

Written Exam for the M.Sc. in Economics winter 2014-15

**Health Economics**

Final Exam

13. January 2015

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by “eksamen på dansk” in brackets, you must write your exam paper in Danish.

**This exam question consists of 3 pages in total**

### **Question 1: Health as an economic Concept:**

- a. **Is the following statement true or false:**  
In the Grossman model framework older individuals devote relatively more resources towards health investments, because their marginal utility of an extra life year is large.
- b. What is the role of “health” in the Grossman investment model, and what is the relationship between health depreciation and length of life?
- c. Explain the fetal origins hypothesis (also known as the thrifty phenotype hypothesis) and what it predicts for long run health outcomes?
- d. Is the role of health depreciation in the Grossman model consistent with the fetal origins hypothesis? Argue for your answer
- e. For each of the models (the Grossman model and the fetal origins hypothesis) explain the causal relation between health and socioeconomic disparities? Discuss the empirical the evidence?

### **Question 2: Information economics and Health policy**

- a. What are the predictions for insurance coverage for individuals with different health risk profiles (but homogenous risk preferences) in an entirely private insurance market with asymmetric information? Explain the predictions in a graphical illustration.
- b. Consider a situation where insurance companies face administrative costs (e.g., for marketing purposes) in a private health insurance market. Would there be any welfare losses if the government mandated insurance coverage in this setting? Explain the predictions in a graphical illustration.
- c. **Is the following statement true or false:**  
Because the Bismarckian systems emphasize patient choice and provider competition, Bismarckian countries rarely provide universal health insurance.
- d. **Is the following statement true or false:**  
Bismarckian countries tend to have higher national health care expenditures than Beveridge countries.
- e. Describe briefly principal policy instruments that different kinds of regimes, i.e., the Beveridge, Bismarckian and US model, use to circumvent cost control issues. What are the pros and cons of these policies?  
(hint: You may build your argumentation of the trade-offs between health outcomes, equity and cost control in different regimes)

### **Question 3: Pharmaceuticals**

- a. Explain problems related to self-medication and drug resistance in developing countries.  
(Hint: you may relate this discussion to the economics of externalities)
- b. Explain the trade-offs governments face when deciding on whether or not to permit a drug on the pharmaceutical market and the strength of patents for pharmaceutical companies?