# Readings for Macro IV: Dynamic Stochastic General Equilibrium and Business Cycles

Florin O. Bilbiie Nuffield College, University of Oxford

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### 1 Textbooks

There is no textbook covering all this material. You should read and understand **the lecture notes** - and the references to subsections of King and Rebelo (1999) provided in the notes **in bold**. However, if you think of becoming a macroeconomist, you really must purchase:

• Ljungquist, L. and T. Sargent (2004), *Recursive Macroeconomic Theory*, 2<sup>nd</sup> Edition, MIT Press, Cambridge, MA.

Three other books well worth having are:

- Cooley, T.F. (Ed.), 1995. Frontiers of Business Cycle Research. Princeton Univ. Press, Princeton. for a collection of articles on various business cycle topics
- Farmer, R. (1999) '*The macroeconomics of self-fulfilling prophecies*', MIT Press, Cambridge, MA. for analysing economies with multiple equilibria. However, on the way there Roger Farmer teaches you the techniques you apply to standard economies.
- Stokey, N.; R. Lucas with E. Prescott, (1989) 'Recursive Methods for Macroeconomic Dynamics', Harvard University Press, Cambridge, MA.
  to really understand the technicalities of these models.
- Woodford, M., (2003), Interest and prices: foundations of a theory of monetary policy, Princeton University Press, Princeton, NJ. Another advanced textbook that covers the latest (up to 2003) developments in (optimal) monetary policy and business cycles with price rigidities. If that's the area you think of working in, that's the book you must read.

#### 2 **RBC-DSGE** references

The lecture notes refer extensively to the following article: make sure you know where to find it (the same version is available at: www.nber.org/papers/w7534). Ideally, you will have read this article by the end of the course, though I will not assume you did.

• \*King, R. and Rebelo, S. (2000) 'Resuscitating Real Business Cycles', in Taylor J. and M. Woodford, eds, *Handbook of Macroeconomics*, North-Holland

You may also want to have a look at:

• \*Cooley, T. F. and E. Prescott, 'Economic growth and business cycles', Chapter 2 in Cooley, T.F. (Ed.), 1995. *Frontiers of Business Cycle Research.* Princeton Univ. Press, Princeton.

The **'motivation'** article by Lucas that I mentioned at the start of the course is:

 Lucas, Jr. R. E., (2005), 'Present at the creation: Reflections on the 2004 Nobel Prize to Finn Kydland and Edward Prescott', *Review of Economic Dynamics* 8 (2005) 777–779

If you want to know where 'it all started':

• Kydland, F.E., Prescott, E.C., (1982). Time to build and aggregate fluctuations. *Econometrica* 50, 1345–1370.

Other **useful references for understanding** the RBC model are:

- King, R., C. Plosser and Rebelo, S. (1988a) "Production, Growth and Business Cycles I: The Basic Neoclassical Model," *Journal of Monetary Economics*, 21: 195-232. [Reprinted in: Becker, Robert and Edwin Burmeister (eds.) Growth Theory III, Edward Elgar Publishers, London 1989 and Phelps, Edmund (ed.) Recent Developments in Macroeconomics, Edward Elgar Publishers, London 1990.]
- King, R., C. Plosser and Rebelo, S. (1988b) "Production, Growth and Business Cycles II: New Directions," Journal of Monetary Economics, 21: 309-341.
- Campbell, J. Y., (1994): "Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model," *Journal of Monetary Economics* 33: 463-506.
- Prescott, E., (1986) 'Theory ahead of business cycle measurement', *Federal Reserve Bank of Minneapolis Quarterly Review* 10.

On solving linear rational expectations models the classic reference is:

• Blanchard, O. J. and C. M. Kahn, (1980), "The solution of linear difference models under rational expectations," *Econometrica*, 48, 5, 1305-12

But if I were to **pick only one** article for you to read on solution methods, I would say:

• Lubik, T. and Schorfheide F. (2003) "Computing Sunspot Equilibria in Linear Rational Expectations Models" *Journal of Economic Dynamics* and Control, 28(2), pp. 273-285.

#### **3** Fiscal policy and business cycles

Again, read the lecture notes. The classic references are:

- Baxter, M., and R. G. King (1993): "Fiscal Policy in General Equilibrium," *American Economic Review* 83: 315-334.
- Christiano, L., and M. Eichenbaum (1992): "Current Real-Business-Cycle Theories and Aggregate Labor-Market Fluctuations," *American Economic Review* 82: 430-450

A recent paper dealing with these issues - which you may want to read after you cover sticky prices and monetary policy, and you must read if you want to do research in this area:

• Galí, J., J. D. López-Salido, and J. Vallés (2005): "Understanding the Effects of Government Spending on Consumption," mimeo, CREI.

Other than that, if you want to know more about fiscal policy issues read the relevant sections in Ljungquist, L. and T. Sargent (2004) indicated in the lecture notes.

## 4 Asset pricing

Again, the relevant parts (especially chapters 8, 10 and 13) of Ljungquist, L. and T. Sargent (2004). You may also look at the 'original' article:

• Lucas, Jr. R. E., (1978), Asset Prices in an Exchange Economy, *Econometrica*