

PUBLIC ECONOMICS: FUNDAMENTAL PRINCIPLES (ECON 8211-001)  
Department of Economics, University of Colorado  
Fall 2007

Charles de Bartolome

Office Hours: M 3:45-4:45 pm, Tu 9:15-10:15 am, Fri 11:00-noon

Time: M,W : noon-1:15pm

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ROOM: ECON 5

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*Textbooks:* Tresch, R.W., (2002), *Public Finance, A Normative Theory*, Second Edition. Academic Press.

*Course description:* This course is the first course in a two-course sequence. This course describes the key ideas in Public Expenditure and Taxation: public goods, externalities, public choice, excess burden, optimal taxation and tax incidence. At the end of this course, you will be familiar with all the conceptual issues which must be addressed in a project in public economics. The second course is a topics course which focuses on papers closer to the “frontier of knowledge”.

*Pre-requisites:* Microeconomic Theory 1 ECON 7010. Microeconomic Theory 2, ECON 7030.

*Problem Sets:* The problem sets are an integral part of the course. They are designed to help you use the material and a significant part of the exams will closely follow their format.

*CULearn:* Problem sets with answers are posted on the CULearn webpage located at: <http://culearn.colorado.edu>

In the past, some students have had difficulty in downloading some of the pdf files posted on WebCT. ITS advises that this is due to the large file sizes. ITS recommends that you open the Adobe Acrobat Reader. Then click as: Edit > Preferences> Internet and *uncheck* “Allow Fast Web View”.

Please note that six pages of each Adobe Acrobat file can be printed on a single sheet by clicking as: Print > Properties > layout > Pages per sheet.

*Exams:* The midterm and final will be given as:

MIDTERM:	Monday 22 October in	7:00 - 9:00 p.m..
FINAL	Thursday 20 December in Econ 5	10:30a.m. - 1:00 p.m.

You must bring a blue-book to each exam.

*Grading:* The student's grade will be determined as: 50% Midterm, 50% Final.

*Students with Special Needs:* If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services (DS) in a timely manner so that your needs may be addressed. DS determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322 and [www.Colorado.EDU/disabilityservices](http://www.Colorado.EDU/disabilityservices).

*Harassment Policy:* The University of Colorado at Boulder policy on Discrimination and Harassment (<http://www.colordodo.edu/policies/discrimination.html>), the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships) applies to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based on race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at (303) 492-2127 or the Office of Judicial Affairs at (303) 492-5550. Information about the OSH and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at: <http://www.colorado.edu/odh>

*Religious Observances:* Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please let me know in a timely manner if one of the exam dates falls on a religious holiday you intend to observe and I will arrange for you to take a make-up. See policy details at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html)

*Classroom Behavior:* Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences in race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

*Academic Integrity:* All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ( [honor@colorado.edu](mailto:honor@colorado.edu) ; 303-725-2273). Students who are found to be in violation

of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>

*Course outline:* Shown below is a list of topics to be covered and likely dates.

27 Aug INTRODUCTION  
Tresch, Chapter 1

## PART 1: EXPENDITURE

29 Aug, 5 Sept FUNDAMENTAL WELFARE THEOREMS  
Tresch, Chapter 2

*Problem Set:* Fundamental Welfare Theorems

10, 12, 17 PUBLIC GOODS  
19 Sept *Normative prescription:*  
Samuelson, P.A., (1954), "The pure theory of public expenditure," *Review of Economics and Statistics* 36, 387-389.  
Samuelson, P.A., (1955), "The diagrammatic exposition of the theory of public expenditure," *Review of Economics and Statistics* 37, 350-356.  
  
*Positive: non-rival and non-excludable:*  
Bergstrom, T., L. Blume and H. Varian, (1986), "On the private provision of public goods," *Journal of Public Economics* 29, 25-49.  
Andreoni, J., (1988), "Privately provided public goods in a large economy: the limits to altruism," *Journal of Public Economics* 35, 57-73.  
Isaac, R.M., and J.M. Walker, (1988), "Group size effects in public goods provision: the voluntary contributions mechanism," *Quarterly Journal of Economics* 103, 179-199.  
Brunner, E.J., (1998), "Free riders or easy riders? An examination of the voluntary provision of Public Radio," *Public Choice* 97, 587-604  
  
*Positive: non-rival and excludable:*  
Demsetz, H., (1970), "The private production of a public good," *Journal of Law and Economics* 13, 293-306.  
Oakland, W., (1974), "Public goods, perfect competition and underproduction," *Journal of Political Economy* 82, 927-939.  
  
*Problem set:* Efficient (First-Best) public good level.  
*Problem set:* Voluntary contributions mechanism.  
*Problem set:* Public goods paradox  
*Problem set:* "Market" provision of non-rival excludable good.

- 24, 26 Sept  
1, 3 Oct
- EXTERNALITIES
- Tresch, Chapters 5, 6, 7 and 8.
- Baumol, W.J., and W.E. Oates, (1988), *The Theory of Environmental Policy*, 2nd Edition, Chap. 4 ("Externalities: formal analysis"), pages 36-56. Englewood Cliffs, NJ:Prentice Hall.
- Spulber, D.F., (1985), "Effluent regulation and long-run optimality," *Journal of Environmental Economics and Management* 12, 103-116.
- Ayres, I. and S. D. Levitt, (1998), "Measuring positive externalities from positive victim precaution: an empirical analysis of Lojack," *Quarterly Journal of Economics* 113, 43-78.
- Weitzman, M., (1974), "Prices vs. Quantities", *Review of Economic Studies* 41, 477-91

*Problem set:* Consumption externality.

*Problem set:* Production externality.

*Problem set:* Externality - firm number.

*Problem set:* Positive externality.

8, 10, 15 Oct PUBLIC CHOICE

*Full information:*

Mueller, D.C., (1989), *Public Choice* 2. Chaps. 4, 5, 7, 10, 11 and 20. Cambridge: Cambridge University.

Bowen, H.R., (1943), "The interpretation of voting in the allocation of economic resources," *Quarterly Journal of Economics* 58, 27-48.

Meltzer, A.H., and S.F. Richard, (1981), "A rational theory of the size of government," *Journal of Political Economy* 89, 914-927.

Husted, T.A., and L.W. Kenny, (1997), "The effect of the expansion of the voting franchise on the size of government," *Journal of Political Economy* 105, 54-82.

Stratmann, T., (2000), "Congressional voting over legislative careers: shifting positions and changing constraints", *American Political Science Review* 94, 665-676

Osborne, M. J., and A. Slivinski, (1996), "A model of political competition with Citizen-Candidates," *Quarterly Journal of Economics* 111, 65-96.

*Incomplete information:*

Mueller, D.C., (1989), *Public Choice* 2. Chaps. 18. Cambridge: Cambridge University.

*Problem set:* Voted public goods level.

*Problem set:* Voting the redistribution level

*Problem set:* Voting cycles

*Problem set:* Citizen-candidate model.

22 Oct MIDTERM (7:00 - 9:00 pm)

## PART 2: TAXATION

17, 22, 24,  
29 Oct POSITIVE: TAX INCIDENCE  
Tresch, Chapter 16

*Property tax capitalization:*

de Bartolome, C.A.M., and S.S. Rosenthal, (1999), "Property tax capitalization in a model with tax-deferred assets, standard deductions, and the taxation of nominal interest," *Review of Economics and Statistics* 81, 85-95.

*Problem Set: Tax Incidence: General Equilibrium Analysis*

31 Oct NORMATIVE: EXCESS BURDEN AND MARGINAL COST OF FUNDS  
5, 7 Nov Tresch, Chapters 12, 13.  
de Bartolome, C.A.M., (1999), "Integrating tax distortions and externality theory," *Journal of Public Economic Theory* 1, 330-358.  
Hausman, J., (1981), "Exact consumer's surplus and deadweight loss", *American Economic Review* 71, 662-676.  
Ballard, Charles L., and D. Fullerton, (1992), "Distortionary taxes and the Provision of Public Goods", *Journal of Economic Perspectives* 6, 117-131.

*Problem set:* Excess burden with Cobb-Douglas utility

*Problem set:* Excess burden with constant elasticity Hicksian Demand

*Problem set:* Excess burden with linear Marshallian demand.

*Problem set:* Marginal Cost of Funds.

12, 14, 26  
28 Nov NORMATIVE: OPTIMAL TAXATION  
*Indirect Taxation:*  
Tresch, Chapter 14.  
Atkinson, A.B., and J.E. Stiglitz, (1980), *Lectures in Public Economics*, Lecture 12. McGraw Hill, New York.  
Diamond, P., (1975), "A many-person Ramsey tax rule," *Journal of Public Economics* 4, 335-342  
Corlett, W.J. and D.C. Hague, (1953), "Complementarity and the excess burden of taxation," *Review of Economic Studies* 21, 21-30.

*Direct Taxation:*

Tresch, Chapter 15

Atkinson, A.B., and J.E. Stiglitz, (1980), *Lectures in Public Economics*, Lecture 13. McGraw Hill, New York..

Stiglitz, J.E., (1982), "Self-selection and Pareto-efficient taxation", *Journal of Public Economics* 17, 213-240.

*Problem set:* Efficient product tax structure: Cobb-Douglas utilities.  
*Problem set:* Optimal tax: Goods complementary with leisure.  
*Problem set:* Efficient Income Tax

### PART 3: PULLING EXPENDITURE AND TAXATION TOGETHER

3 Dec      *Second-best public goods level*  
Atkinson, A.B., and N.H. Stern, (1974), "Pigou, taxation and public goods,"  
              *Review of Economic Studies* 41, 119-128 .  
de Bartolome, C.A.M, (2001), "Why is Pigou sometimes wrong? Explaining how  
              distortionary taxation can cause public spending to exceed the efficient  
              level?" *Working Paper of the University of Colorado* #07-02.  
  
*Problem set:* Second-best level of the public good.

### PART 4 : CLUBS AND LOCAL GOVERNMENT

5, 10 Dec      CLUBS AND TIEBOUT MODEL  
Tresch, Chapters 29, 30 and 31  
Berglas, E., (1976), On the theory of clubs," *Papers and Proceedings of the*  
              *American Economic Association* 66 , 116-121.  
Tiebout, C.M., (1956), "A pure theory of local expenditures," *Journal of Political*  
              *Economy* 94, 416-424.  
Berglas, E., and D. Pines, (1981), "Clubs, local public goods and transportation  
              models," *Journal of Public Economics* 15, 141-162.  
Edel, M., and E. Sclar, (1974), "Taxes, spending, and property values:  
              supply adjustment in a Tiebout-Oates model," *Journal of Political*  
              *Economy* 82, 941-954.  
Eberts, R.W., and T.J. Gronberg, (1981), "Jurisdictional homogeneity and the  
              Tiebout hypothesis," *Journal of Urban Economics* 10, 227-239.  
  
*Problem set:* Clubs  
*Problem set:* Club theory - visits  
*Problem set:* Tiebout model of local government

12 Dec

## THE MONOCENTRIC CITY

Mills, E.S., (1967), "An aggregative model of resource allocation in a metropolitan area," *Papers and Proceedings of the American Economic Association* 57, 197-210.

Wheaton, W.C., (1977), "Income and urban residence: an analysis of consumer demand for location," *American Economic Review* 67, 620-631.

de Bartolome, C.A.M. and S.L. Ross, (2007), "Community income distributions in a metroplitan area," *Journal of Urban Economics* 61, 496-518.

de Bartolome, C.A.M. and S.L. Ross, (2004), "Who's in charge of the central city? The conflict between efficiency and equity in the design of a metropolitan area," *Journal of Urban Economics* 56, 458-483

McMillen, D.P., (2003), "The return of centralization to Chicago: using repeat sales to identify changes in house price distance gradients," *Regional Science and Urban Economics* 33, 287-304.

*Problem set:* Monocentric city

20 Dec

FINAL EXAM (10:30 a.m. - 1:00 pm)