrow r\uparrow \Rightarrow I\downarrow$

r

IS_0

$P_0 = P_{X2}$

$r_a = r_0$ $w^r\downarrow$ $FX_0 = FX_2$

MP_0

r_1 J_{x1} IS_1

FX_1

$Y_1 \Leftarrow Y_0$ Y

Additional exercise

b_1 managed floating

$r = r' + \lambda_p(Y - \bar{Y}) + \lambda_I \pi + \boxed{\lambda_w w}$ $r_a = r_0$

$r < r_a \Rightarrow$ olen $\$ \hat{r} \rightarrow w \uparrow \rightarrow w' \uparrow$

No disturbances to GDP!

IS_0

P_0

MP_0

FX

$MPmf$

FX

P_x

IS_1

IS^m_0

Y_0

Y

r