Department of Economics

Course name:	**Public Finance**
Course code:	**EC2106**
Examiner:	**Mikael Priks**
Number of credits:	**7,5 credits (hp)**
Date of exam:	**2015-02-22**
Examination time:	**3 hours (09:00-12:00)**

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).

Do not write answers to more than one question in the same cover sheet. Explain notions/concepts and symbols. Only legible exams will be marked. **No aids are allowed.**

The exam consists of 3 questions. The first and second questions are worth 40 points each; the last question is worth 20 points, 100 points in total. **For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.**

If you think that a question is vaguely formulated: specify the conditions used for solving it.

Results will be made available on your "My Studies" account (www.mitt.su.se) on the 16th of March 2015 at the latest.

Good luck!

Retake Exam, Public Finance, Fall 2014

Mikael Priks

This exam consists of three questions. The first and second question give 40 credits each and the last question gives 20 credits. p denotes prices and q quantities. To get full credit, you need to state and explain your results clearly. Good luck!

Externalities (40)

a) Define the term externality.

b) Define the term internality.

c) Why is taxation cost efficient whereas regulation is normally not cost efficient? Explain and show in a figure.

d) Assume that the demand for a good is given by p=12-2q. The supply is given by p=q. There is also an externality equal to 3 for each quantity produced. Solve for the optimal level of production for the firms and for the society separately. How large is the welfare loss due to the externality? Which tax rate would remedy the problem with the externality? Derive and show in a figure.

Empirical Economics (40)

a) What is the difference between correlation and causality?

b) What is the main problem we have discussed with cross-sectional analysis? Why are control variables used?

c) Why is it important to have a sufficient number of observations in a randomized experiment?

d) Suppose the government introduces road fees in one area, A, but not in another comparable area B. Cars do not cross the border between the areas. In area A there were 10 000 cars before the reform and 6 000 after the reform. In area B there were 8 000 cars before the reform and 6 000 after. What is the effect of the road fees on the number of cars according to the three different empirical methods cross-sectional analysis, time series analysis, and the difference-in-difference analysis? Explain your results.

Political Economics (20)

a) State the median voter theorem.

b) State the two useful roles lobbying can serve, which we discussed in class.