

9-30-08

SPECIFIC FACTORS

KEY QUESTION:

EFFECTS OF TRADE ON
FACTOR EARNINGS.

RESULTS:

- ABUNDANT FACTOR GAINS
- SCARCITY " IS WORSE OFF
- UNCLEAR EFFECTS ON
MOBILE FACTOR

FOCUS IS ON REAL RETURNS

$$\frac{r_k}{p_M} \quad \frac{r_k}{p_A} \quad \text{CAPITAL}$$

$$\frac{r_T}{p_M} \quad \frac{r_T}{p_A} \quad \text{LAND}$$

$$\frac{w}{p_M} \quad \frac{w}{p_A} \quad \text{LABOR}$$

REMARK ON RATIOS

EXAMPLE: SUPPOSE X & Y
INCREASE THEN

$$\frac{X}{Y} \uparrow \text{ IF}$$

% CHANGE IN X >
% CHANGE IN Y

REMARKS ON RETURNS

NICE PROD. FUNCTIONS

\implies FACTORS GET

PAID THE VALUE OF
THEIR MARGINAL PRODUCT

AND

WE ASSUME MARGINAL
PRODUCTS ARE FUNCTIONS
OF ONLY FACTOR RATIOS

$$W = MPL_A \cdot p_A = MPL_M \cdot p_M$$

LABOR

$$\Rightarrow \frac{W}{p_A} = MPL_A, \quad \frac{W}{p_M} = MPL_M$$

CAPITAL

$$r_K = MPK \cdot p_M$$

$$\Rightarrow \frac{r_K}{p_M} = MPK$$

AND

$$\frac{r_K}{p_A} \text{ CAN BE "CALCULATED"}$$

LAND

$$r_T = MPT \cdot p_A$$

$$\Rightarrow \frac{r_T}{p_A} = MPT$$

AND

$$\frac{r_T}{p_M} \text{ CAN BE "CALCULATED"}$$

ALSO : -4-

$$MPL_A \left(\frac{T}{L_A} \right)$$

$$MPL_M \left(\frac{k}{L_M} \right)$$

$$MPK \left(\frac{k}{L_M} \right)$$

$$MPT \left(\frac{T}{L_A} \right)$$

EXAMPLE :

$\uparrow L_M$ KEEPING k CONSTANT

$$\Rightarrow \uparrow \frac{L_M}{k} \Rightarrow \downarrow MPL_M$$

$$\& \quad \uparrow MPK$$

$\uparrow T$ KEEPING L_A CONSTANT

$$\Rightarrow \frac{T}{L_A} \uparrow \Rightarrow \uparrow MPL_A$$

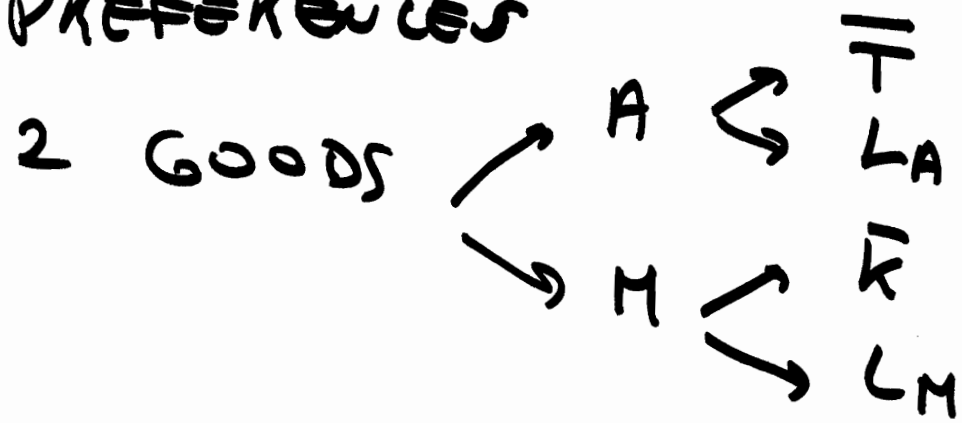
$$\downarrow MPT$$

2 COUNTRIES EXAMPLE

H: RELATIVE ABUNDANCE OF CAPITAL

F: RELATIVE ABUNDANCE OF LAND

NILE PPF'S, IDENTICAL PREFERENCES

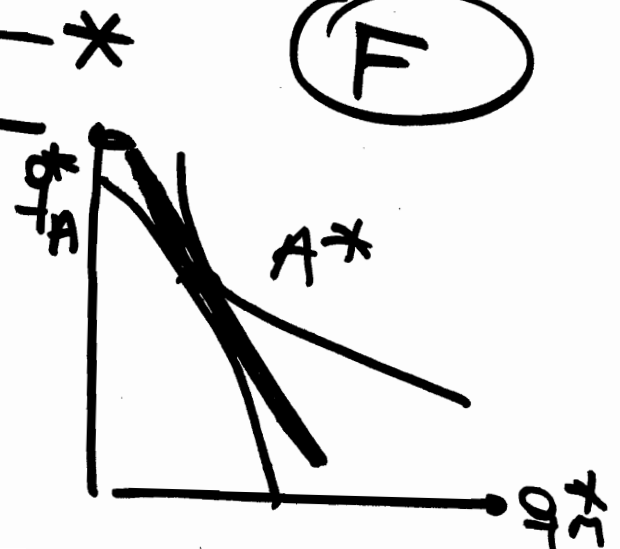
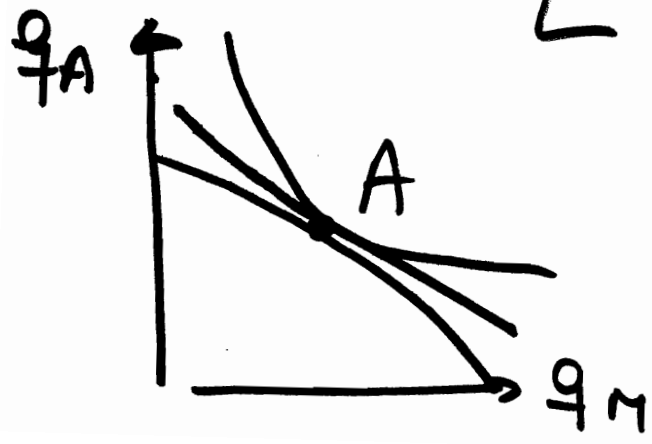


ENDOWMENTS:

$$\frac{\bar{K}}{\bar{L}} > \frac{K^*}{L^*}$$

(H)

(F)

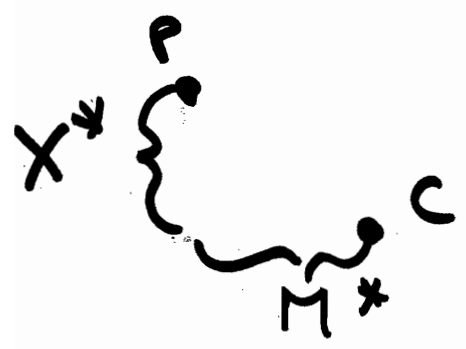
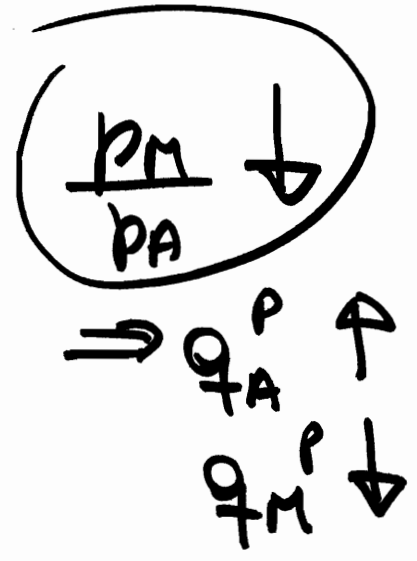
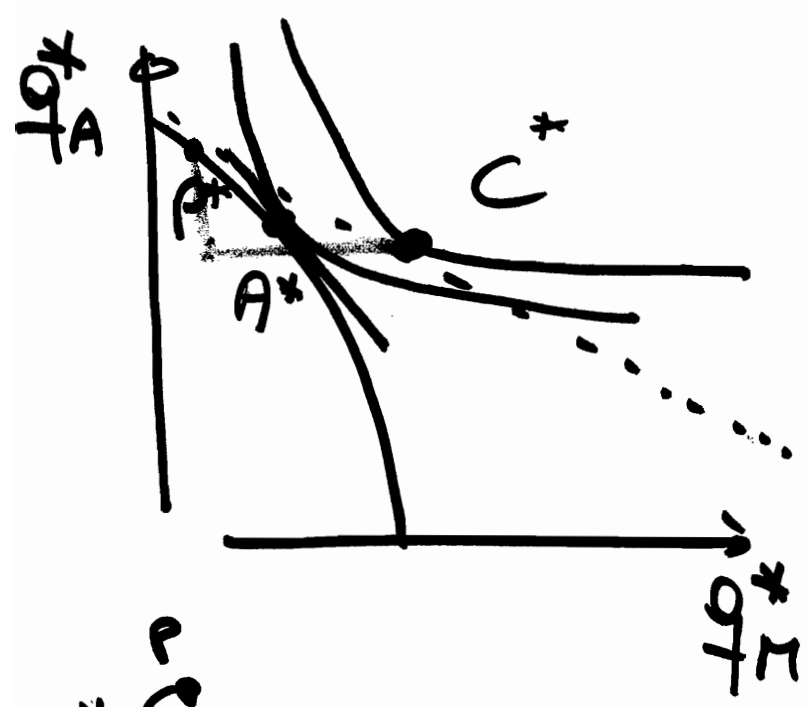


$$\left(\frac{P_M}{P_A}\right)^A < \left(\frac{P_M}{P_A}\right)^{A^*}$$

FREE TRADE

$$\left(\frac{P_M}{P_A}\right)^A < \left(\frac{P_M}{P_A}\right)^{FT} < \left(\frac{P_M}{P_A}\right)^{A^*}$$

FOREIGN: AUTARKY → FT



COUNTRY F
 EXPORTS Q_A AND
 IMPORTS Q_M

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PRICE CHANGES:

HERE FOR FOREIGN:

$$\frac{P_M}{P_A} \downarrow$$

WE ASSUME P_M CONSTANT

$$\& P_A \uparrow$$

GUESS OF RESULTS:

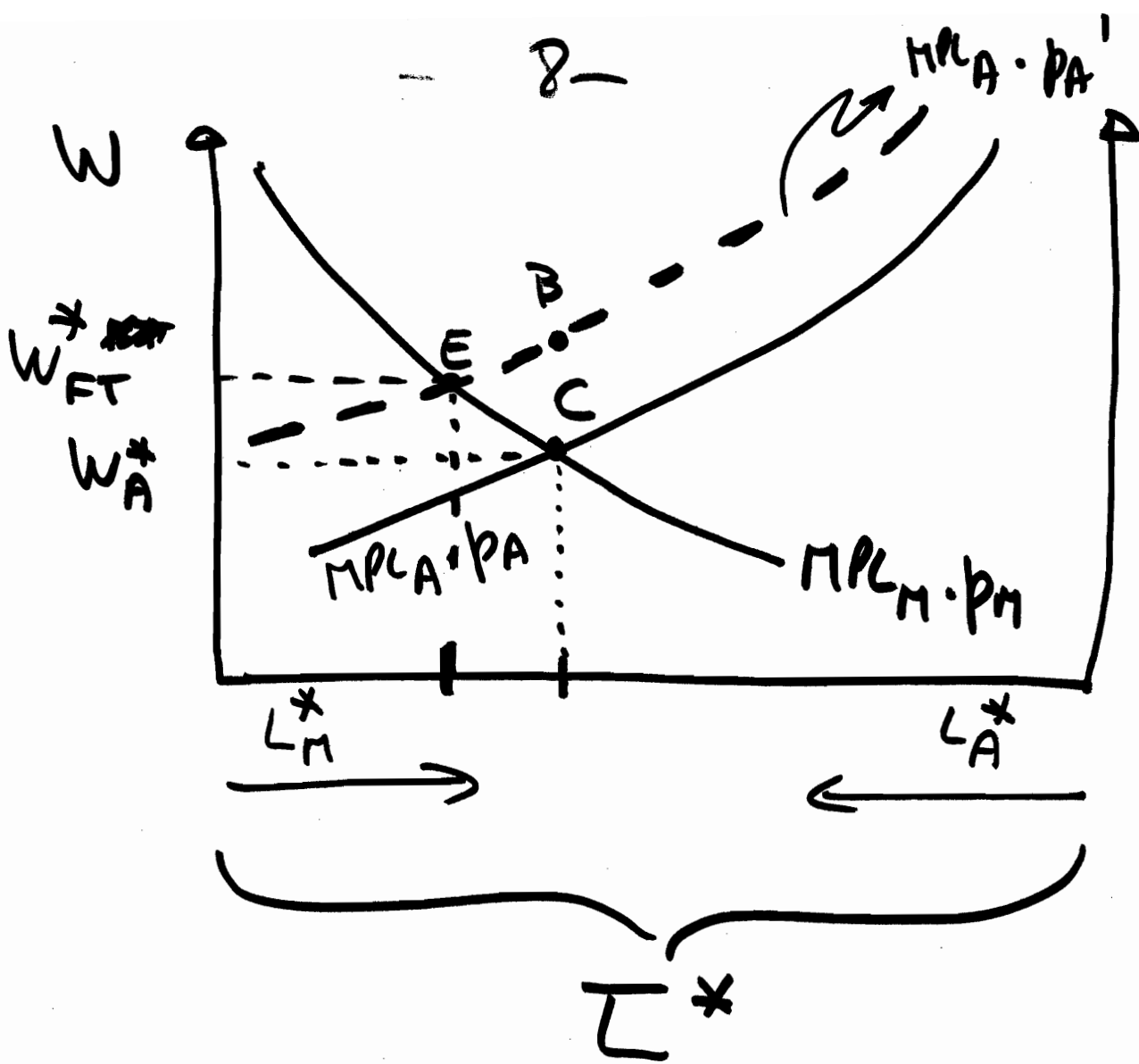
COUNTRY ABUNDANT
IN LAND:

$$\uparrow \frac{r_T}{P_A} \quad \uparrow \frac{r_T}{P_M}$$

$$\downarrow \frac{r_K}{P_A} \quad \downarrow \frac{r_K}{P_M}$$

LABOR MIXED EFFECTS

$$\frac{W}{P_A} \quad \frac{W}{P_M}$$



AUDARKY \rightarrow FT
 \rightarrow ϕ p_A , p_M CONSTANT
 (p_A TO p_A^{FT})

PRODUCTION :
 ϕ L_A^* , \downarrow L_M^*

WAGE \uparrow
 BUT $\% \Delta W$ \ll $\% \Delta p_A$