

EC325 - Public Economics

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LSE

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October 11, 2018

General Information

- Classes:
Friday 10:00-11:00 (G2) or 11:00-12:00 (G3).
- Office hours:
Friday 12:30-13:30 (L32.1.30).
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Why we care about public economics?

NHS watchdog warns good healthcare is becoming more of a postcode lottery

CQC chief blames 'geographical disparities' in England for lack of access to quality care



▲ Amb units are treating growing numbers of frail elderly people who cannot access the services they need nearby. Photograph: iStock

Market forces won't improve our schools

Parental choice and competition don't help, writes **Andrew Wingard**, comprehensives aren't just 'bog standard', says **Celia Berridge**, and **Neil Macehiter** asks how the shortfall of secondary school places will be tackled



Radical Labour levy would double council tax on holiday homes

Party promises £560m raised would be used to help homeless children



▲ St. Ann's in Cornwall, where many properties are owned as holiday homes. Photograph: Matt Corbridge/Getty

Move tax relief for entrepreneurs to NHS, thinktank says

Scrap tax break and put £2.7bn annual savings into health, says Resolution Foundation



At least 1,000 women protest at changes to UK pension age

Some of the 3.8 million women affected by new laws marched on parliament under the banner 'Shoulder to Shoulder'



▲ Some of those affected by the pension changes have lost their homes, while others are experiencing stress and hardship. Photograph: Martin Godwin/For the Guardian

Restore grant system for poor students, due to council cuts - study

Group recommends 'living wage' grant for students eligible for free school meals to allay debt fears



▲ A protest against tuition fees and student debt in November 2017. The poorest students face an even greater burden of debt, which could amount to £50,000 for a three-year course. Photograph: Matthew Churley/Reuters/Getty Images

Research shows post-industrial cities in north of England are being hit hardest by austerity



▲ Salford was one of seven councils that have seen hits by cuts of more than 80%. Photograph: PhotoDisc/Reuters/Getty Images

Why we care about public economics?

- ① When and why should the government intervene?
 - Fundamental Welfare Theorems.
 - Redistribution.
- ② How should policies be designed?
- ③ What are the effects of policies?
 - Mechanical (direct).
 - Behavioral (indirect).
- ④ Why do public authorities behave in the way they do?
 - Political and technical constraints.

Today's class

We will review some microeconomics concepts that will help us to deal with the questions just discussed:

- Supply and demand.
- Consumer theory:
 - Utility maximization.
 - Slutsky equation:

$$\frac{\partial x_i(p, w)}{\partial p_j} = \frac{\partial h_i(p, u)}{\partial p_j} - \frac{\partial x_i(p, w)}{\partial w} \cdot x_j(p, w)$$

- Efficiency.
- Welfare:
 - CV, CS, EV.
 - Welfare functions.

Problem Set 1

For this question, consider a consumer with a generic utility function $u(x_1, x_2)$ satisfying the typical properties mentioned in lectures.

- 1 Show graphically how an increase in the price of x_1 affects the budget constraint and optimal consumption levels of x_1 and x_2 .
- 2 Is it possible for an increase in the price of x_1 to result in an increase in the individual's utility? Why or why not?
- 3 Decompose the total effect on x_1 and x_2 into income and substitution effects. What is the intuition behind each effect?
- 4 Repeat this decomposition for a consumer with utility function $u(x_1, x_2) = \min\{x_1, x_2\}$. What is the substitution effect in this case?
- 5 Using the utility function from Part 4, derive analytically the amount of income you would need to provide the individual after the price change to bring her utility back to the original level. Express your answer in terms of the new and old price of x_1 , the price of x_2 , and income. How does your answer relate to the income effect of the price change? What does your answer tell you about the effect of the price change on welfare?

Problem Set 2

Consider an economy with two consumers, Ann (A) and Bob (B). Denoting by x and y the two goods, their utilities are given by $u^A(x^A, y^A) = x^A + y^A$ and $u^B(x^B, y^B) = x^B y^B$, respectively. The total endowment in the economy is 20 units of x and 10 units of y .

- 1 Draw the indifference curves of Ann and Bob that pass through the point $(x^A, y^A) = (18, 2)$. Is the allocation Pareto efficient? If not, suggest a Pareto improvement.
- 2 Characterize the set of Pareto efficient allocations.
- 3 Which Pareto efficient allocations are feasible from the point of view of the social planner with the ability to redistribute resources in a lump-sum fashion? Discuss which of these allocations might be desirable to such a planner.

Today's class

After this class you should be comfortable with:

- Supply and demand diagrams.
- Utility maximization:
 - Graphic solution (indifference curves).
 - Analytic solution (constrained maximization).
- Substitution (relative prices) and income effects (change in wealth).
- Pareto efficiency and Edgeworth box.
- Welfare:
 - CV, CS, EV.
 - Different social planner preferences.

If you have doubts with any of this concepts, come to my office hour!! Do not wait until the week before the exam!!

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