Exemplary Exam Questions for
World Agricultural Markets

1. What are the main assumptions in the Ricardian model of international trade?
2. Explain the theory of comparative cost advantages (formally and intuitively). Why do comparative cost advantages lead to relative price differences?
3. Why do relative price differences lead to international trade?
4. Is the Ricardo model realistic (pros and cons)?
5. What are the assumptions underlying the neoclassical approach to trade theory (two factors and two goods economy, 2x2)?
6. Describe the equilibrium conditions in a 2x2 model and show graphically how their fulfillment
determine both factor prices and output of the two sectors.
7. Explain the concept of factor price insensitivity.
8. Explain the factor price equalization (FPE) theorem. Under which conditions does trade lead to factor price equalization and how can this be displayed graphically?
9. Explain the effect of an increase in the price of one commodity on factor prices in a 2x2 model (Stolper-Samuelson theorem).
10. Explain the effect of an increase in the endowment of one factor on production in a 2x2 model (Rybczynski theorem).
11. What are the assumptions of the Heckscher-Ohlin (HO) model?
12. Describe graphically the equilibrium with free trade in the HO model. Show that the engagement
in free trade leads to welfare gains.
13. Show that under the assumptions of the HO model a unique relationship between factor price and commodity price ratio exists.
14. What might happen to the HO model results under factor intensity reversals (FIRs)?
15. What might happen to the HO model results under different demand conditions?
16. Leontief tried to verify the HO theorem. Describe the design and results of these tests and discuss their possible shortcomings.
17. Explain the Heckscher-Ohlin-Vanek model (HOV, factor content of trade) and discuss its key assumptions.
18. Illustrate the results of the HOV model in a suitable diagram and discuss the position of factor content of production and consumption.

19. How did Trefler test the HOV model? Were his results better than earlier tests?
20. Explain the Ricardo-Viner model ("specific factors") with two goods and three factors. Why can it be seen as a short term version of the HO model?
21. What is the impact of endowment changes in the in the Ricardo-Viner model with two goods and three factors? Distinguish between mobile and immobile factors?
22. What is the impact of product price changes in the Ricardo-Viner model with two goods and three factors?
23. Explain the concept of returns of scale in general. Why do they give incentives for trade?
24. Explain the assumptions of the monopolistic competition model.
25. Explain the equilibrium before and after trade in the monopolistic competition model with the demand function: q= Q * $(\frac{1}{n} - \beta(p - \bar{p}))$
26. Discuss the role of inter- and intra-industry trade on world agricultural markets. How can these be measured?
27. How would you estimate the effect of a regional trade agreement between two countries i and j on bilateral trade with the gravity model? State, explain and interpret the model explicitly. Pay attention to indices and multilateral resistance.
28. McCallum (1995) estimated trade flows between American states and Canadian provinces to analyze the relevance of national borders for trade. The result became famous as the "border puzzle". Explain his approach, method and results. How was the border puzzle solved?
29. Illustrate the effects of a tariff for a large country. What are the welfare effects of optimal import tariffs for the large country and for the world?
30. Compare an import tariff with an import quota which provides equal budget revenues. What happens under monopoly conditions?
31. Discuss tariff escalation for agricultural products. How can tariff escalation be measured?
32. Define and explain nominal and effective protection rates. When is the nominal rate of protection equal to the effective rate of protection?
33. Compare Producer Support Estimate (PSE) with appropriate measures of welfare changes for the case of a price-based protection in a large country.
34. Explain the concept of tariff rate quotas (TRQ). Why and how are they usually applied?
35. The administration procedures used for managing a TRQ have important implications. Discuss the most important administration procedures.
36. Discuss the role of standards and regulations in international trade, and explain the WTO agreements which are most important for agricultural trade in this context.

37. Explain the basics of the WTO's Dispute Settlement Understanding and the dispute settlement
process.
38. Use an example to illustrate the various steps in the WTO dispute settlement process.
How can the parties react to the panel findings?
39. Describe the current state of the WTO talks with regard to agriculture.

1.a

1a * What are the main assumptions in the Ricardian Model of international trade?

TRB
H-O-
zero profit

1.b

1.b * What are the assumption of Demand in Ricardian Model? Explain!

1.c

* Explain about: -MPL (Marginal Product of Labour)
- Slope of PPF / Opportunity Cost (OC)
- Terms of Trade (ToT)

How we determine the wages and the relative price

$$W = P \cdot MP_L \quad (VMP_L)$$

$$P_W \cdot MPL_W = P_C \cdot MPL_C$$

$$\frac{P_W}{P_C} = \frac{MPL_C}{MPL_W}$$

$\frac{P_W}{P_C}$: relative price

1.d

1d * What is the difference between absolute advantage and comparative advantage ?

TTLND

① 2 x 2 x 1 = 2 countries 1 factor
2 goods ex: labour

② Technology → Constant return to scale
→ Average Production cost is the same over time

③ Labour requirements:
- Internationally immobile → no labour movement, so wages are determined domestically.
- Domestically mobile: wages in each industry are identical / same
- full employment: no worker outside.

④ Demand side → identical preferences
→ homothetic preferences

⑤ Trade cost is zero
↳ with trade, there is only a single common price for each good.

⑥ Wages: identical between sector
- determined domestically
- Paid according to VMP.

a.) MPL = the extra output that we produce by using one mor of labour.

b) Slope of PPF (Production Possibility Frontier)
↳ shows the various combination of two goods th produced by given fixed resources.

Reflects the OC of goods. ⇒ the amount of q_1 that must be to obtain one more unit of q_2.

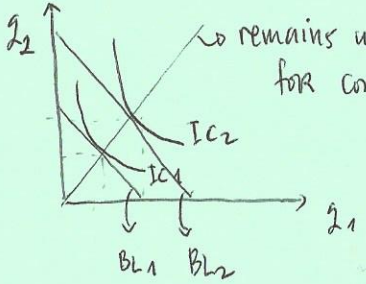
Germany 3rd largest → 2013. 66 billion.

c.) Terms of Trade: The price of a country's exports devided imports is called the terms of trade.
- Because home exports wheat so ToT = P_w/P_c
- Because foreign exports cloth so ToT = P_w/P_c

Ag-Ma Milk+ Wheat

1. Identical preferences = same preferences

2. Homothetic preferences
↳ at given product prices the ratio of q_1 to q_2 in consumption will be the same for any income levels.



↳ remains unchanged for constant prices.

If relative prices are unchanged an increase in income will not affect the ratio of consumption.

Konsumsi akan naik dgn proporsi yg sama between both goods

Absolute advantage:
when a country has the best technology for producing a good

Comparative advantage:
a country has a comparative advantage in a good when it a lower opportunity cost of producing than another count
↳ How well a country produces a good compares with ot

2 * Explain the theory of comparative cost advantages (both formally & intuitively). why do comparative cost advantages lead to relative price differences?

↳ Why? Because: the relatives prices has the relationship with the cost per unit labor requirements. For example: suppose that home country has a comparative advantages in producing good 1, meaning that $a_1/a_2 < a_1^*/a_2^*$ then it implies that the home autarky relative price of good 1 is lower than in foreign country.

3 * Why do Relative price differences lead to international trade?

4 * Is the Ricardo model Realistic (pros & cons)?

5 * What are the assumptions underlying the neoclassical approach to trade theory (2x2 economy)?

* Comparative advantage is: how well a country produces a good compares with other good.

Ex: Comparing two products from input requirements.
- Production Per Labor Hour

	cloth	wine
England	100	120
Portugal	90	80

England: $\frac{a_1}{a_2}$ = relative price of g_1

$\frac{a_2}{a_1}$ = relative price of g_2

$90/80 = 9/8$; $80/90 = 8/9$ → smaller OC *

cloth* = $100/120 = 5/6$ ✓ smaller OC ; wine = $120/100 = 6/5$

England has comparative advantage in cloth → export cloth

Portugal -"- -"- -"- wine → export wine

Result: Both countries gain from trade by specializing according to their relative cost advantage.

Relative price differences lead to international trade because it would give the incentive of trade if the world / int'l price is between two countries ($p^a \leq p \leq p^{a*}$)

↳ world price

P_1/P_2 = relative price of the 2 goods

* $P < p^a < p^{a*} \Rightarrow P_1/P_2 \downarrow$ Home: $P_1/P_2 \Rightarrow P < p^a \rightarrow$ produce g_2

Foreign: $P < p^{a*} \rightarrow$ produce g_2

no incentive to produce good 1 at home nor foreign

world supply of $g_1 = 0$

* (P) $p^{a*} > p^a \Rightarrow$ H: $P > p^{a*}$; F: $P > p^{a*}$ $P_1/P_2 \uparrow$ → produce g_1 → Produce g_1 $p^a < p^{a*} < P$

↳ steeper than slope PPF in foreign

No incentive to produce good 2 at H or F, world supply of $g_2 = 0$

* $p^a \leq P \leq p^{a*}$ → Producer has incentive to produce both goods

→ Int'l relative Price in the equilibrium

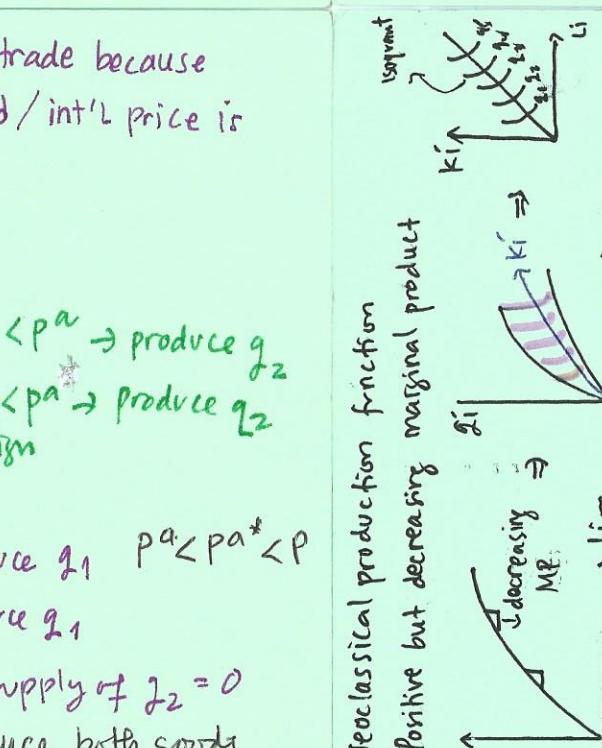
trade.
- It helps to understand the concept of comparative cost advantages compare to absolute cost advantages.

Pro's:
- good as basic model for int'l trade
- explain about comparative advantage
- Consider different wage between country

Con's:
- only one input
- no migration
- Perfectly competitive market

Allow us to show the technological different

a.) Neoclassical production function
→ Positive but decreasing marginal product

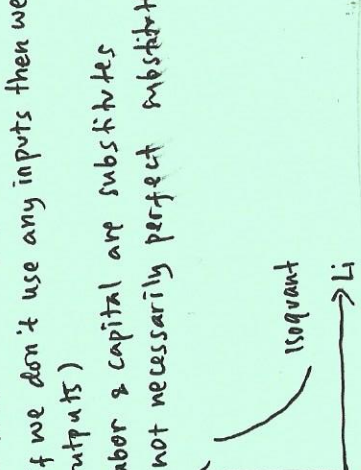


b.) Economies of scale: Constant return to scale
Size doesn't matter, if we add output 2x requires /need exactly 2x inputs

c.) No "free lunch" → $f(0,0) = 0$
(if we don't use any inputs then we will not have any outputs)

$f(0,0) + f(0,0) = 0 = f(1,1) + f(-1,-1) = 0$

d.) Labor & capital are substitutes
(not necessarily perfect substitutes)



e.) factor endowment (both are given / fixed)

6 * Describe the equilibrium conditions prior to trade in a 2x2 model. Does trade lead to factor prize equalization (FPE)? ↓

yes,

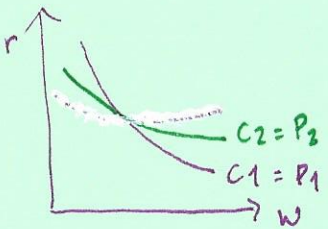
- Trade in goods has the ability to equalize factor prices
- Trade in goods is a perfect substitute for trade in factors.

8 * Explain the factor price equalization theorem!

Under which conditions does trade lead to factor price equalization & how can this be displayed graphicall

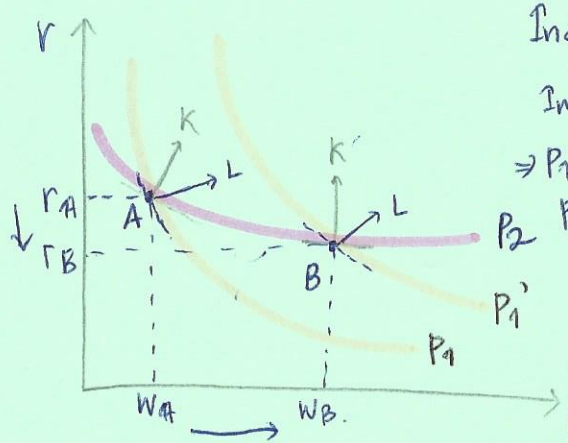
7 * Explain the concept of Factor Price Insensitivity!

FPI: for given product prices P_1 & P_2, there is one unique set of factor prices w^* & r^* which give zero profits in both countries and are insensitive to changes in factor endowments provided that: - Both goods are produced
- The curves do only intersect once



If both goods are produced & if the zero-profit condition → graph intersect only once
⟹ factor price insensitivity.

9 * Assume 2 countries, 2 factors & 2 commodities & explain the effect of an increase in the price of a commodity on factor prices (Stolper,-Samuelson theorem).



Industry 1 in Point A, L
Industry 2 in Point A, Ca
⇒ P_1 ↗ becomes P_1' so that price of capital redu the wages increase.

Equilibrium condition of 2×2 model –.

a. full employment

$\bar{L} = L_1 + L_2 \quad \bar{K} = k_1 + k_2$

$\bar{L} = a_{1L} \cdot g_1 + a_{2L} \cdot g_2$

$\bar{K} = a_{1K} \cdot g_1 + a_{2K} \cdot g_2$

Producing on PPF use of all factor endowment

Factor Price Intensity

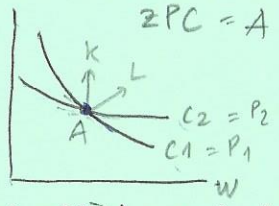
b. Zero profit condition in both countries ✓

$c_1 = R_1 \quad c_2 = R_2$

$R_1 = P_1 \quad c_2 = P_2$

$\Downarrow \qquad \Downarrow$

$c_1(w,r) = P_1 \qquad c_2(w,r) = P_2$



↑

ZPC derive FPI; for given (P_1, P_2), there exist a unique (w,r) if both goods are produced & no FIR's occur.

→ These will lead to FPE

Tutorial No. 10, 13/5/14

Factor Price Equalisation (FPE) is one of the important result (H-O-S) Heckscher-Ohlin-Samuelson Model. It was develo 1949 By Paul Samuelson.

FPE: Under Free trade (Trade costs is zero), factor prices will be the in the two countries regardless of their factor endowment → equa

The some factor prices equalisation will happen if only both countrie

a. identical technology
b. production of both goods in each countries ✓
c. identical consumer preferences
d. No Factor Intensity Reversal (FIR's) ✓

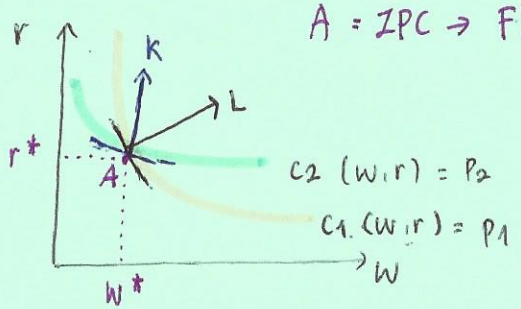
} Factor Price Insensitivity con

Factor Price Insensitivity (FPI)

for given (P_1, P_2) there exist a unique (w,r) if both goods are produced & no FIR's occur.

⇒ each price vector (P_1, P_2) corresponds to unique factor price (w,r), Factor endowments dont matter

A = ZPC → FPI



Zero profit condition P=C

- The stolper Samuelson Theorem -

An increase in the relative price of the good will increase real return to the factor used intensively in that good and the real return to the other factor.

OR: An increase in the relative price of the good which is user intensively will increase the real wage & will decrease the re price of capital.

⇔ If $P_1 \uparrow \rightarrow C_1 \uparrow$ because ZPC → P=C

$\frac{dw}{w} > \frac{dP_1}{P_1} > \frac{dP_2}{P_2} > \frac{dr}{r}$ } ⇒ the change in the price good has magnified effect on real return the factor prices

++ + 0 –

* Assume 2 countries, 2 factors and two commodities & explain the effect of an increase in the endowment of one factor on production (Rybczynisky theorem)

* Describe graphically the equilibrium with free tra
in the H-O model!

Determine the welfare gains from free trade!
Show that the engagement in free trade leads to welfare gains

Welfare gains:

Both countries benefit from free trade, consumer covid get both and Indifference curve is shifting upward (higher utility)

- H-O model: Each country will export the good which use its abundant factor intensively (and import the good which the scarce factor intensively).
- Winners at home: (workers)
- winners at Foreign (capital owner)

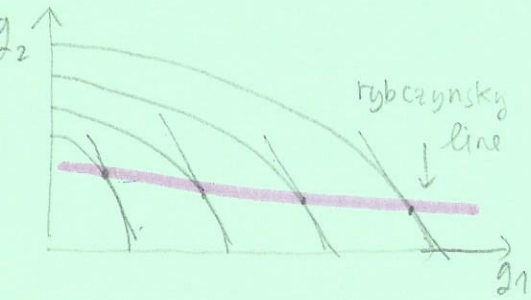
11 * What are the assumptions of the Heckscher-ohlin model?

13 * Show that under the assumptions of the HO model a unique relationship between factor price & commo price ratio exists!

- Rybczynsky theorem imply on 2x2x2 model when there's endowment changes and its impact to output level.
- An increase in the endowment of one factor (the other factor constant) will lead to an increase of the output of the industry which uses this factor intensively and to a reduction in the output of the industry which uses the other factor intensively.

Ex: Immigration & Dutch diseases.

⇒ Dutch disease is discovery of oil (exportable resources) in the Netherland → they will lead to decreasing to the traditional sector.

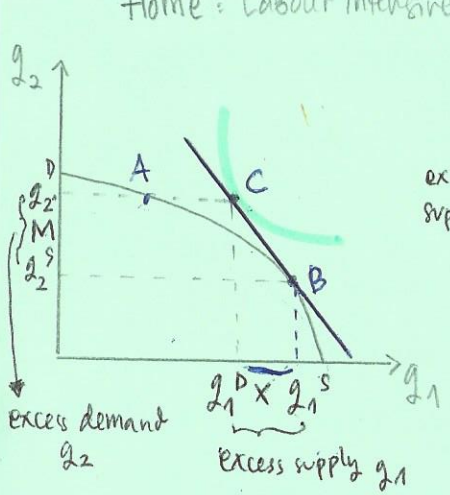


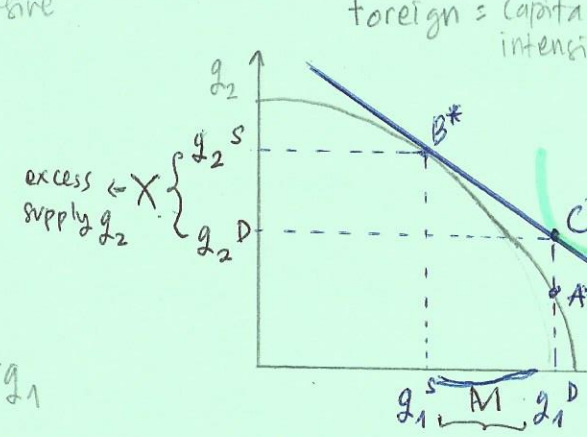
If g_1 is labor intensive and L ↑, K ↓ (constant)

then:

$$\frac{dg_1}{g_1} > \frac{dL}{L} > \frac{dk}{k} > \frac{dg_2}{g_2}$$

$$\frac{dk}{k} = 0 \qquad \frac{dg_2}{g_2} = (-1)$$





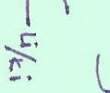
A, A* = autarchy

B, B* = production

C, C* = consumption.

a. 2 x 2 x 2 = 2 countries, 2 goods, 2 factors

b. Technology: - neo classical production function (Law of deminishing return)



- identical technology between countries

$a_{iL} = a_{iL}(w,r)$

$a_{iK} = a_{iK}(w,r)$

$a_{iL} = a_{iL}^*$; $a_{iK} = a_{iK}^*$

c. Relative factor endowments (Home is labor intensive / foreign is capital intensive)

$K/L \neq K^*/L^* \rightarrow K/L < K^*/L^*$

d. Economies of Scale (Constant Return to Scale)

size doesn't matter, doubling the output requires (exactly) doubling the input

e. Demand preferences: - homothetic preferences

- identical preferences in both countries

f. Factor mobility: - perfect mobility between sectors

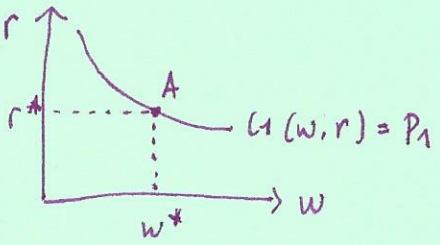
- immobile between countries

g. Competition: perfect competition both for factor & products.

fPI (factor Price Intensitivity)

↳ for each set of product prices ($\bar{P}_1$, $\bar{P}_2$), there is exis unique set of factor prices w^*, r^* which give zero in both industries.

Zero profit is one of the assumptions in H-O model

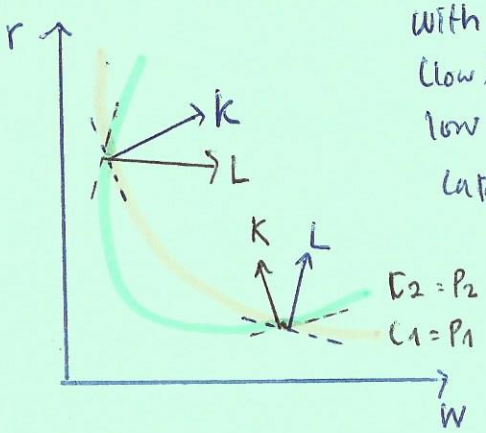


Point A shows the fPI, where a unique factor (w^*, r^*) ex

14 * What might happen to the H-O model results under factor intensity reversals?

↓

FIR = More than one intersection between 2PC



With FIR, FPI is violated with high (low) endowment, the combination with low (high) wage and high (low) capital price occur.

15 * What might happen to the H-O model result under different demand condition?

* In consumer theory, a consumer's preferences are called homothetic if they can be represented by a utility function which is homogeneous of degree-1

16 * Leontief tried to verify the HO theorem. Describe the and results of these tests and discuss their possible shortcomings

assumption (H-O) model: for a capital abundant country

$\left(\frac{K}{L}\right)^{US}_{X} > \left(\frac{K}{L}\right)^{US}_{M.} \Rightarrow$ then the Leontief Result / Par

$\left(\frac{K}{L}\right)^{US}_{X} < \left(\frac{K}{L}\right)^{US}_{M}$

Leontief Paradox in economics is that the country with the world's high per worker has a lower capital / labour ratio in exports than imports. rical test attempt to test the H-O model in 1954

Result: US (the most capital abundant country in the world) labour intensive commodity & imported capital intensive in contradiction with the HO theory

18 * Illustrate the results of the HOV model in a suitable diag and discuss the position of factor content of production Consumption

Labor abundant "Home A" $\frac{K}{L} < \frac{K^*}{L^*}$ Capital abundant "Foreign B"

V^A = endowment print for A (home)

L^A = all labour available in country A

K^A = all capital -"- -"-

ad^A = consumption point for country A (in the diagonal

Why diagonal? ⇒ because it is identical homothetic pr (same indifference curve, same ratio of goods in given independent to the income level).

FIR: a property of the tech. for two industries such that their ordering of relative factor intensities is different at different factor prices.

*Ex: one industry may be relatively Ci compare to the other at high relative wages and labor intensive at low relative wages.

Some proportions of the H-O model require the absence of FIR's

↳ IPC is the assumption of H-O model & it's derive FPI (Factor Price Intencitivity which require producing of both goods and No FIR's. So under FIR, HO model could not be apply.

Explanation: (Possible shortcoming to the leontief paradox)

1. Different Technology
2. 1947 ⇒ special year (shortly after WW2)
3. Ignorance of factor demand "land" (only 2 factors)
4. Different factor qualities (eg. skilled vs non skilled labor)
5. Trade cost → trade is not free of cost (trade policy!)
6. Leamer (1980) → repairs the test and give term "wrong"

↓

He argued that leontief performed the wrong test (especially if trade balance is not zero).

⇒ Solution the HOV model

H-O model could not be applied H-O model assumed identical preferences. (Same indifference curve) and homothetic preferences.

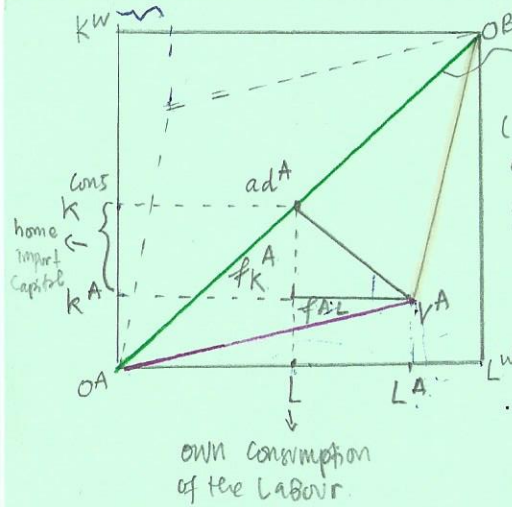
By homothetic preferences, the autarchy price between country will be different → incentive to trade

Before trade: $pa^* > pa \leftrightarrow \frac{P_1^{*a}}{P_2^{*a}} > \frac{P_1^{a}}{P_2^{a}}$ ⇒ with different demand,

→ foreign and home autarchy prices could be equal and there's no incentive to trade.

So, no FPE

Stolper-Samuelson could not be applied.

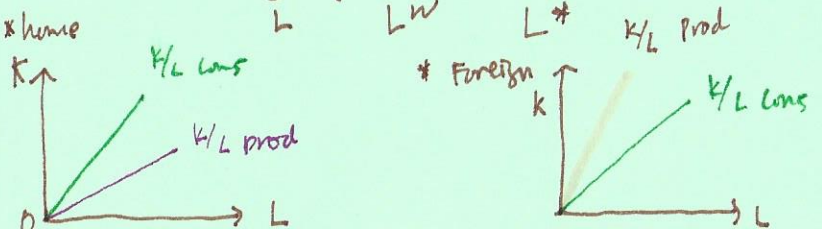


for countr
•) exports f
•) imports f

$$\ast \frac{K^{m=A}}{L^{m=A}} < \frac{(K^m - f_k^m)}{(L^m - f_L^m)}$$

in production | in consumption

Additional $\frac{K}{L} < \frac{k^w}{L^w} < \frac{k^*}{L^*}$



19. How did Trefler test the HOV model ? were his results better than earlier tests

20. Explain the Ricardo-Viner model ("specific factors") with two goods and three factors.

Why can it be seen as a short term version of the HO model ?

assumptions :

a. Labor, perfectly mobile domestically
b. capital { specific to sector 1 / — " — 2

c. Internationally, all factors are immobile
d. Identical technology : neo classical production function
e. short run and intermediate time horizon.

Profit maximization : $MC = MR$

for Labour : $w = VMP_L$

$w = p \cdot \frac{\partial q_i}{\partial L_i}$

since L is perfectly mobile within sector then :

$p_1 \cdot \frac{\partial q_1}{\partial L_1} = w = p_2 \cdot \frac{\partial q_2}{\partial L_2}$

22. What is the impact of product price changes in the Ricardo-Viner-Model with 2 goods & 3 factors ?

if $P_1 \uparrow$ and P_2 constant, then change in Labour allocation → wage also increase

* Impact of P_1 on the wages

$\frac{dP_1}{P_1} > 0$ and $\frac{dP_2}{P_2} = 0$

$\frac{dP_1}{P_1} > \frac{dw}{w} \Rightarrow \frac{w}{P_1} \downarrow , \frac{w}{P_2} \uparrow$ } impact of $P_1 \uparrow$ to real wage prices.

* Impact of $P_1 \uparrow$ on the sector specific factors

a) for industry 1, we have zero profits :

$R_1 = C_1$

$P_1 = c(w, r_1)$

$\frac{dw}{w} < \frac{dP_1}{P_1} < \frac{dr_1}{r_1} \Rightarrow$ impact on real capital price in industry $\frac{r_1}{P_1} \uparrow , \frac{r_1}{P_2} \uparrow$

∴ Sector-specific capital owners in industry 1

23. Explain the concept of Returns of Scale in general. Why do they give incentives for trade ?

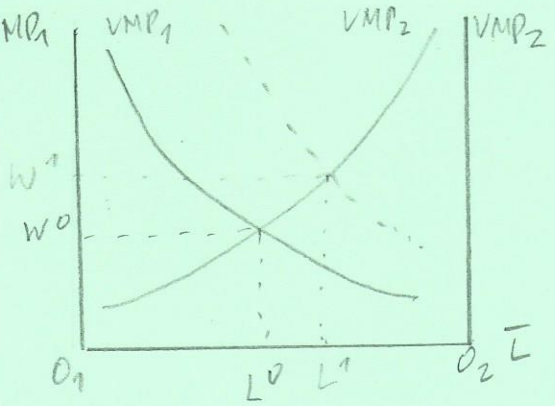
↳ Because different economies of scale will lead to different productivity / cost of production → different prices → Comparative advantages.

real price of sector-specific capital in industry 2:

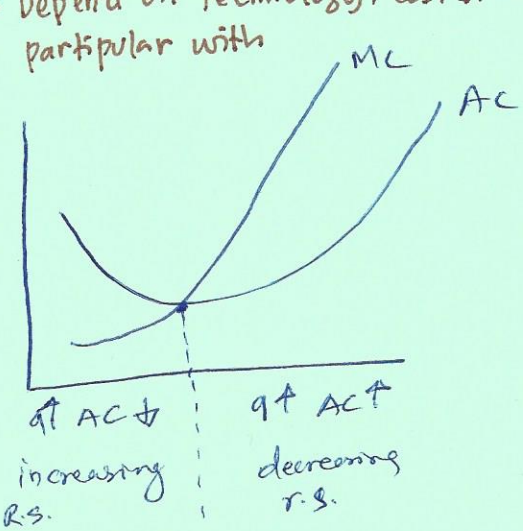
$\frac{r_2}{P_1} \downarrow \quad \frac{r_2}{P_2} \downarrow$

summary: $\frac{dP_1}{P_1} \uparrow, \frac{dP_2}{P_2} = 0$

$\Rightarrow \frac{dr_1}{P_1} > \frac{dP_1}{P_1} > \frac{dw}{w} > \frac{dP_2}{P_2} > \frac{dr_2}{r_2}$



- depend on ... particular with



IRS means the more q produced, the less cost so the better return/incentive in trading occur due to differences of specialization in good.

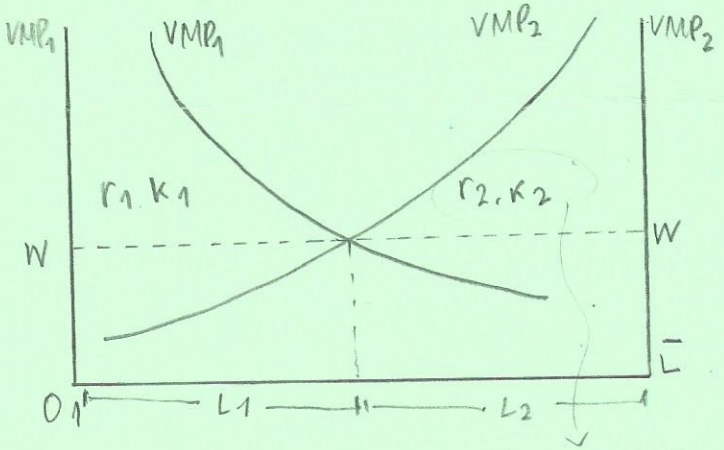
Trefler (1995) use sign test & Rank test of HOV model where $f^m = V^m - s_m \cdot V^w$.
The first sign test (50% correct signs) is not really convincing. Then there are extensions to allow for different technologies.
With his approach, HOV performance improves but not by much.
He allows for different technology $\Rightarrow \neq$ Productivities between countries but all factors within a country share a common productivity.

$f_j^m = \delta_m \cdot V^m - s_m \cdot V^w$

δ = scalar between 0-1 specific to each country

δ's can be estimated. (60-62, 50 → 62)

- The idea is that: earnings of specific of fixed factors (such as capital & land) will go up/down, the most due to changes in relative prices (that is, they are most sensitive to relative price changes) because in the short run, they are "stuck" in a sector. and cannot be employed elsewhere. In constrast mobile factors (such as labor). can offset their losses somewhat by seeking employment in other industries

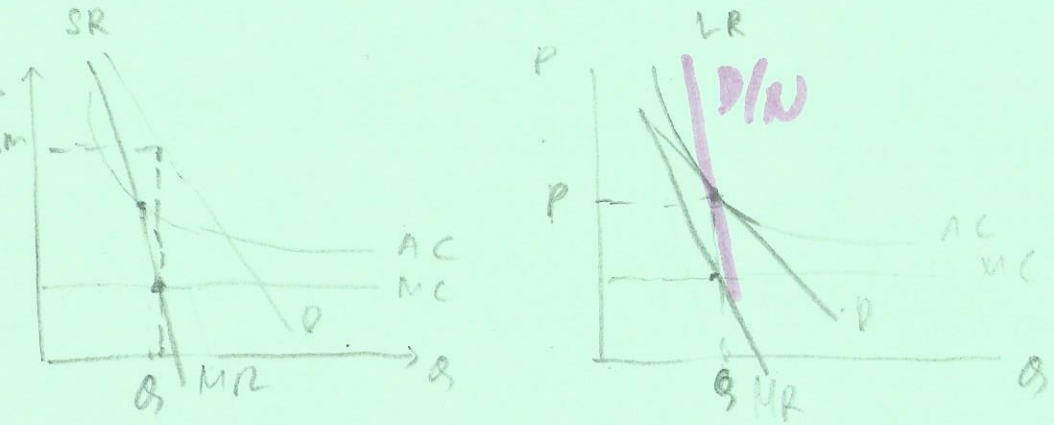


Specific factor
→ can't be changed each other

24 Explain the assumptions of the Monopolistic competition model.

25. Explain the equilibrium before & after trade in the monopolistic competition model with the demand function: $q = Q * \left(\frac{1}{n} - \beta(p - \bar{p})\right)$

Before trade



26 Discuss the role of inter- and intra industry trade world agricultural markets. How can these be measured?

Inter-industry trade → a trade of products (ex-im) from two different industry

Intra-industry trade → a trade of products (export that belong to the same industry:

* Benefit of Inter:
1. Concentrate on producing specific types of production
2. Stimulates innovation in industry.

27 Discuss different methods in order to measure mar power and their possible disadvantages.

Measurement of Market Power:

1. Traditional (empirical) I O
→ SCR (Structure - Conduct-Performance)
↓ seller concentration, product differentation → what firms do to compete. → seller profitability:
2. New IO
3. PTM

a. prices of competitor are taken = given

free entry & exit → long run = zero profit

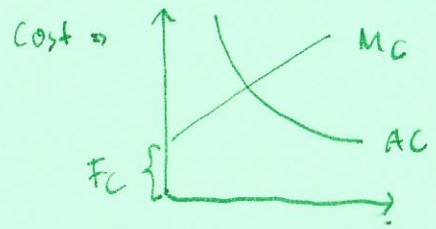
b. There are variety of products, but producer will reduce some variety

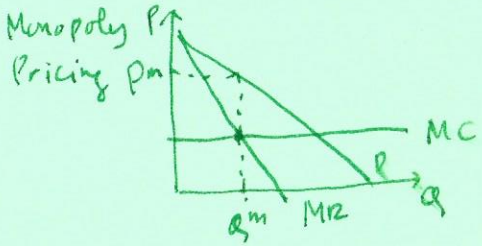
↳ IRS ⇒ Increasing return to scale

⇒ AC decrease with the level of output increase

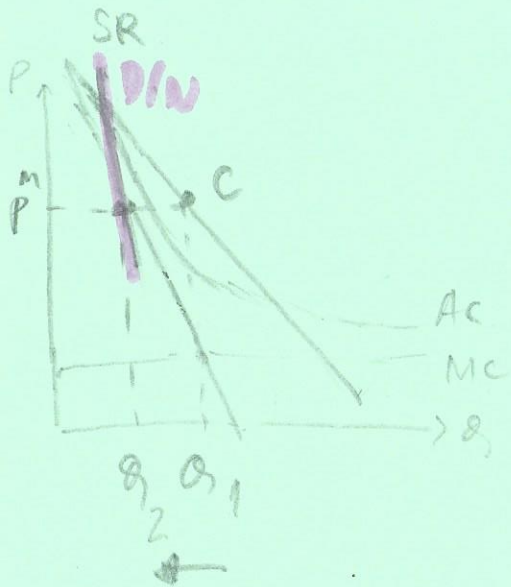
AC ↓, Q ↑ krn $AC = \frac{TC}{Q}$

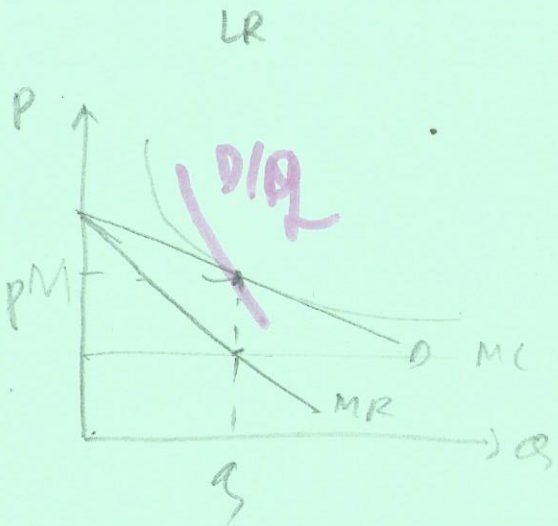
c. Product differentiation (love of variety)





after trade.





Note:

Inter & Intra trade are important in world agricultural market every country has their own natural resources & tech which could le comparative adv. so inter industry is applied. And for some cases wh countries have the same product, Consumer wants to have love of va so intra industry is applied.

⇒ Measurement IIT index (Grubel-Lloyd Index)

$IITm = 1 - \frac{|Xm - Mm|}{Xm + Mm}$

If IIT = 0 → pure inter industry

If Xm = Mm ⇒ IIT = 1 → pure intra industry

28 When exchange rate change we observe often a phenomenon called "incomplete exchange rate pass-through (ERPT)". What does this phenomenon describe and what could be the general reasons for it?

General reasons:

1. Marginal cost changed
   ⇒ only when the import country is big.

2. Mark up changed ⇒ PTM ! → Pricing To Market Approach

$$\frac{P - MC}{P} = \frac{\theta}{|\varepsilon|}$$

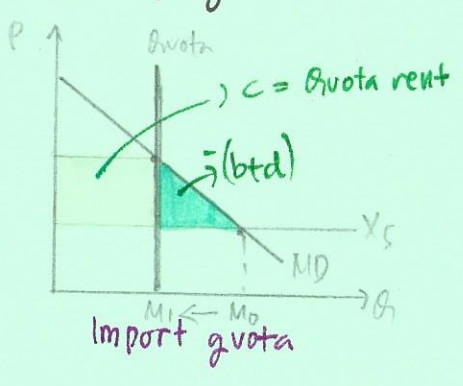
Mark up + MC = Price in destination country.

29 Explain the general Idea of the pricing to market (PTM) approach & the measurement of PTM through the model of Knetter (1989) !

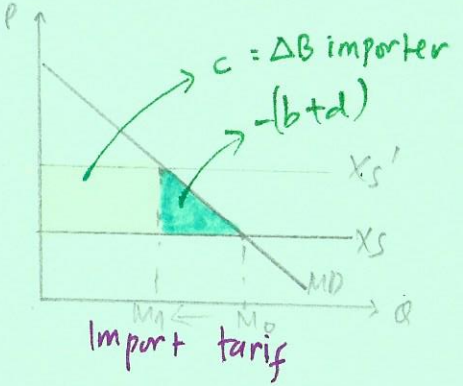
30 Illustrate the effects of a tariff for a large country. Are the welfare effects of optimal import tariffs for large country & and for the world?

16 06

31 Compare an import tariff with an import quota which provides equal budget revenues. What happens under monopoly conditions?



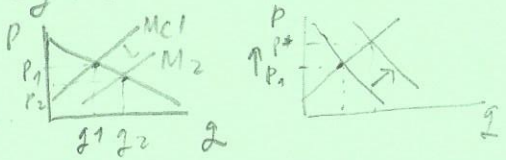
Import quota



Import tarif

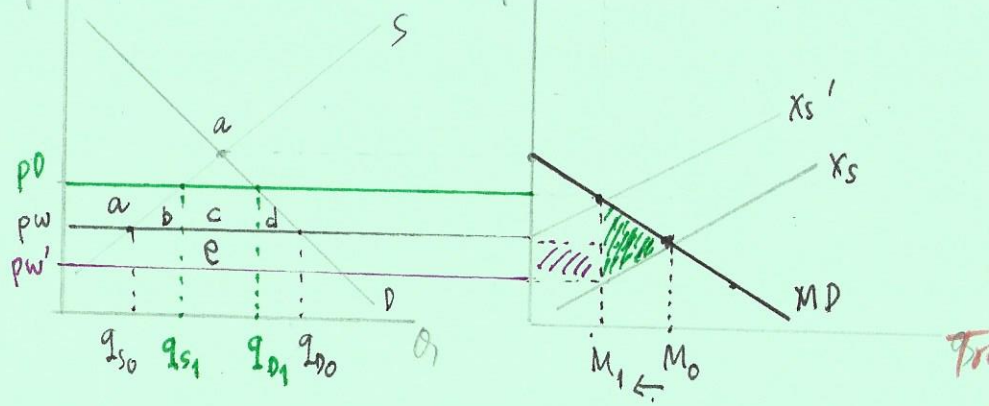
Import quota and import tarif are perfectly equivalent, f
resulting the same effects

⇒ a phenemenon after an appreciation of the dollar, the import prices do not decreases by the same extent as the exchange rate increased.



Reasons: - MC changed

The demand reaction



$\Delta PS = +a$

$\Delta CS = -(a+b+c+d)$

$\Delta B = +c+e$

$\Delta W = -b-d+e$

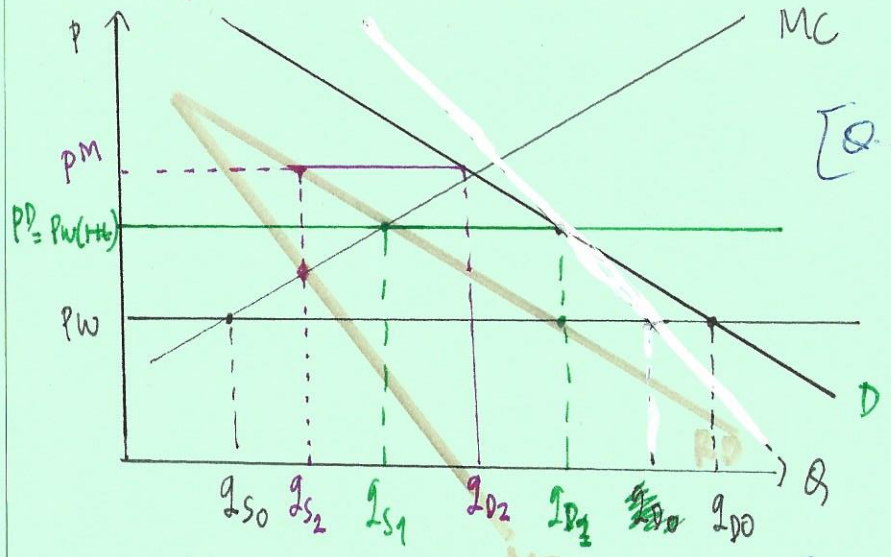
$-(b+d) < e \rightarrow \Delta W$ is (+)

Gover ment Gain

Gov can gain

optimal tariff = $t^m =$

If there is a monopoly conditions (Presence of domestic market po
then the equivalence will be breakdown



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Residual Demand → Market demand - Supplied by othe firms

↓ "Residue" market

32 Discuss tariff escalation for agricultural products. How can tariff escalation be measured? Give example!

Measurement of tariff escalation:

1. Looking at protection on the product
2. Looking at protection on the input/raw material product

Effective Protection coefficient rate (EPC) $\Rightarrow$ $EPC = \frac{VA^D}{VA^W}$

$VA = P.q - \sum_{i=1}^{K} w_i x_i$

w_i = factor price of tradable input x_i

x_i = input of tradable factors i

$P.q$ ~ TR

$\sum_{i=1}^{K} w_i x_i$ ~ cost for tradable inputs.

assumption: - No substitution between factors when switching from domestic to world price
- constant return to scale (CRS)

33 Define & explain nominal & effective protection rates. When is the nominal rate of protection equal to the effective rate of protection?

NPR is equal to EPR when taxes (tariff) on output and all input be the same (no tariff escalation)

34 Compare Producer Support Estimate (PSE) with appropriat measures of welfare changes for the case of a price- protection in a large country.

PSE in relative terms: share of gross farmer receipts.

PSE should not measured as a welfare ~~effect~~ but change a policy effect.

35 Explain the concept of Tariff rate quotas (TRQs). Why & how are they usually applied?

TRQ = hybrid between tariff & quota

-) for imports below the fixed quantity, a reduced tariff r applied.
-) for imports above this fixed quantity, a higher tariff ra applied.

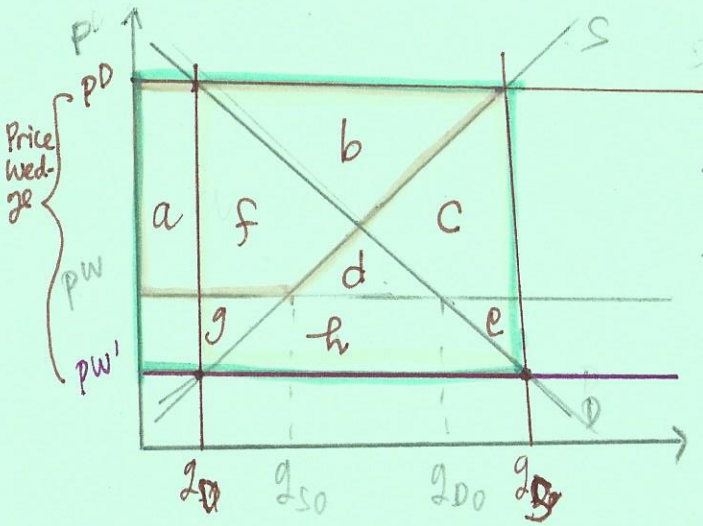
* Why TRQ usually applied?

Proliferation of TRQs in agriculture since the Uruguai Round

- Tariffication: all non tariff barriers to trade were turned into t
- TRQ is counted as tariff in WTO
- Min. market access (of 5%) for all agriculture imports.

* Definition: Tariff Escalation is tariff schedule characterized by tariff rates which increase with the processing depth
* Higher degree of processing → higher nominal phenomena.
* Reasons for TE: – Protection of value added industries at home
– Domestic processing industries are privileged.
* Tariff Escalation is important in agriculture because:
1. Agricultural product usually processed
2. It is more prevalent in industrialized countries
3. Most market TE if domestic production doesn't take place and if processing is less labour intensive.

Market Price Support for a large country



$\Delta PS = a+f+b$
$\Delta CS = -(a+f+$
$\Delta B = -(b+f+$
$-(g+h$

MPS = "Price wedge" = gs with the policy.

NPC = Nominal Protection Coefficient ∴ $NPC = \frac{P^D}{P^W}$

$NPR = NPC - 1\ (100\%) = \frac{P^D - P^W}{P^W} \times 100\%$

EPC = Effective Protection Coefficient: $EPC = \frac{VA^D}{VA^W}$

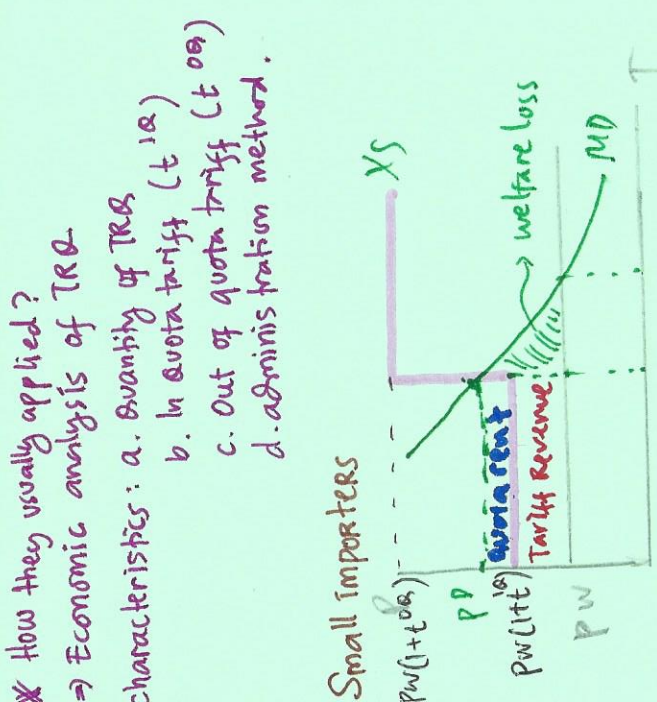
$EPR = EPC - 1\ (in\ \%) = \left(\frac{VA^D - VA^W}{VA^W}\right) \cdot 100\%$

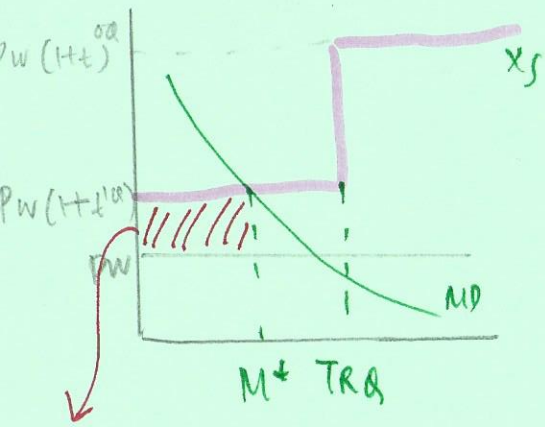
VA = Value added

NPC = Ratio between the average price received by producer (at farm gate) including payments per ton of current output & the border price.

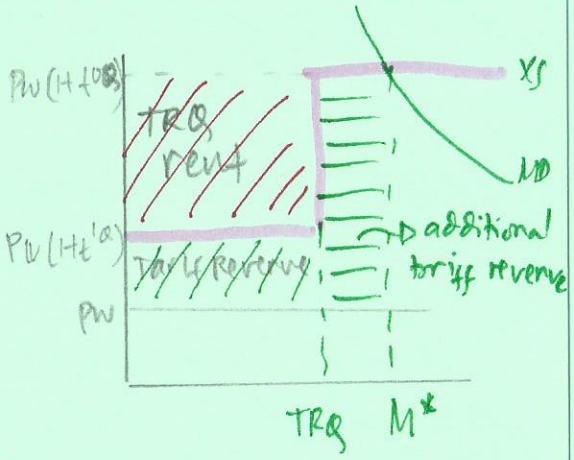
EPC = a measure of the total effect of the entire tariff structure on the value added per unit of output in each country, when both intermediate & final goods are imported.

* How they usually applied?
→ Economic analysis of TRQ
Characteristics: a. Quantity of TRQ
b. In quota tariff (t^{IQ})
c. Out of quota tariff (t^{OQ})
d. administration method.





Budget Revenue



37 Discuss the role of standards & regulations in internatio trade, & explain the WTO agreements which are m important for agricultural trade in this context

WTO Regulations on standard etc..

Standard. = - non mandatory compliance
- Public / Private

Regulation = - typically technical regulation
- Product characteristic / processing
- Mandatory compliance.

36 The administration procedures used for managing a TRQ have important implications.

Discuss the most important administrative procedures?

38 Explain the basics of the WTO's Dispute Settlement U standing & the dispute settlement process.

- DSU = agreement for resolving trade disputes establ with WTO
- DSU enables the WTO to make resolutions that are formal on members to resolve disputes through the Dispute Settlem (DSB)

Administration Method for TRQ's

a) 40%: applied tariff:
T^{IQ} is charged regardless of the level of imports,

b) 30%: Licenses on Demand
Licenses are granted for free to importers. If TRQ is binding, rent / TRQ goes to license holder.

c.) 12.5% first come - first served
at import $\sum M \leq TRQ = T^{IQ}$
$\sum M > TRQ = T^{OQ}$

d) 10% Historical import volumes
allocation of quota access follow the distribution of trade of previous reference period.

e) 5% auction: $
Licenses are allocated to traders with the higher bid / WTP

Also Relevant in WTO

(1) SPS = Sanitary & Phytosanitory → focused on feed, food, drink
food & agriculture, related health risks
⇒ is a technical regulation / standard refers to food, feed or drinks and aim at the protection of human, / animal / plant health, then SPS applies otherwise TBT.

(2.) TBT → Technical Barrier to Trade
⇒ legal framework for int'l trade in any product with regard to both technical regulations & standards.

* 3 Principles of TBT

1. Non discrimination. = "like products" ≈ similar from other countries should not be treated less favorable than domestic products
2. least distortive regulation
- No unnecessary obstacles to trade: no more trade frictions than necessary to fulfill a legitimate object

39 Use an example to illustrate the various steps in the WTO dispute settlement process. How can the parties react to the panel findings.

Stage in DSU :
1 → Consultation & Mediation
2 → Request for a panel
3 → The panel at work
4 → Adoption of decision or appeal
5 → Implementation.

example =
DS 49 Hormone Treated Beef.
Complainant: US & Canada
Respondent: EU
Cause: EU ban the beef imports from US which had been produced using hormones.

40 Describe the current state of the WTO talks with regard to agriculture.

3 Pillars : 1. Domestic Support
2. Market Access
3. Export competition.

① Domestic support ⇒ tot 3 boxes ⨯ traffic lights

amber ↓ stop / Reduced overtime

Blue ↓ warning ↓ no reduction, but no extension

Green ↓ go, no trade dis can be free

BGA (Bluegreen Algae)

NO. 39 Continues

Phase 1. → EU opens a TRQ 20.000 ton for non hormone treated beef
08/12 – 07/13 → US reduced retaliation ~ 4 million US dollar without carousel legislation.

Phase 2 → EU asked to increase TRQ to 45000 tons.
07/12 → US eliminate all retaliation.

Phase 3 → Negotiation permanent solution
8/13 ⇓ Part of TTIP negotiations.

time line.

01/96	US request for consultation
04/96	Panel established
08/96	Panel report, main finding EU band violate the SPS agreement
09/96	Appeal by EU
01/98	Appelate report - unchanged
02/98	Reasonable amount of time fixed by an arbitrater: 15 months.
05/99	US retaliation proposal - worth 200 million US $ annually - Arbitrater 117 million —u—
09/03	EU: Risk assessment (specific based) for hormone treated beef
10/04	EU as complainant : DS 320
03/08	Panel Report < US retaliation is too hig < EU violates SPS
05/08	EU appeal
!	Negotiation about compensation
05/09	MOU Interrum agreement until 8/13

② Market Access

tot: 1. Tarrification
(non tariff basic are change into tarif
2. Tariff reduction 20-30 %
3. Minimum market access 5 %

Modalities:

- Difference between applied & bound tariff rate
- Low fill rates for many TRQs

③ Export competition.

tot: Product specifics limits on subsidies export
- Quantity of exports 21 %
- value of export subsidies 36 %
(reduced)

Hongkong (2005) Phasing out of any form of exports subsidisation by 2013

(Bali package).

2013

TTIP Negotiations.

TTIP = Transatlantic Trade & Investment Partnership → 25-24 June '14

Objectives
- Increase market access, through elimination of barriers to trade & investment in goods.
- Enhance regulatory coherence & cooperation
- Develop new rules in areas, such as FDI, Intellectual property right, labour, environment, etc.

TTIP ⇒ not mainly about agriculture