# Econ 9431 Central Banking Policies, Part II

Spring 2018, 2<sup>nd</sup> 8 weeks TR 11 am – 12:15 pm Location: Middlebush Hall 205

Instructor: Chao Gu Office: 328 Professional Building Email: guc@missouri.edu Phone: 573-882-8884 Office Hour: TR 3:30pm – 4:30pm

In this course, we develop themes in monetary economics. In particular, we further our understanding of the functions of money and other means of payments in modern theories.

<u>Reference book:</u> [1] Rocheteau and Nosal, Money, Payments, and Liquidity, 2<sup>nd</sup> edition, MIT Press, 2017

[2] Walsh, Monetary Theory and Policy, MIT Press, 2010

[3] Friedman and Hahn, Editors, Handbook of Monetary Economics, North Holland, 2010.

[4] Kareken and Wallace, Editors, Models of Monetary Economies, Minneapolis, Federal Reserve Bank of Minneapolis, 1980.

#### Course Requirements:

Grade will be determined by problem sets (25%), a presentation (25%), and the takehome final (50%).

#### Make-up Policy:

Make-up exams will generally not be given. A request for alternative arrangements must be in writing and must be accompanied by appropriate documentation for not taking the scheduled exam.

#### Course Blackboard:

There is a course canvas to support the class (https://courses.missouri.edu/). Course information, extra practice materials and announcements can be found on the course blackboard. You may also check your grades on the course blackboard site.

Course Outline:

#### 1. Introduction

Samuelson, What classical and neo-classical monetary theory really was, *Canadian Journal of Economics*, 1968, 1-15.

Cass and Shell, In defense of a basic approach, Kareken and Wallace (eds.), *Models of Monetary Economies*, 251-260.

Baumol, The transaction demand for cash: an inventory theoretic approach, *Quarterly Journal of Economics* 66, 1952, 546-556.

Shell, Notes on the economies of infinity, *Journal of Political Economy* 79, 1971, 1002-1011.

Lucas, Equilibrium in a pure currency economy, Kareken and Wallace (eds.), *Models of Monetary Economies*, 131-145.

Bewley, The optimal quantity of money, Kareken and Wallace (eds.), *Models of Monetary Economies*, 169-210.

Townsend, Models of money with spatially separated agents, Kareken and Wallace (eds.), *Models of Monetary Economies*, 265-303.

## 2. Matching model of money

Kiyotaki, and Wright, On money as a medium of exchange, *Journal of Political Economy* 97, 1989, 927-954.

Trejos, and Wright, Search, bargaining, money and prices, *Journal of Political Economy* 103, 1995, 118-141.

Largos, and Wright, A unified framework for monetary theory and policy analysis, *Journal of Political Economy* 113, 2005, 463-484.

Williamson and Wright, Barter and monetary exchange under private information, *American Economic Review* 84, 1994, 104-123.

#### 3. Money, credit and payments

Kocherlakota, Money is memory, Journal of Economic Theory 81, 1998, 232-251.

Kocherlakota and Wallace, Incomplete record-keeping and optimal payment arrangements, *Journal of Economic Theory* 81, 1998, 272-289.

Cavalcanti, and Wallace, Inside and outside money as alternative media of exchange, *Journal of Money, Credit and Banking* 31, 1999, 443-457.

Green, Payment arrangements and inflation, *American Economic Review* 92, 2002, 51-57.

Freeman, The payments system, liquidity, and rediscounting, *American Economic Review* 86, 1996, 1126-1138.

Azariadis, Bullard, and Smith, Private and public circulating liabilities, *Journal of Economic Theory* 99, 2002, 59-116.

Bullard and Smith, Intermediaries and payments instruments, *Journal of Economic Theory* 109, 2003, 172-197.

## 4. The Friedman rule, money creation, and inflation

Bewley, The optimal quantity of money, Kareken and Wallace (eds.), *Models of Monetary Economics*, 169-210.

Bewley, A difficulty with the optimum quantity of money, EMA 51, 1983, 1483-1504.

Townsend, Models of money with spatially separated agents, Kareken and Wallace (eds.), *Models of Monetary Economics*, 265-303.

Levine, Asset trading mechanisms and expansionary policy, *Journal of Economic Theory* 54, 1990, 148-164.

Deviatov and Wallace, Another example in which money creation is beneficial, *Advanced in Macroeconomics* 1, 2001.

# 5. Money in banking

Berensten, Camera, and Waller, Money, credit and banking, *Journal of Economic Theory* 135 (2007), 171-195.

Williamson, Limited participation, private money, and credit in a spatial model of money, *Economic Theory* 24, 857-875.

He, Huang, and Wright, Money, banking and monetary policy, *Journal of Monetary Economics* 55 (2008), 1013-1024.

#### 6. Banking crisis

Diamond and Dybvig, Bank runs, deposit insurance, and liquidity, *Journal of Political Economy* 91 (1983), 401-419.

Wallace, Another attempt to explain an illiquid banking system: the Diamond and Dybvig model with sequential service taken seriously," *Federal Reserve Bank Minneapolis Quarterly Review* 12 (1988), 3-16.

Wallace, A banking model in which partial suspension is best, *Federal Reserve Bank Minneapolis Quarterly Review* 14 (1990), 3-16.

Peck and Shell, Equilibrium bank runs, *Journal of Political Economy* 111 (2003), 103-123.

Green and Lin, Diamond and Dybvig's classic theory of financial intermediation: What's missing?" *Federal Reserve Bank Minneapolis Quarterly Review 24*, Winter 2000, 3-13.

Green and Lin, Implementing efficient allocations in a model of financial intermediation," Journal of Economic Theory 109, 2003, 1-23.

#### 7. Additional readings

Andolfatto, "Essential Interest-Bearing Money." *Journal of Economic Theory* 145, 2010, 1495-1507.

Aruoba, "Money, Search and Business Cycles." *International Economic Review* 52, 2011, 935-959

Aruoba, Waller, and Wright, "Money and capital," *Journal of Moneatry Economics* 58, 2011, 96-116.

Berentsen, Menzio, and Wright, "Inflation and Unemployment in the Long Run," *American Economic Review* 101, 2011, 371-398.

Gu, Mattesini, Monnet, and Wright. "Endogenous credit cycles." Forthcoming, *Journal of Political Economy* 121, 2013, 940-965.

Gu, Mattesini, Monnet, and Wright. "Banking: A New Monetarist Approach." *Review of Economic Studies* 80, 2013, 636-662.

Gu, Mattesini and Wright. "Money and Credit Redux." Econometrica 84, 2016, 1-32.

Head, Liu, Menzio, and Wright, "Sticky Prices: A New Monetarist Approach," *Journal of the European Economic Association* 10, 2012, 939-973.

Lagos and Rocheteau. "Liquidity in Asset Markets with Search Frictions." *Econometrica* 77, 2009, 403-26.

Lagos, Rocheteau and Wright. "Liquidity: A New Monetarist Perspective," *Journal of Economic Literature*, forthcoming.

Lester, Postlewaite, and Wright. "Liquidity, Information, Asset Prices, and Monetary Policy." *Review of Economic Studies* 79, 2012, 1209-1238.

Li and Rocheteau. "On the Threat of Counterfeiting." *Macroeconomic Dynamics* 15, 2011, 10-41.

Rocheteau and Wright. "Money in Search Equilibrium, in Competitive Equilibrium, and in Competitive Search Equilibrium." *Econometrica* 73, 2005, 175-202.

Sanches and Williamson. "Money and Credit with Limited Commitment and Theft." *Journal of Economic Theory* 145, 2010, 1525-1549.

Williamson. "Liquidity, Monetary Policy, and the Financial Crisis: A New Monetarist Approach." *American Economic Review* 102, 2012, 2570-2605.

Williamson and Wright. "New Monetarist Economics: Models." Benjamin Friedman and Michael Woodford, eds., *Handbook of Monetary Economics*. Volume 3A.

Williamson and Wright. "New Monetarist Economics: Methods." *Federal Reserve Bank of St. Louis Review* 92, 2010, 265-302.

#### ACADEMIC INTEGRITY

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor.

#### ACCOMMODATION OF DISABILITIES

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please establish an accommodation plan with the Disability

Center (http://disabilitycenter.missouri.edu), S5 Memorial Union, 573- 882-4696, and then notify me of your eligibility for reasonable accommodations. For other MU resources for persons with disabilities, click on "Disability Resources" on the MU homepage.

### INTELLECTUAL PLURALISM

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the Departmental Chair or Divisional Director; the Director of the Office of Students Rights and Responsibilities (http://osrr.missouri.edu/); or the MU Equity Office (http://equity.missouri.edu/), or by email at equity@missouri.edu. All students will have the opportunity to submit an anonymous evaluation of the instructor(s) at the end of the course.

## ACADEMIC INQUIRY, COURSE DISCUSSION AND PRIVACY

# For faculty allowing recording:

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may make audio or video recordings of course activity unless specifically prohibited by the faculty member. However, the redistribution of audio or video recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

# For faculty not allowing recording:

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may not make audio or video recordings of course activity, except students permitted to record as an accommodation under Section 240.040 of the Collected Rules. All other students who record and/or distribute audio or video recordings of cection 200.020 of the Collected Rules and Regulations of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Those students who are permitted to record are not permitted to redistribute audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.