UNIVERSITY OF OSLO
DEPARTMENT OF ECONOMICS

Exam: **ECON4624 – Empirical Public Economics**

Date of exam: Friday, November 25, 2016 **Grades are given:** December 13, 2016

Time for exam: 09.00 a.m. – 12.00 noon

The problem set covers 6 pages (incl. cover sheet)

Resources allowed:

- No written or printed resources – or calculator - is allowed (except if you have been granted use of a dictionary from the Faculty of Social Sciences)

The grades given: A-F, with A as the best and E as the weakest passing grade. F is fail.

This exam has two questions. Both should be answered and they have equal weights. The exam includes five pages.

Problem 1: Supporting the poor (50%)

1. Bitler, Gelbach and Hoynes (BGH): "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments" examine a welfare reform that allowed poor single mothers on welfare to keep more of the benefits if they earned private income (up to a cap). They compare two programs: AFDC and Job First. Figure 1 below gives a stylized representation of the budget set for the two programs. In the Job First program clients can keep all benefits and earnings up to the federal poverty line (FPL), if their private earnings goes beyond FPL they lose all benefits (Budget line is A-F if earnings are below FPL). In the AFDC program the government cuts back on benefits as soon as the client start to earn money (budget line is A-B).

   Explain the reasoning behind the following predictions related to labour supply adjustments: Compared to AFDC, Job First will have

   (a) no effect on private earnings for many of those who would have no earnings under AFDC (in point A in Figure 1),

   (b) a positive effect on those with some earnings (e.g. point C in Figure 1)

   (c) a negative effect on those who would have relatively high earnings (e.g. point D in Figure 1).

2. What is the effective marginal tax rate under the Job First program for a person with earnings equal to FPL.

3. Bitler, Gelbach and Hoynes have data from a policy that randomizes clients to AFDC and Job First. Why would it be difficult to estimate the effect of the program if clients could choose their preferred program?

4. In Table 3 (page 3) BGH compares the mean of some individual characteristics

for those who are on AFDC and Job First. What should we expect to find if randomization was successful, and what does Table 3 show?

5. If the two samples are not balanced in terms of individual characteristics, what can be done to take account of this in the analysis of the program effect?

6. BGH use the quantile treatment effect (QTE) to estimate the hetereogenous effects of the Job First program. Explain briefly how the QTE estimator works and the findings in Figure 3 below.

7. Discuss this statement: "A limitation of the BGH analysis is that they only examine how the Job First program affect those who already are on benefits. (Hint: entry-exit).

Problem 2: Tax incidence (50%)

1. Imagine that in September 2014 the municipality of Oslo introduced a 15 % tax on restaurant meals served within Ring 1 (a sharp and clearly defined city center in Oslo). You are asked to analyze the incidence of that tax, how would you proceed:

   (a) What data will you collect to analyze the incidence of this tax (hint: what are the prices that are likely be affected by this tax change, does the time-perspective matter)?

   (b) How would you analyze the data in order to identify the incidence of the tax?

   (c) Discuss if there are any threats to identification.

   (d) External validity refers to the generalizability of the results found in one particular study. Discuss the external validity of the results you may find here.

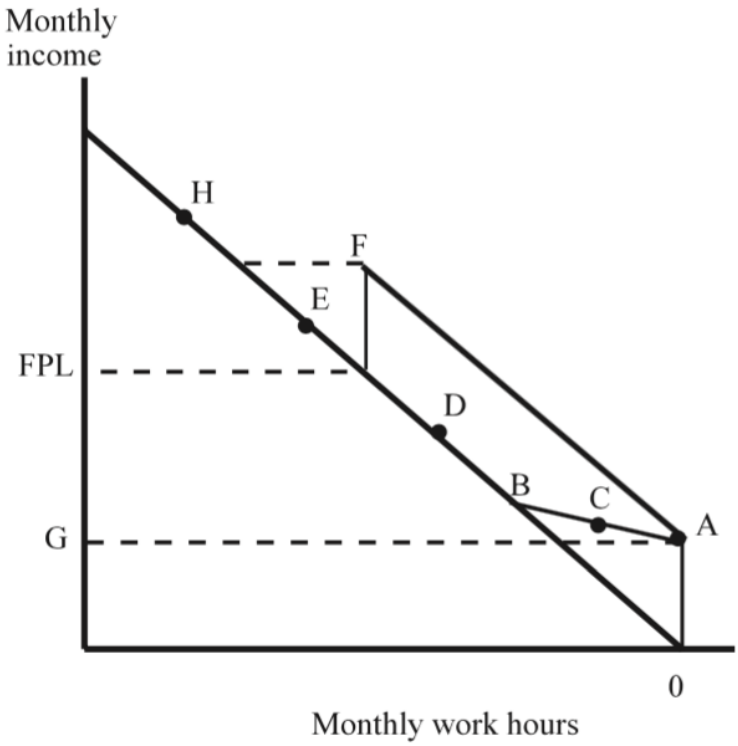

FIGURE 1. STYLIZED CONNECTICUT BUDGET CONSTRAINT UNDER AFDC AND JOBS FIRST

TABLE 3—CHARACTERISTICS OF NATIONAL CASELOAD AND EXPERIMENTAL SAMPLE

	National caseload (CPS)	Experimental sample			
		Levels		Differences	
		Jobs First	AFDC	Unadjusted	Adjusted
Demographic characteristics					
White	0.405	0.362	0.348	0.014	0.001
Black	0.344	0.368	0.371	−0.003	−0.000
Hispanic	0.206	0.207	0.216	−0.009	−0.001
Never married	0.474	0.654	0.661	−0.007	−0.000
Div/wid/sep/living apart	0.316	0.332	0.327	0.005	0.000
HS dropout	0.399	0.350	0.334	0.017	−0.000
HS diploma/GED	0.358	0.583	0.604	−0.021	0.001
More than HS diploma	0.243	0.066	0.062	0.004	0.000
More than two children	0.280	0.235	0.214	0.021*	−0.000
Mother younger than 25	0.251	0.289	0.297	−0.007	−0.000
Mother age 25–34	0.436	0.410	0.418	−0.007	0.000
Mother older than 34	0.313	0.301	0.286	0.015	0.000
Recipient (stock) sample		0.624	0.593	0.031**	−0.001
Average quarterly pretreatment values					
Earnings		679	786	−107***	−1
		(1,304)	(1,545)	(41)	(32)
Cash welfare		891	835	56**	−1
		(806)	(785)	(23)	(2)
Food stamps		352	339	13	0
		(320)	(304)	(9)	(1)
Fraction of pretreatment quarters with					
Any earnings		0.322	0.351	−0.029***	0.000
		(0.363)	(0.372)	(0.011)	(0.001)
Any cash welfare		0.573	0.544	0.029**	−0.001
		(0.452)	(0.450)	(0.013)	(0.001)
Any food stamps		0.607	0.598	0.009	0.000
		(0.438)	(0.433)	(0.013)	(0.001)

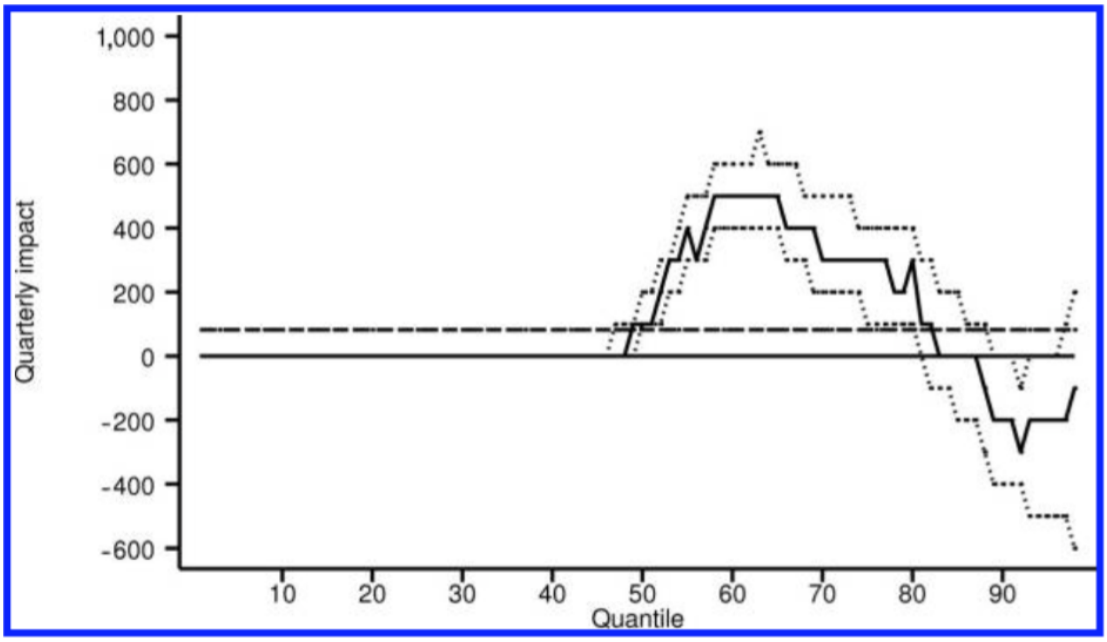

FIGURE 3. QUANTILE TREATMENT EFFECTS ON THE DISTRIBUTION OF EARNINGS, QUARTERS 1–7