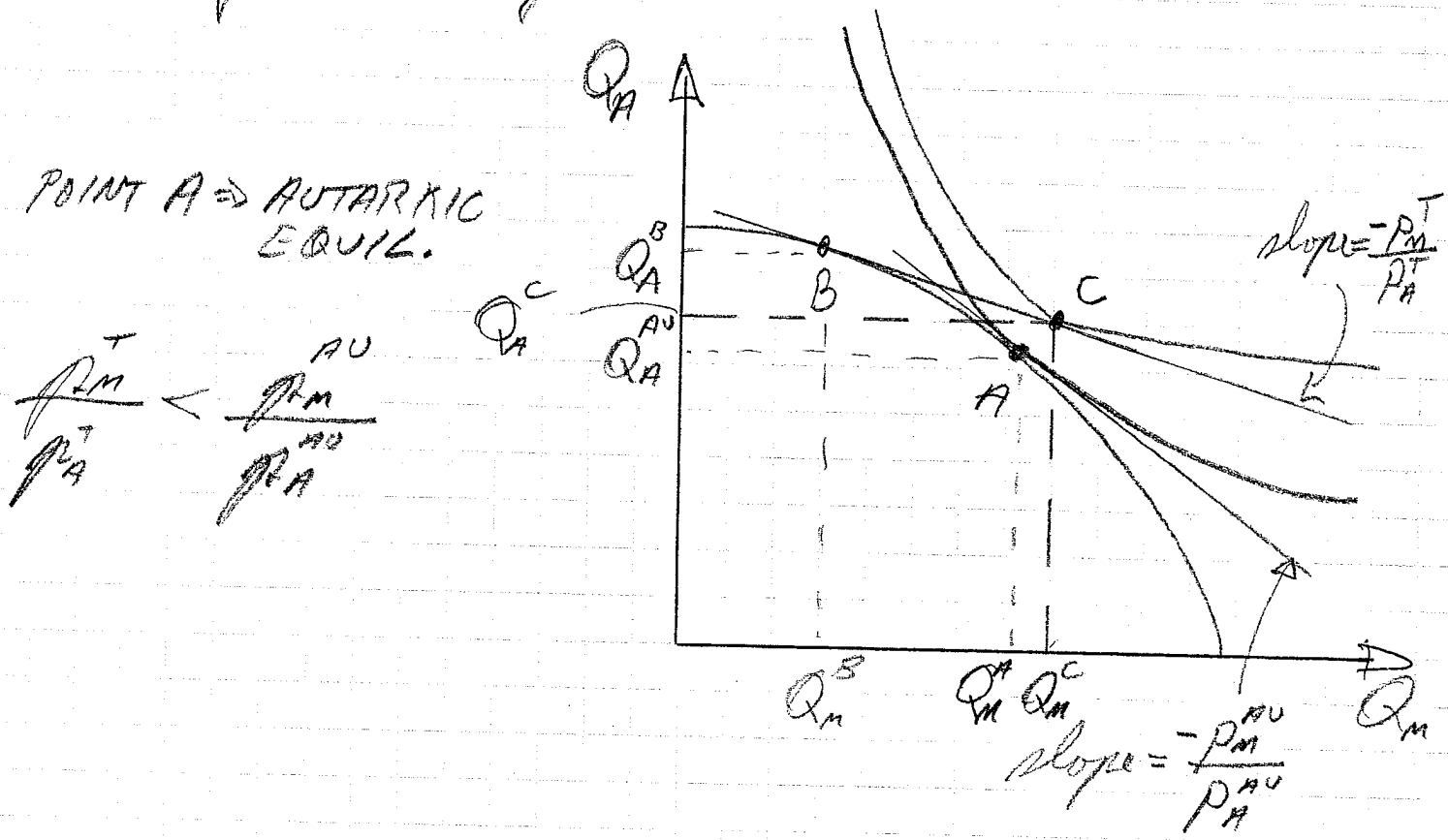


PROBLEMS CHAP. 3

1) The specific factors model considers a short-run time frame during which labor has enough time to move between sectors of the economy such that wages are equalized but not other factors such as land and capital. The idea is that it takes longer for capital and land to move between sectors when there is a difference in their returns.

3) A fall in the relative price of manufactures:



$\frac{P_M^{AU}}{P_A^{AU}}$ corresponds to the slope of the PPF curve at point A.

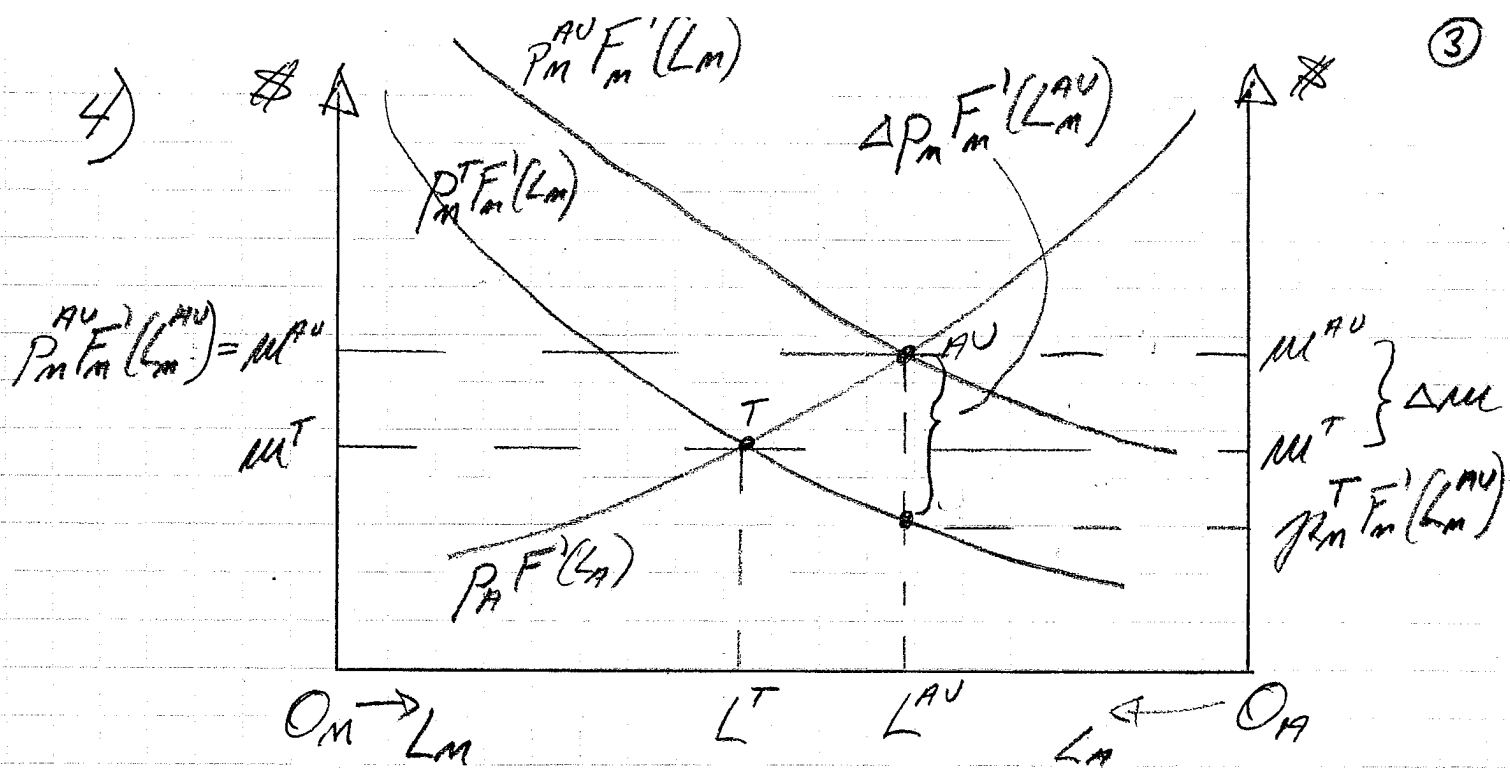
A lower relative price of manufactures under trade corresponds to a price slope that is less steep. This is the case at point B on the PPF curve.

a) With a lower relative price of manufactures under trade, the country lowers its production of the manufactured goods from Q_M^A to Q_M^B and increases that of agricultural goods from Q_A^A to Q_A^B .

At the given world price, the new production levels allow the country to increase its consumption levels to Q_M^C and Q_A^C .

b) The country exports $Q_A^B - Q_A^C$ agricultural goods and imports $Q_M^B - Q_M^C$ manufactured goods.

c) There are still gains from trade because, with the lower trade price for manufactures, the country can receive back more manufactures on world market from each agricultural goods it exports than it must forgo by producing them, i.e. it now has a comparative advantage in A goods.



a) Since $w^T > P_M^T F'_m(L_m^{AU})$, we have

$$\frac{\Delta w}{w^{AU}} < \frac{\Delta P_M F'_m(L_m^{AU})}{P_M^{AU} F'_m(L_m^{AU})}$$

$$\Rightarrow \frac{\Delta w}{w^{AU}} < \frac{\Delta P_M}{P_M^{AU}}$$

In terms of labour wages, M-goods are therefore cheaper.

b) In terms of A-goods, since $P_A^{AU} = P_A^T$ and $w^T < w^{AU}$, we have

$$\frac{w^T}{P_A^T} < \frac{w^{AU}}{P_A^{AU}}. \text{ Hence, the real}$$

wage decreases in terms of A-goods.

c) Without more information on consumer preferences, we cannot tell if workers are better or worse off. It would

(4)

much depend on whether they tend to spend more on A-goods or M-goods.

7) a) Workers gain an extra 52 weeks of eligibility for UI.

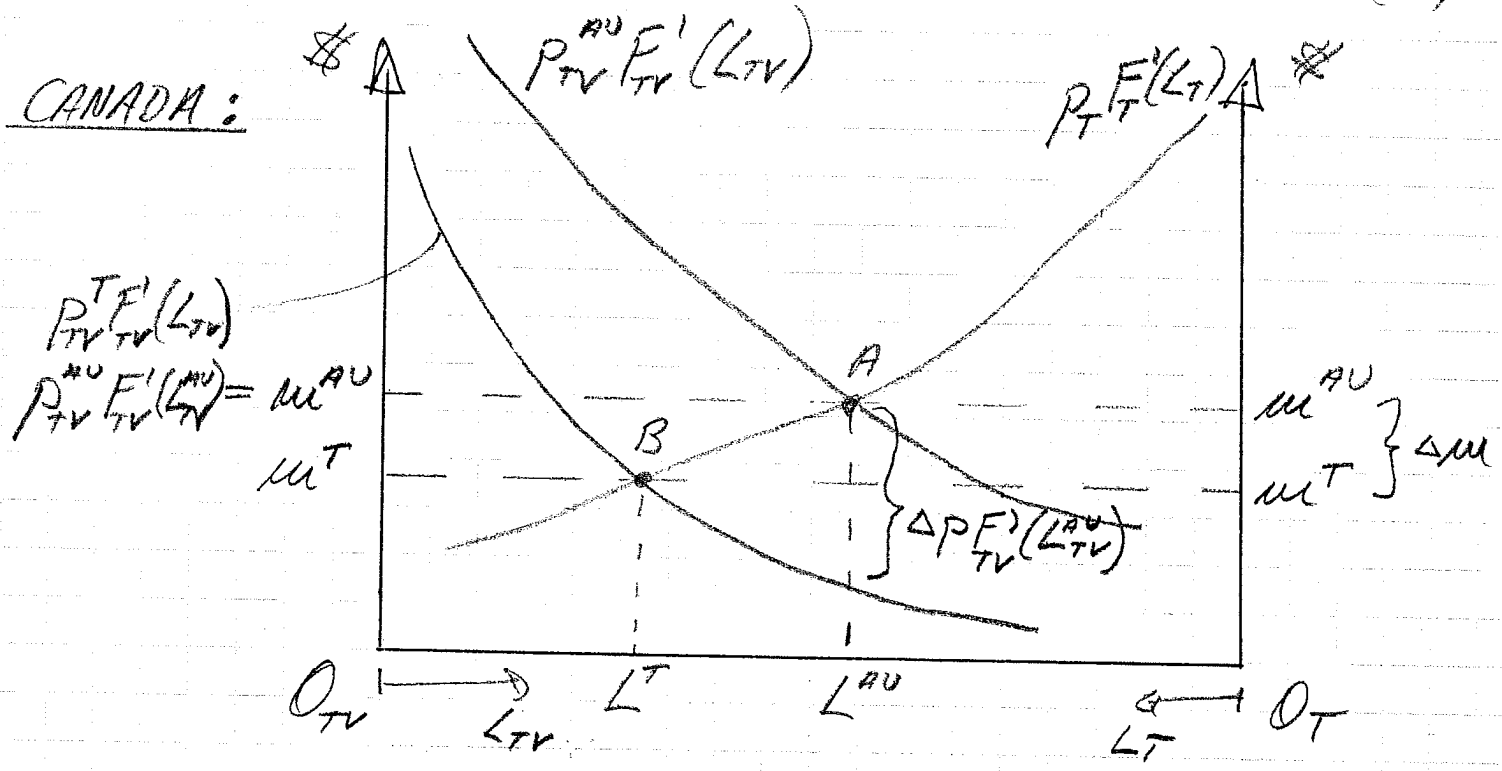
To be eligible, it must be shown that they have lost their job because of increased imports. Also, they must be enrolled in an approved training program.

b) To qualify to the proposed program, a worker must simply have been "displaced" by the standard definition of the BLS, has served at the previous job for a minimum amount of time, and have suffered an earnings loss.

The idea is to provide workers with a "wage insurance" i.e. a partial compensation for lost wages only a worker finds a new job. It only kicks in when a worker finds a new job and is proposed to compensate 50% of wage losses.

8) The cost of the plan for 1999 was estimated to fall between 2 and 3 billion \$ had it been adopted with a 50% insurance coverage of lost wages.
 This compares to a present UI insurance cost of 20 billion \$.

9) 2 goods: TV and Timber (T).
 2 countries: Canada (C) and Mexico (M)



point A \Rightarrow AUTARKY EQUILIBRIUM
 point B \Rightarrow TRADE EQUIL.

Since $m^T < m^{AU}$ and $P_T^T = P_T^{AU}$, the real wage in terms of timber drops with free trade.

Through graphical inspection, we have:

$$\frac{\Delta w}{w^{AU}} < \frac{\Delta P_{TV} F'_{TV}(L_{TV}^{AU})}{P_{TV}^{AU} F'_{TV}(L_{TV}^{AU})} = \frac{\Delta P_{TV}}{P_{TV}^{AU}}$$

Hence, the percent drop in TV prices exceeds that of nominal wages. Therefore, the real wage increases with trade.

b) i) Effect of trade on the real capital income:

The equil. condition for capital income is: $\frac{r}{P} = MPK$

Since $L_{TV}^T < L_{TV}^{AU}$, we have $MPK^T < MPK^{AU}$

$$\Rightarrow \frac{r^T}{P_{TV}^T} < \frac{r^{AU}}{P_{TV}^{AU}} \Rightarrow \frac{r^T}{P_T^T} < \frac{r^{AU}}{P_T^{AU}}$$

since $P_{TV}^T > P_{TV}^{AU}$ and $P_T^T = P_T^{AU}$.

Consequently, capital owners in Canada lose from trading with Mexico in terms of both TVs and timber prices.

ii) Real land income:

Let $q \equiv$ land rental rate.

$MP_L \equiv$ marginal product of land.

We have: $\frac{q}{P} = MP_L$

$$L_T^T > L_T^{AU} \Rightarrow MPT^T > MPT^{AU}$$

$$\Rightarrow \frac{Q_T^T}{P_T^T} > \frac{Q_T^{AU}}{P_T^{AU}}$$

And given that $P_T^T = P_T^{AU}$ and $P_{TV}^T < P_{TV}^{AU}$:

$$\frac{Q_T^T}{P_{TV}^T} > \frac{Q_T^{AU}}{P_{TV}^{AU}}$$

Consequently, land owners in Canada gain from trade in terms of both TV and timber prices.

c) In Mexico's case, everything is reversed, i.e. land owners lose from trade and capital owners gain.

d) In each country, it is the specific factor used in the export (import) sector, unambiguously gains (loses) from trade.