Macroeconomics of Fiscal Policy

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The objective of the course is to introduce the students to the study of fiscal policy and some of the ongoing academic debates.

We will look at fiscal policy from a positive and normative angles. In the first part, we will examine the macroeconomic effects of fiscal policy, for instance, the size of multipliers or the effects on different components of spending, both from a theoretical and empirical perspective. We will also analyse the interactions between fiscal and monetary policy. In the second part of the course we will look at optimal dynamic taxation policy.

The broader objective of the course is to expose the students to a number of advanced methods in macroeconomics. We will use Dynare to solve the dynamic stochastic general equilibrium models and STATA for the empirical applications. There is no textbook for the course. The topics covered and the reading list are as follows.

Introduction (1 lecture)

- Why is it important to study fiscal policy?
- Stylized facts: size and composition of government spending, taxation and government debt in the United States and OECD countries
- Methodological discussion: Positive and Normative analysis
- Simple model of government spending and Ricardian Equivalence
- Introduction to Dynare

Poterba, J. (2010). 'Research Opportunities in Economics: Suggestions for the Coming Decade", National Science Foundation White Paper.

Rogoff, K. (2010). 'Three Challenges Facing Modern Macroeconomics', National Science Foundation White Paper.

Reis, R. (2010). 'Future Research in Macroeconomics', National Science Foundation White Paper.

Barro, R. (1974). 'Are Government Bonds Net Wealth?, Journal of Political Economy, 82(6), 10951117.

• Effects of government consumption and investment

• Effects of government employment and wage

Baxter, M. and King R. (1993). 'Fiscal Policy in General Equilibrium, American Economic Review, 83(3), 31534.

Finn, M. (1998). 'Cyclical Effects of Governments Employment and Goods Purchases, International Economic Review, 39(3), 63557.

Effects of fiscal policy with frictions (3 lectures)

• Fiscal policy with labour market frictions

• Fiscal policy in an New-Keynesian model

Gomes, P. (2010). 'Fiscal Policy and the Labour Market: The Effects of Public Sector Employment and Wages, IZA Discussion Papers 5321.

Linnemann, L. and Schabert, A. (2003). 'Fiscal Policy in the New Neoclassical Synthesis, *Journal of Money, Credit and Banking*, 35(6), 91129.

*** Leeper, E.; Walker, T. and Yang, S. (2010). 'Government investment and fiscal stimulus," *Journal of Monetary Economics*, 57(8), 1000-1012.

*** Monacelli, T.; Perotti, R. and Trigari, A. (2010). 'Unemployment fiscal multipliers," *Journal of Monetary Economics*, 57(5), 531-553.

*** Gali, J.; Lopez-Salido, J. and Valles, J. (2007). 'Understanding the Effects of Government Spending on Consumption, *Journal of the European Economic Association*, 5(1), 227270.

*** Oh, H. and Reis, R. (2011). 'Targeted Transfers and the Fiscal Response to the Great Recession," NBER Working Papers 16775.

***Christiano, L.; Eichenbaum, M. and Rebelo, S. (2011). 'When Is the Government Spending Multiplier Large?," *Journal of Political Economy*, 119(1), 78 - 121.

Monetary-Fiscal Policy interactions (3 lectures)

- Intertemporal budget constraint of the Government
- Active and passive monetary and fiscal policy
- Fiscal Theory of Price Level

Sargent, T. and Wallace, N. (1981). 'Some Unpleasant Monetarist Arithmetic, Federal Reserve Bank of Minneapolis Quarterly Review, 5, 117.

Leeper, E. (1991). 'Equilibria Under Active and Passive Monetary and Fiscal Policies, Journal of Monetary Economics, 27(1), 129147.

Christiano, L. and Fitzgerald, T. (2000). 'Understanding the fiscal theory of the price level," *Economic Review*, Federal Reserve Bank of Cleveland, Q II, pages 2-38.

Kocherlakota, N. and Phelan, C. (1999). 'Explaining the Fiscal Theory of the Price Level", *Federal Reserve Bank of Minneapolis Quarterly Review*, 23 (4), 1423.

Buiter, W. (1999). 'The Fallacy of the Fiscal Theory of the Price Level," NBER Working Papers 7302.

*** Davig, T. and Leeper, E. (2007). 'Generalizing the Taylor Principle," *American Economic Review*, 97(3), 607-635.

 *** Conesa, J. and Kehoe, T. (2011). 'Gambling for Redemption and Self-Fulfilling Debt Crises". Mimeo

*** Schabert, A. (2010). 'Monetary policy under a fiscal theory of sovereign default," *Journal of Economic Theory*, 145(2), 860-868.

Empirical questions in fiscal policy (2 lectures)

- Identifying government spending and taxes shocks
- Sustainability of debt
- Estimating DSGE models using Dynare

Blanchard, O. and Perotti, R. (2002). 'An Empirical Characterization Of The Dynamic Effects Of Changes In Government Spending And Taxes On Output, *The Quarterly Journal of Economics*, 117(4), 13291368.

Mountford, A. and H. Uhlig (2009). 'What are the effects of fiscal policy shocks?, *Journal* of Applied Econometrics, 24(6), 960992

Ramey, V. and Shapiro, M.(1998). 'Costly capital reallocation and the effects of government spending, *Carnegie-Rochester Conference Series on Public Policy*, 48(1), 145194.

Ramey, V. (2011). 'Identifying Government Spending Shocks: It's all in the Timing," *Quarterly Journal of Economics*, 126(1), 1-50.

Perotti, R. (2008). 'In Search of the Transmission Mechanism of Fiscal Policy, in *NBER Macroeconomics Annual 2007*, Volume 22, NBER Chapters, pp.169226.

Bohn, H. (2007). 'Are stationarity and cointegration restrictions really necessary for the intertemporal budget constraint?," *Journal of Monetary Economics*, 54(7), 1837-1847.

Bohn, H. (1998). 'The Behavior Of U.S. Public Debt And Deficits," *Quarterly Journal of Economics*, 113(3), 949-963.

Canzoneri, M.; Cumby, R. and Diba, B. (2001). 'Is the Price Level Determined by the Needs of Fiscal Solvency?," *American Economic Review*, 91(5), 1221-1238.

*** Caldara, D. (2011). 'The Analytics of SVARs: A Unified Framework to Measure Fiscal Multipliers," Mimeo

*** Nekarda, C. and Ramey, V. (2011). 'Industry Evidence on the Effects of Government Spending," *American Economic Journal - Macroeconomics*, 3(1), 36-59.

*** Shoag, D. (2011). 'The Impact of Government Spending Shocks: Evidence on the Multiplier from State Pension Plan Returns," Mimeo.

 *** Chung, H. and Leeper, E. (2007). 'What has financed government debt?," NBER working paper 13425.

Part II: Optimal taxation and debt (6 lectures)

- Tax smoothing result
- Optimal taxation with complete markets
- Optimal taxation with market incompleteness
- Capital and labour taxation and the problem of time inconsistency

Barro, R. (1979). 'On the determination of the public debt," *Journal of Political Economy*, 87, 940-71.

Lucas, R. and Stokey, N. (1983). 'Optimal Fiscal and Monetary Policy in an Economy without capital," *Journal of Monetary Economics*, 12, 55-93.

Chari, V.; Christiano, L. and Kehoe, P. (1994). 'Optimal Fiscal Policy un a Business Cycle Model". *Journal of Political Economy*, 102, 617-652.

Aiyagari, R.; Marcet, A.; Sargent, T. and Seppala, J. (2002). 'Optimal taxation without state-contingent debt", *Journal of Political Economy*, 110(6), 1220-1254.

Chamley, C. (1986). 'Optimal taxation of capital income in general equilibrium with infinite lives," *Econometrica*, 54, 607-622.

*** Angeletos G. (2002). 'Fiscal policy with non-contingent debt and optimal maturity structure", *Quarterly Journal of Economics*, 117(3), 1105-1131.

*** Klein, P. and Rios-Rull, J. (2003). 'Time-consistent optimal fiscal policy," *Interna*tional Economic Review, 44(4), 1217-1245.

*** Debortoli, D. and Nunes, R. (2010). 'Fiscal policy under loose commitment," *Journal of Economic Theory*, 145(3), 1005-1032.