

UNIVERSITY OF OSLO
DEPARTMENT OF ECONOMICS

Exam: **ECON4624 – Empirical Public Economics**

Date of exam: Friday, November 24, 2017

Grades are given: December 12, 2017

Time for exam: 14.30 – 17.30

The problem set covers 2 pages (including 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.

Exam Econ 4624, fall 2017.

The exam contains two problems, each count 50%.

Problem A

Consider an income tax scheme that taxes all income below and equal to 300.000 NOK at a 20% rate and all income above 300.000 NOK at a rate of 40%.

1. Draw the budget line.
2. Explain how the distribution of tax payers around the kink can be used to estimate *ETI* (the elasticity of taxable income).
3. What identification assumption(s) does this method rely on?
4. Saez (2010) uses kinks in the budget line due to the earned income tax credit scheme to estimate the ETI for US tax payers. He finds that wage earners have a lower response than the self-employed. Why do you think that is the case?

Problem B

In 2017 the Norwegian government introduced an extra payroll tax on firms that operate in the financial sector (firms selling financial services). Only firms with more than 70% of their activity in the financial sector were eligible for the tax.

Suppose you are asked to estimate the effect of this tax on wages in the financial sector.

1. Could the extra payroll tax affect other economic variables (think incidence)?
2. Someone suggests that you can use a regression discontinuity design (RDD) to assess the effect of this tax. What is your response?
3. If you use RDD, how would you proceed; what would you check and how would you estimate?
4. Suppose you find out that RDD is not working here. What alternative methods could you use to estimate the effect of the tax.