

Exam SØK3522 May 2022

Answer 3 out of 4 questions (your choice). All questions of equal value.

NOTE 3 from 4? Some answered all 4

Question 1 Labour Supply

Demonstrate the effect of a wage increase on labour supply. What is the effect of an increase in non-labour benefits on labour force participation and labour supply, and why is this important for the design of unemployment benefits? Demonstrate how schemes like Earned Income Tax Credits (EITC) attempt to address these problems.

First using a standard leisure-labour trade-off model of labour supply demonstrate how the effect of a wage increase on labour supply is a function of income and substitution effects. Show how the effect is ambiguous, i.e. it depends on the relative size of income and substitution effects.

Demonstrate that increases non-labour benefits only have income effects, and hence unambiguously decrease labour supply. This is important for the design of unemployment benefits as it means that any increase in these benefits (a) reduces labour supply (through more non-participation) and (b) how it is important to design benefit systems that carefully remove these benefits as hours of work increase so as to avoid welfare traps.

Set out an EITC scheme diagrammatically, show how the features of the scheme can lead to more participation of individuals who are initially not participating, but how its overall effect on labour supply is ambiguous.

Question 2 Contracts

Show how individual performance pay schemes such as piece rate schemes can lead to higher worker effort and attract higher ability workers. If worker output cannot be measured, how can deferred compensation schemes (where individual pay increases with time at the job) lead to higher effort levels?

Discuss principal agent problems and use the standard piece rate diagramme to show how piece rates can lead to a higher wage / higher effort equilibrium (and higher worker utility). Then using individuals with different indifference curves demonstrate how some individuals will prefer salary jobs and others will prefer piece rate jobs, and how this will lead to sorting.

Deferred compensation schemes pay individuals an increasing amount each year. Hence workers are underpaid early and overpaid later. Demonstrate how workers will be incentivized to not shirk due to the fear of losing (getting fired) the increasing stream of income in the future.

Question 3 Discrimination

How can employer taste-based discrimination lead to wage differences between groups of workers (for instance, men and women)? How can the Oaxaca-Blinder approach be used to measure wage discrimination?

Use the standard Becker discrimination model and demonstrate how employers who have a 'taste' for discrimination will be willing to pay more for certain workers (or need to be compensated to hire others). This leads to equilibrium wage differences between the two groups. Could also discuss how this is inefficient and how in a competitive market discriminatory firms will be out-competed.

Set out a simple Oaxaca-Blinder model with one independent variable (i.e. education). Use notation or diagrammes from class to demonstrate how average wage differences between two groups reflect a combination of differences in characteristics / endowments and the returns to these. Could discuss the implications of this, for instance whether wage differences reflect discrimination (an interpretation of differences in returns) or differences in productive characteristics (average schooling levels). An excellent answer would highlight how the later might also reflect pre-market discrimination / differences in access.

Question 4 Wages

Why would we expect risky jobs to pay more?

Consider two jobs which differ only in risk of death. In equilibrium a risk averse individual will need to be compensated from taking on this risk. This leads to a higher wage being needed to attract individuals to the riskier job generating a compensating wage differential between the two jobs. Of course, if individuals vary in their risk aversion we would expect sorting across jobs on the basis of this. This means that we cannot simply interpret differences in wages across jobs as compensating wage differences.

Contrast the effect of a minimum wage on employment under a competitive labour market and a labour market characterized by monopsony

Demonstrate (a) how a binding minimum wage unambiguously reduces employment (causes unemployment) in a competitive market. Then (b) how under monopsony it is possible that a minimum wage could lead to increased employment provided it lies in a certain range (typically between the monopsonistic wage and the competitive wage).