

Topics in Macro: Measuring the effects of fiscal policy
UPF Spring 2009
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Outline

The course presents a self contained exposition of the effects of fiscal policy in closed and open economy, taking monetary policy as given or interacting with it. Both empirical and theoretical aspects will be considered.

It is assumed that students are familiar with structural VAR techniques (to understand empirical analyses) and methods to solve dynamic stochastic general equilibrium model (do understand how models work). Students not familiar with the topics may consult chapters 2 and 4 of my textbook: *Methods for applied macroeconomic research*, Princeton, 2007, for reference. The first class will refresh this material to make sure that everybody starts at the same level. Since homeworks will require some programming in MATLAB (or Dynare, for some problems), working knowledge of this language is a prerequisite for successful performance in this class.

The grade will be based on homeworks (probably 3), on three in class presentation on the topics listed below, and on a final short paper (max 10 pages) developing one of the topics discussed in the class. Deadline for the paper proposals will be May 20, 2009.

Pdf with lectures notes will be posted prior to the lectures on my home page together with sample programs.

Program

1) Empirical tools: Structural VARs and solutions to DSGE models (1 week). Homework 1

Canova, F. (2007) *Methods for Applied Macroeconomic Research*, Princeton University Press, Chapters 2 and 4.

2) What are the effects of fiscal shocks? Some empirical evidence (1.5 weeks)

Blanchard, O. and Perotti, R (2002) An empirical characterization of the dynamic effects of changes in government spending and taxes on Output, *Quarterly Journal of Economics*, 117, 1329-1368.

Burnside, C., Eichenbaum, M. and J. Fisher (2004), Fiscal shocks and their consequences, *Journal of Economic Theory* 115, 89-117

Caldara, D. and C. Kamps (2007), What are the effects of Fiscal Policy shocks? A VAR based comparative analysis , ECB working paper 877.

Canova, F. and P. Pappa (2007), Price differential in Monetary Unions: The role of fiscal shocks, *Economic Journal*, 117, 713-737.

Canova, F. and P. Pappa (2006a), The elusive const and the immaterial gains of fiscal restrictions, *Journal of Public Economics*, 90, 1341- 1414

Canova, F. and P. Pappa (2006b) Does it cost to be virtuous? The macroeconomic effects of fiscal constraints, in Clarida, R. and West (eds.) NBER International Macroeconomic Annual, MIT Press.

Chung, H. and Leeper, E. (2007) What has financed Government Debt?, University of Indiana, manuscript.

Edelberg, W., Eichenbaum, M. and Fisher, J. (1999) Understanding the effects of a shock to Government Purchases, *Review of Economic Dynamics*, 166-206.

Eichenbaum, M. and J. Fisher (2005), Fiscal policy in the aftermath of 9/11, *Journal of Money Credit and Banking*, 37, 1-22.

Favero, C. and Giavazzi, F (2007) Debt and the effect of fiscal policy, IGIER Bocconi, manuscript.

Giannitsarou, C. and A. Scott (2006), Inflation Implications of Rising Government Debt, in L. Reichlin and West, K. (eds.), NBER International Macro Annual, MIT Press

Mountford, A. and Uhlig, H (2005) What are the effects of fiscal policy shocks, CEPR working paper, forthcoming, *Journal of Applied Econometrics*

Pappa, P. (2008) The effects of fiscal policy: an international comparison, AUB manuscript.

Pappa, P. (2009) The effects of fiscal shocks on hours and wages, *International Economic Review*, 50, 217-244.

Perotti, R. (2004) Estimating the Effects of Fiscal Policy in OECD countries, CEPR working paper 168.

Perotti, R. (2007) In search of the transmission mechanism of fiscal policy, NBER Macroeconomic Annual, MIT Press.

Ramey, V. and Shapiro, M. (1998) Costly capital reallocation and the Effect of Government Spending, *Carnegie Rochester Conference on Public Policy*, 145-194.

Cardia, E (1997), Replicating Ricardian Equivalence tests with simulated series, *American Economic Review*, 87, 65-79.

Gale, W. and P. Orszag (2004) Budget Deficit, National Savings and Interest Rates, *Brookings Papers on Economic Activity*, 2, 101-210.

Parker, J. (1999) The Reaction of Household Consumption to predictable Changes in Social Security Taxes, *American Economic Review*, 89, 959-973.

Shapiro, M. and Slemrod, J. (2003) The consumer response to tax rebate, *American Economic Review*, 93, 381-396.

3) Presentations (0.5 weeks):

i) Tax changes: a narrative approach (Romer, C. and D. Romer (2007a) The macroeconomic effects of tax changes, NBER working paper 13264, and (2007b) Do tax cuts starve the beast? The effects of tax changes on Government spending, NBER working paper 13548.

ii) Tax changes: Micro evidence (D., Parker J. and Souleles, N. (2006) Household expenditure and Income Tax Rebates of 2001, *American Economic Review*, 96, 1589-1610; Coronado, J., Lupton, J., Shiner, L. (2005) The household spending response to the 2003 Tax cut: Evidence from survey data, Finance and Economic Discussion Series, 2005-32, Federal Reserve Board; Broda, C. and

ParKer, J. (2008) The impact of the 2008 Tax Rebates on consumer spending: preliminary evidence, mimeo.

iii) Debt dynamics and Inflation (Bohn (2005), The fiscal sustainability of US debt, CESifo, wp 1446; Giannitsarou, C. and A. Scott (2006), Inflation Implications of Rising Government Debt, in L. Reichlin and West, K. (eds.), NBER International Macro Annual, MIT Press.

iv) Fiscal foresight (House, C. and Shapiro, M (2006) Phase-in Tax cuts and economic activity, American Economic Review, 96, 1835-1849; House and Shapiro, (2008, AER)).

4) What are the effects of fiscal shocks? Theories (RBC and New Keynesian) (1.5 weeks) Homework 2

Baxter, M. and King, R., 1993, Fiscal Policy in General Equilibrium, American Economic Review, 83, 315-334.

Finn, G.M., 1998, Cyclical effects of government employment and goods purchases, International Economic Review, 39, 635-657.

Aschauer, D. A., Is public expenditure productive?, 1989, Journal of Monetary Economics, 23, 177-200.

Braun, T., 1994, Tax disturbances and real economic activity in the postwar US, Journal of Monetary Economics, 33, 441-462.

Cipollone, P. and Rosolia, A., 2007, Social Interaction in High School: Lessons from an earthquake, American Economic Review, 97, 948-965.

Ludvigson C. S., 1996, The Macroeconomic Effects of Government Debt in a Stochastic Growth Model, Journal of Monetary Economics, 38 ,25-45.

McGattan, E., 1994, The macroeconomic effects of distortionary taxation, Journal of Monetary Economics, 33, 573-601.

Pappa, E., 2009, The effects of fiscal shocks on employment and the real wage, International Economic Review, 50, 217-244.

Linneman, L. and Schabert, A., 2003, Fiscal policy in the neoclassical synthesis, Journal of Money Credit and Banking, 35, 911-930.

Ravn, M., Schmitt-Grohe, S and Uribe, M., 2007, Explaining the effect of government spending on consumption and the real exchange rate, NBER working paper 13328

5) Presentations (0.5 weeks):

i) Extensions 1: Non-separable utility (Bouakez, H. and N. Rebei, 2007, Why does private consumption rise after a government spending shock?, Canadian Journal of Economics, 40, 954-979.

ii) Extension 2: Rule of thumb consumers (Gali, J., J.D. Lopez-Salido, and J. Valles, 2007, Understanding the effects of government spending on consumption, Journal of the European Economic Association, 5, 227-270.)

iii) Extension 3: GHH preferences (Monacelli, T and Perotti, R., 2008, Fiscal Policy, Wealth Effects and Markups, Bocconi University, manuscript.)

iv) Extension 4: Deep habits (Ravn, M., Schmitt-Grohe, S and Uribe, M., 2006, Deep habits, Review of Economic Studies.)

6) Fiscal policy predictability: Examples and consequences (0.5 week)

Auerbach, A and Slemrod, J., 1997, The economic effects of tax reform act of 1986, *Journal of Economic Literature*, 35, 589-632.

Canova, F. 2009, Is there fiscal foresight?, manuscript.

Hansen, L. and Sargent, T., 1991, Two difficulties in Interpreting Vector Autoregressions, in Hansen and Sargent (eds.), *Rational Expectations Econometrics*, 77-119, Westview Press, Boulder, Co.

House C. and Shapiro, M., 2006, Phased-in Tax Cuts and Economic Activity, *American Economic Review*, 96, 1835-1849

House C. and Shapiro, M., 2008, Temporary Investment Tax-Incentives: Theory with Evidence with Bonus Depreciation, *American Economic Review*, 98,

Leeper, E, Walker, T and Yang, S.C., 2008, Fiscal Foresight: Analytics and Econometrics, manuscript, University of Indiana.

Leeper, E, Walker, T and Yang, S.C., 2009, Empirical Analyses of Fiscal Foresight, manuscript, University of Indiana.

Lippi, M. and Reichlin, L., 1993, The Dynamic Effects of Aggregate Demand and Supply Disturbances: Comment, *American Economic Review*, 83, 644-652.

Lippi, M. and Reichlin, L., 1994, VAR analysis, Nonfundamental representations and Blaschke matrices, *Journal of Econometrics*, 63, 307-325.

Martens, K and Ravn, M, 2008, The aggregate effects of Anticipated and Unanticipated US tax policy shocks: Theory and Empirical Evidence, EUI, working paper 2008/5

Roberds, W, 1991 Implications of Expected Present value Budget Balance: Application to Postwar US data, in Hansen and Sargent (eds.), *Rational Expectations Econometrics*, 163-175, Westview Press, Boulder, Co.

Souleles, N 1999, The response of household consumption to Income tax rebates, *American Economic Review*, 89, 947-958.

Steigerwald, D. G., and Stuart, C., 1997, Econometric Estimation of foresight: Tax policy and Investment in the US, *Review of Economics and Statistics*, 79, 32-40.

Yang, S.C., 2005, Quantifying tax effects under perfect foresight, *Journal of Monetary Economics*, 52, 1157-1568.

Fernandez, J., Rubio, J., Sargent, T and Watson, M, 2007, Fernandez-Villaverde, J., Rubio-Ramirez, J. , Sargent, T. and Watson, M., 2007, The ABC (and D) of structural VARs, *American Economic Review*, 97, 1021-1026.

Quah, D. 1990, Permanent and Transitory Movements in Labor Income: An explanation for "Excess Smoothness" in consumption, *Journal of Political Economy*, 98, 449-475.

7) Fiscal and Monetary policy interaction: empirical evidence (0.5 week)

Ljungquist, L. and T. Sargent (2004), *Recursive Macroeconomic Theory*, MIT Press, second edition, ch. 24.

Leeper, E. (2008), Lecture Notes, Indiana University.

Walsh, C (2005), *Monetary Theory and Policy*, 2nd edition, MIT Press.

8) Fiscal and Monetary policy interaction: theory (FTPL, without and with distortions) and empirics (1.5 week). Homework 3

C. Walsh (2005) *Monetary Theory and Policy*, 2nd edition, MIT Press.

Leeper E. (1991) Equilibria under Active and Passive Monetary and Fiscal Policies, *Journal of Monetary Economics*, 27, 129-147.

Leeper, E. and Yun, T. (2005) Monetary and Fiscal Policy Interactions and the Price Level: Background and Beyond, *International Tax and Public Finance*, 13, 373-409, available at www.indiana.edu/~eleeper

Sargent, T. and Wallace, N. (1981) Some unpleasant Monetary Arithmetic, *Federal Reserve Bank of Minneapolis Quarterly Review*, 5, 1-17

Woodford, M (2001), Fiscal Requirement for Price Stability, *Journal of Credit, Money and Banking*, 33, 669-728.

Dungey, M. and R. Fry, 2007, The identification of fiscal and monetary policy in a structural VAR, Australian National University working paper.

Canzoneri, M. Cumby, R., Diba, B., 2001, Is the price level determined by the needs of fiscal solvency?, *American Economic Review*, 91, 1221-1238.

Canzoneri, M. Cumby, R., Diba, B., 2001, Fiscal discipline and exchange rate system, *Economic Journal*, 111, 667-690.

Cochrane, J., 1998, A frictionless view of US inflation in B. Bernanke and J. Rotemberg, eds., *NBER Macroeconomic Annual*, MIT Press, 323-384.

Cochrane, J., 2001, Long term debt and optimal policy in the fiscal theory of the price level, *Econometrica*, 69, 69-116.

Ljungqvist, L. and T. Sargent (2004), *Recursive Macroeconomic Theory*, MIT Press, second edition.

Gordon, and Leeper, E. (2005), Are countercyclical Fiscal Policies Counterproductive?, NBER working paper 11869.

Gordon, and Leeper, E. (2006), The Price Level, The Quantity Theory of Money and the Fiscal Theory of the Price Level, *Scottish Journal of Political Economy*, 53(1), 4-27.

9) Presentations (0.5 week)

i) Fiscal and monetary policy switching (Davig and Leeper (2006) and (2007), NBER Macro Annual and AER).

ii) Fiscal policy in monetary unions (Fatas and Mihov (2009), NBER wp 14722).

iii) Fiscal policy and regional inflation (Duarte and Wollman (2005), Fed of Richmond wp).

iv) Changes in the transmission of fiscal policy (Bilbie, Meier and Muller, (JMCB, 2008)).

10) Transmission of fiscal shocks in open economies (1.0 week). Homework 4

Beetsma, R., M. Giuliodori and F Klaasen (2007) The effect of public spending shocks on the trade balance in European Union, University of Amsterdam, manuscript.

Corsetti, G. and G. Muller (2006) Budget Deficits and current accounts, *Economic Policy*, 599-636.

Corsetti, G. and G. Muller (2007) Twin Deficits, Openness and the Business cycle, EUI, manuscript.

Corsetti, G. ,A. Meier, and G. Muller (2007) International Dimensions of fiscal policy transmission, EUI manuscript.

Epifani, P. and G. Gancia (2009) Openness, government size and the terms of trade, Review of Economic Studies.

Fatas, A. and I. Mihov (2001) Government size and automatic Stabilizers, International and Intranatiopnal evidence, Journal of International Economics, 55, 3-28.

Fatas, A. and I. Mihov (2009) The Euro and fiscal policy, NBER working paper 14722.

Kim, S. and N. Roubini (2003) Twin deficits or twin divergence: fiscal policy, the current account and the real exchnage rate in the Us, NYU manuscript.

Monacelli, T. and R. Perotti, (2006) Fiscal policy, trade balance and the real exchnage rate, Implications for risk sharing, Universita' Bocconi, manuscript.

Ratto, M., Roeger, W and I. int 'Veld (2006) Fiscal policy in an estimated open economy model of the Euro area, European Commission, Economic Papers 266.

Rodrick, D.(1998) Why do more open economics have bigger governments, Journal of Political Economy, 106, 997-1032.

11) Fiscal policy at the time of crises: how big are the multipliers? (1.0 week)

Christiano, L., Eichenbaum, M. and Rebelo, S (2009) When is the Government spending multiplier large?, Northwestern University, mansucript.

Feldstein, M. (2009) Rethinking the role of Fiscal policy, NBER wp 14684

Cogan, J., Cwik, T., Taylor, J. and Wieland, V (2009), New Keynesian versus old Keynesian Government spending multipliers, CEPR working paper 7236

Lecture notes will be available at www.crei.cat/people/canova/teaching a couple of days before the lecture.