University of Colorado, Boulder
Economics 8858
Simulation Techniques for Applied Microeconomics
Fall 2013, MW 13:30-14:45

Professor James Markusen
Econ 216
303-492-0748
james.markusen@colorado.edu
http://spot.colorado.edu/~markusen

solving square systems of equations and inequalities. But the user's guide will give you the syntax and notation as I indicated.

After you have gone through the two "Introduction.." files, you can start on the models themselves, which are found by clicking on the bullet "GAMS examples 2012". The model

5.4 Matrix inversion as an MCP
Model M5-5

5.6 Structural estimation and general-equilibrium counterfactuals using MPEC
Model M5-6

Chapter 6: General Equilibrium with Distortionary Taxes, Public Goods, Externalities, Optimal Taxation and Redistribution Policies

6.1 Taxes in the benchmark data
Model M6-1

6.2 Labor supply taxation: introducing equal-yield tax reform
Model M6-2a
Model M6-2b introduces equal yield constraint

6.3 Public consumption goods
Model M6-3

6.4 Optimal provision using a Samuelson rule
Model M6-4

6.5 Public intermediate (infrastructure) good with optimal provision
Model M6-5

6.6 Pollution from production affects utility
Model M6-6a
Model M6-6b uses MPEC to solve for the optimal pollution tax
Model M6-6c uses constraint equation to solve for the optimal pollution tax

6.7 Optimal taxation and redistribution
Model M6-7 adapts M3-7 to an MPEC maximizing social welfare

Chapter 7: Adding Scale Economies and Imperfect Competition to General Equilibrium

7.1 A brief introduction to the CES function - more later

7.2 Monopoly, with fixed costs (increasing returns)
Model M7-2

7.3 Oligopoly: Cournot competition with identical products and free entry
Model M7-3

10.2 The MPS/GE subsystem of GAMS

10.3 The Armington assumption

10.4 From an IO Table into GAM

Chapter 11: Basics of Dynamic Modeling:

11.1 Comparative steady-state analysis
Model M10-1

11.2 Converting an Infinite Horizon Problem to an MCP
Model M10-2 (currently only available in an MPS/GE format)

**Special Accommodations Policy**
If you have specific physical, psychiatric, or learning disabilities and require accommodations, let me know early in the semester so that your needs may be appropriately met. You will need to provide documentation of your disability to the Disability Services Office in Willard 322 (telephone 303-492-8671)