

## **ECONOMICS 736: PUBLIC FINANCE**

### **DEPARTMENT OF ECONOMICS CORNELL UNIVERSITY FALL 2012**

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Office Hours: 11-12 Mo & 2-3 Tu

#### **COURSE DESCRIPTION:**

This course provides an introduction to the field of public economics. The field is large, with significant theoretical and empirical components. The emphasis of this course is on the theory. It covers core ideas in the areas of static and dynamic optimal taxation, public goods and externalities, social insurance and welfare, and state and local public finance.

#### **GRADING:**

There will be a mid-term and a final. The mid-term will be held in class and will account for 40% of the grade. The final will cover material from both parts of the course, but will put greater weight on the latter. Both exams will be closed book. Problem sets will also be provided, along with answers. While these will not be graded, questions on the exams will be drawn from them.

#### **PREREQUISITES:**

Students will be assumed to have taken and mastered the first year PhD economics micro and macro theory sequences.

#### **TEXTS AND READING:**

I have not ordered any books for the course. Comprehensive lecture notes will be provided together with references to the relevant journal articles. Some of the basic material is covered in Mas-Colell, Whinston, and Green, *Microeconomic Theory*; and Ljungqvist and Sargent, *Recursive Macroeconomic Theory*. Other textbooks that might be helpful references are Atkinson and Stiglitz, *Lectures in Public Economics*; Auerbach and Feldstein (eds), *Handbook of Public Economics* Vols 1,2,3 and 4; Gruber, *Public Finance and Public Policy*; Kaplow, *The Theory of Taxation and Public Economics*; Kocherlakota, *New Dynamic Public Finance*; Myles, *Public Economics*; and Salanie, *Economics of Taxation*.

## COURSE OUTLINE

### I. STATIC OPTIMAL TAXATION

We begin by discussing optimal commodity taxation. We derive the Many Person Ramsey Tax Rule and discuss the Production Efficiency Theorem. We then study the non-linear taxation of income and revisit the case for commodity taxation when non-linear income taxation is possible.

Atkinson, A. and J. Stiglitz, "The Design of Tax Structure: Direct versus Indirect Taxation," *Journal of Public Economics*, 1976.

Diamond, P., "A Many-Person Ramsey Tax Rule," *Journal of Public Economics*, 1975.

Diamond, P. and J. Mirrlees, "Optimal Taxation and Public Production," *American Economic Review*, 1971.

Diamond, P., "Optimal Income Taxation: An Example with a U-Shaped Pattern of Optimal Marginal Tax Rates," *American Economic Review*, 1998.

Laroque, G., "Indirect Taxation is Superfluous under Separability and Taste Homogeneity: A Simple Proof," *Economics Letters*, 2005.

Mirrlees, J., "An Exploration in the Theory of Optimal Income Taxation," *Review of Economic Studies*, 1971.

Saez, E., "Using Elasticities to Derive Optimal Income Tax Rates," *Review of Economic Studies*, 2001.

### II. PUBLIC GOODS

We begin by reviewing the neoclassical theory of public goods, distinguishing excludable and non-excludable public goods, exploring the nature of market failure, and describing the idea of Lindahl equilibrium. We will then provide an overview of research on public goods since the development of the neo-classical theory. Topics include: mechanism design; the political economy of public good provision; the optimal provision of public goods when taxes are distortionary; and the private provision of public goods.

Anderson, S. and S. Coate, "Market Provision of Broadcasting: A Welfare Analysis," *Review of Economic Studies*, 2005.

Andreoni, J., "Philanthropy," in *Handbook of the Economics of Giving, Altruism, and Reciprocity*, 2006.

Atkinson, A. and N. Stern, "Pigou, Taxation and Public Goods," *Review of Economic Studies*, 1974.

Boadway, R. and M. Keen, "Public Goods, Self-Selection, and Optimal Income Taxation," *International Economic Review*, 1993.

Mas-Colell, A., M. Whinston, and J. Green, *Microeconomic Theory*, Chapter 11.

Samuelson, P., "The Pure Theory of Public Expenditure," *Review of Economics and Statistics*, 1954.

### III. EXTERNALITIES

We begin by reviewing the basic idea of externalities and why they cause market failure. We then discuss the Coase Theorem; the difference between price and quantity regulatory approaches to deal with externalities; tradeable permits; optimal taxation in the presence of externalities; and common property externalities.

Leach, J., *A Course in Public Economics*, Cambridge University Press: Cambridge, 2004.

Chapters 7 and 8.

Mas-Colell, A., M. Whinston, and J. Green, *Microeconomic Theory*, Chapter 11.

Sandmo, A., "Optimal Taxation in the Presence of Externalities," *Swedish Journal of Economics*, 1975.

Weitzman, M., "Prices vs Quantities," *Review of Economic Studies*, 1974.

#### **IV. DYNAMIC OPTIMAL TAXATION**

We discuss the idea of Ricardian Equivalence; the Tax Smoothing problem; the Chamley-Judd result on capital taxation; the problem of Time Inconsistency; and the New Dynamic Public Finance.

Aiyagari, S.R., A. Marcet, T. Sargent and J. Seppala, "Optimal Taxation without State-Contingent Debt," *Journal of Political Economy*, 2002.

Atkeson, A., V.V. Chari and P. Kehoe, "Taxing Capital Income: A Bad Idea," *Minneapolis Fed Quarterly Review*, 1999.

Barro, R., "On the Determination of the Public Debt," *Journal of Political Economy*, 1979.

Barro, R., "The Ricardian Approach to Budget Deficits," *Journal of Economic Perspectives*, 1989.

Chari, V.V. "Time Consistency and Optimal Policy Design," *Minneapolis Fed Quarterly Review*, 1988.

Chari, V.V. and P. Kehoe, "Optimal Fiscal and Monetary Policy," in *Handbook of Macroeconomics*, Volume 1C, J. Taylor and M. Woodford, Eds, North Holland, Amsterdam, 1999.

Golosov, M., N. Kocherlakota, and A. Tsyvinski, "Optimal Indirect and Capital Taxation," *Review of Economic Studies*, 2003.

Golosov, M., A. Tsyvinski and I. Werning, "New Dynamic Public Finance: A User's Guide," *NBER Macro Annual*, 2006.

Klein, P., P. Krusell and V. Rios-Rull, "Time-Consistent Public Policy," *Review of Economic Studies*, 2008.

Kydland, F. and E. Prescott, "Rules Rather than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy*, 1977.

Ljungqvist, L. and T. Sargent, *Recursive Macroeconomic Theory*, Chapters 10 and 15.

Lucas, R. and N. Stokey, "Optimal Fiscal and Monetary Policy in an Economy without Capital," *Journal of Monetary Economics*, 1983.

Phelan, C. and E. Stachetti, "Sequential Equilibria in a Ramsey Tax Model," *Econometrica*, 2001.

#### **V. OPTIMAL TRANSFER PROGRAMS**

We discuss the optimal design of cash transfer programs; the role of in-kind transfers; and the determinants of public generosity towards the poor.

Akerlof, G., "The Economics of Tagging as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning," *American Economic Review*, 1978.

Besley, T. and S. Coate, "The Design of Income Maintenance Programmes," *Review of Economic Studies*, 1995.

Blackorby, C. and D. Donaldson, "Cash versus Kind, Self Selection and Efficient Transfers," *American Economic Review*, 1988.

Coate, S., "Altruism, the Samaritan's Dilemma and Government Transfer Policy," *American Economic Review*, 1995.

Piketty, T., "Social Mobility and Redistributive Politics," *Quarterly Journal of Economics*, 1995.

Saez, E., "Optimal Income Transfer Programs: Intensive versus Extensive Labor Supply Responses," *Quarterly Journal of Economics*, 2002.

## **VI. SOCIAL INSURANCE**

We begin by discussing the general arguments for the provision of social insurance. We then review some work on designing social security, unemployment insurance, and disability insurance.

Andersen, T. and J. Battacharya, "On Myopia as Rationale for Social Security," *Economic Theory*, 2010.

Chetty, R., "A General Formula for the Optimal Level of Social Insurance," *Journal of Public Economics*, 2006.

Feldstein, M., "The Optimal Level of Social Security Benefits," *Quarterly Journal of Economics*, 1985.

Feldstein, M., "Rethinking Social Insurance," *American Economic Review*, 2005.

Feldstein, M. and J. Liebman, "Social Security," NBER Working Paper #8451, 2001.

Golosov, M. and A. Tsyvinski, "Designing Optimal Disability Insurance: A Case for Asset Testing," *Journal of Political Economy*, 2006.

Gordon, R. and H. Varian, "Intergenerational Risk Sharing," *Journal of Public Economics*, 1988.

Hansson, I. and C. Stuart, "Social Security as Trade among Living Generations," *American Economic Review*, 1989.

Kotlikoff, L., "Justifying Public Provision of Social Security," *Journal of Policy Analysis and Management*, 1987.

Krueger, D. and F. Kubler, "Pareto Improving Social Security when Financial Markets are Incomplete," *American Economic Review*, 2005.

Ljungqvist, L. and T. Sargent, *Recursive Macroeconomic Theory*, Chapter 21.

Rothschild, M. and J. Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*, 1976.

Samuleson, P., "Optimum Social Security in a Life-Cycle Growth Model," *International Economic Review*, 1975.

Shimer, R. and I. Werning, "Liquidity and Insurance for the Unemployed," *American Economic Review*, 2008.

## **VII. STATE AND LOCAL PUBLIC FINANCE**

We consider issues arising in economies in which public goods and services are provided by local governments. We discuss Tiebout's theory of local public spending; property taxation and zoning; the idea of capitalization; the distributional implications of local service provision; and state and local government interactions.

Bewley, T., "A Critique of Tiebout's Theory of Local Public Expenditures," *Econometrica*, 1981.

Coate, S., "Property Taxation, Zoning, and Efficiency: A Dynamic Analysis," *mimeo*, 2010.

Fernandez, R. and R. Rogerson, "Public Education and Income Distribution: A Dynamic Quantitative Evaluation of Education-Finance Reform," *American Economic Review*, 1998.

Hamilton, B., "Zoning and Property Taxation in a System of Local Governments," *Urban Studies*, 1975.

Oates, W., "The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis," *Journal of Political Economy*, 1969.

Tiebout, C., "A Pure Theory of Local Public Expenditures," *Journal of Political Economy*, 1956.

### **VIII. POSSIBLY INTERESTING FUTURE TOPICS**

If time permits, we will discuss some more recent papers which suggest potentially interesting approaches and/or topics for future study.

Battaglini, M. and S. Coate, "Fiscal Policy and Unemployment," mimeo, 2012.

Benabou, R. and J. Tirole, "Laws and Norms," NBER Working Paper No 17579, 2011.

Fleurbaey, M. and F. Maniquet, "Fair Income Tax," *Review of Economic Studies*, 2006.

Landais, C., P. Michaillat and E. Saez, "Optimal Unemployment Insurance over the Business Cycle," NBER Working Paper No 16526, 2012.