

ANSWER KEY – THURSDAY EEIP FINAL

- (1) **Transport:** *In your essay on this topic, you were asked if the government should make a policy affecting transportation choices, with particular reference to the tension between personal choice and collective impacts. In your homework, you compared different transportation modes for getting around Wageningen and Los Angeles. With these exercises in mind, please answer the following questions. Average score was 7.6/10 and most answers were pretty good.*

- (a) *Gasoline (petrol) prices are higher in the Netherlands than in the US. Please discuss how THOSE prices may explain differences between the Netherlands and the US with respect to car ownership, car use, population density, and transportation patterns. CLEARLY identify other factors that affect these outcomes. Make sure that you discuss whether outcomes are CAUSED or CORRELATED with gas prices.*

Ownership down (unless high prices lower price of cars, which is debatable when you consider all factors affecting S and D), use down, density up, patterns more efficient (carpooling, trip combining). Many factors affect those outcomes, incl tax on cars, city location and history, income differences, etc.

- (b) *Pigouvian taxes are meant to capture the additional, social cost of an activity (e.g., tax on petrol that reflects cost of pollution, global warming etc.). Gasoline prices in both countries include taxes that go to the treasury (i.e., NOT to renewable energy, bike programs, etc.).*

*Are these taxes Pigouvian? Are they the same as “green” or “carbon” taxes? Explain your answers.* Depends. If taxes cover road costs then not designed to alter behavior but may do so, so higher are more Pigouvian b/c they are likely to provoke a bigger (elasticity)/response. P Tax is supposed to reduce harmful behavior to the “socially efficient level,” NOT replace fund green projects (i.e., Pigouvian subsidy [http://en.wikipedia.org/wiki/Pigouvian\\_tax](http://en.wikipedia.org/wiki/Pigouvian_tax)) or replace behavior, which would imply a 100 percent reduction in that behavior via tax/subsidy or infinite elasticity. Carbon taxes are green taxes (GT can tax something other than carbon, e.g., rubbish) which are Pigouvian taxes (PT can tax non-green problems like noise).

- (c) *Should tax revenues go to the treasury or the people affected by the externality? Discuss advantages and disadvantages for each destination.* Treasury is easier, victims is fairer.

- (d) *If you were going to distribute Dutch carbon taxes to everyone in the Netherlands, how would you do so?* Looking for creativity, efficiency and/or fairness. Note that subsidies to clean production can be inefficient if the “wrong” production is used AND that taxes already encourage NON-carbon production as well as lowering carbon harm to those harmed (as well as local pollution harm). Per capita rebates are fair and easy to calculate.

- (2) Water

- (3) Energy

- (4) **Indicators:** *In his 1945 essay, The Use of Knowledge in Society, F.A. Hayek argued against centralized economic management. It looks like only 6/10 students who took Thursday’s exam had read this essay. That caused many to have a low score (3.3/10 was the average). Next time, make sure you READ the ASSIGNED readings – esp. when the lecturer says “this may be on the final.”*

- (a) *What was his view on the distribution of information and how it affected centralized management?* Information is shared, without overlaps, among many people. Centralized management will fail b/c it cannot gather all this information accurately.

- (b) *What methods (signal or indicator) did he propose to aggregate information?*  
Prices
- (c) *Give one example of how you've used this signal to make a choice in your life.*  
How did a high price discourage you to act, or v.v.
- (d) *Give one example of where your choice has been "bad" from a personal or social perspective due to an inaccurate or distorted signal.* Price was low but unpriced social impact was high.
- (e) *Give me an example of where Hayek's signalling method will not work.* When expressing love, you do not "buy it."

#### ANSWER KEY – FRIDAY EEiP FINAL

- (1) **Transport:** *You wake up one morning to discover that US and NL transportation costs have changed: petrol is 1 EUR/liter in the NL and 2 EUR/liter in the US. Train and bus prices have also reversed (expensive in NL; cheap in NL). Roads, parking, insurance, etc. costs are the same.*
- (a) *Explain what happens to the prices of cars and bikes in both countries in the next year.*  
The price of cars rises where gas is cheaper because cars and gas are complements, and the quantity of demanded gas rises when price falls. Bikes are substitutes for cars, so demand falls (shifts in) and bike prices fall.
- (b) *Explain what happens to transportation choices in the next year (what changes, what doesn't, and why)*  
People shift towards the cheaper alternative in the short run but they are constrained by investment (owning a car or bike), infrastructure, commuting patterns, etc. The main effect is more/less driving by those who ALREADY have cars when gas is less/more expensive.
- (c) *Explain what happens to living and working choices in the next 1-10 years.*  
People have time to adjust. They may increase/decrease the distance between jobs/home when gas is less/more expensive.
- (2) Water
- (3) Energy
- (4) **Indicators:** *You are visited by Marta, a friend from Bolivia who speaks English. The two of you go to the store for some beer and wine for a party. After the party, you have empty bottles of beer and wine and empty cans of beer. Explain to her why the wine bottle goes to the recycling, the beer bottle goes to deposit and the beer can goes in the rubbish. If everything goes in the rubbish, then explain why. Make sure you discuss economic incentives, regulatory objectives and how you interpret them. Short and concise answers are better.*

I'm interested to see what you say.