

McGILL UNIVERSITY
MONEY AND BANKING (ECON 623A, CRN 11802)
TOPICS IN MONETARY ECONOMICS (ECON 459A, CRN 11801)

Professor Jagdish Handa

Fall Term, 2017

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Office Hours: Tu 1.30 - 2.15 pm.

ECON 623A/459A focuses on the *macroeconomic* aspects of modern monetary theory and policy. It will cover the macroeconomic component of monetary economics, and monetary policy. This course will be partly based on my book *Monetary Economics* (2009). The chapters covered this year in this course will include: Chs. 1, 2 on the background and heritage of monetary economics, Chs. 13-17 on monetary macroeconomics and Chs. 10-12 on monetary policy and central banking. A significant element of the presentation would be checking the theories against the stylized facts of the economies in order to assess their validity. This material will be supplemented by discussions on the current major monetary and macroeconomic occurrences in the world economy.

The impact of financial factors on economic activity will be studied through arguments presented in my recent book, *A Reformulation of Keynesian Economics* (2015).

Note that the perspective of standard macroeconomics courses tends to be somewhat different from that of monetary macroeconomics, so that ECON 459/623 and advanced undergraduate and graduate macroeconomics courses tend to be complementary and enrich the understanding of macroeconomics.

Attendance: Attendance at all classes is mandatory. Some of the material discussed in class will be on recent economic events in the world economy. The exams are likely to include some questions related to class discussions.

Prerequisites:

Prior knowledge of *differential calculus* is essential for this course.

Before taking this course, students should have completed a rigorous course in intermediate macroeconomics. This requirement can be met by the undergraduate honours and majors macroeconomics courses (ECON 352D, ECON 330D), or equivalent courses taken in other universities. Graduate students are taken to have the required background in macroeconomics

REGISTRATION FOR THE COURSE:

Undergraduate Honours and Qualifying Year students are not permitted to take ECON 459A unless they have already completed the honours level macroeconomics course (ECON 352D) and received at least 70% in that course or have completed the majors level macroeconomics course (ECON 330D) and received at least 75% in that course and also have completed at least one Calculus course. Undergraduate students register for ECON 459A and not for ECON 623A.

Graduate students registering for ECON 623A must have completed a graduate course in macroeconomics (such as ECON 620A) or be taking it concurrently with ECON 623A.

All other students (including undergraduate Majors and visiting or special categories) need my permission to register for ECON 459 or 623. If in doubt, write to me or come and see me to discuss the adequacy of prior preparation.

Exams:

There will be a mid-term exam (in class, worth 25%; date and material covered will be announced one week in advance) and a formal examination at the end of the course (3 hours, worth 75% of the grade. The final exam will require knowledge of material covered in the course as a whole, the textbook and readings. The grading of all answers and other materials will depend on the rigour and accuracy of the analyses and the clarity and accuracy of the definitions, as taught in the class. The date of the final exam is centrally scheduled by the university and cannot be changed by the instructor or the department.

There will not be make-up or special exams for this course.

Exams and any other hand-written work for grading must be written in legible, easy-to-read handwriting.

DATES OF THE EXAMS: The date of the mid-term exam will be announced one week earlier in the class. The date of the December exam is set by the Faculty of Arts and is during the official exam period. It is the responsibility of the students to become informed of the dates and material covered for the exams.

MISSED MID-TERM EXAM (WORTH 25% OF THE COURSE GRADE): If you miss the mid-term exam for a valid reason, the weight on the December exam will be correspondingly increased.

SUPPLEMENTARY EXAM (worth 100%), **DEFERRED EXAM** (will replace the final exam and have the same weight as the final exam): The format and coverage of both these exams will be that of the final exam.

Contacting me:

While I try to respond to emails sooner or later, the average time for me to respond is about five working days (excluding holidays). But there is no guarantee that I will respond to all emails: I usually do not respond to emails with questions that should have been asked in the class, questions related to info which is already on myCourses, or questions on the dates of the exams or when the exam papers would be returned, since I repeat this info at least a couple of times in the class.

MCGILL UNIVERSITY'S STATEMENTS

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. "Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue)."

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <http://www.mcgill.ca/integrity> for more information).

Plagiarism and the use of Text-matching software -- Text-matching software may be used in this course to verify the originality of students' written course work. Students considered to have committed plagiarism would be referred to the Faculty and their submission will be heavily penalised. See www.mcgill.ca/files/students/Text-Matching-Policy-on-English.pdf for more information.

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site <http://www.mcgill.ca/integrity>).

In the event of extraordinary circumstances beyond the University's and instructor's control, the content and/or evaluation scheme in this course is subject to change.

*According to Senate regulations, instructors are not permitted to make **special arrangements** for final exams. For further information, consult the Calendar, section 4.7.2.1, General University Information and Regulations at www.mcgill.ca.*

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TEXTBOOK:

JAGDISH HANDA. *MONETARY ECONOMICS*. LONDON: ROUTLEDGE, 2009.
(The paperback edition of this book is stocked by the McGill bookstore).

RECOMMENDED READING:

JAGDISH HANDA. *A REFORMULATION OF KEYNESIAN ECONOMICS*. World Scientific Press, August 2015, especially Ch. 6 (The bookstore has some copies of this book).

In the following reading list, the items marked with * are required readings. Others are strongly recommended.

INTRODUCTORY REMARKS: EVALUATING THE CURRENT STATE OF MONETARY MACROECONOMICS AND ITS MODELING

Caballero, R.J. "Macroeconomics after the crisis: time to deal with the pretense of knowledge syndrome." *Journal of Economic Perspectives*, 24, 2010, pp. 85-102.

Pfleiderer, P., "Chameleons: the misuse of theoretical models in finance and economics." March, 2014.

Krugman, P. "How did economists get it so wrong?" *The New York Times*, 6 September, 2009.

Mulligan, C. (2009a). "Is macroeconomics off track." *The Economists Voice*, www.bepress.com/ev, November, 2009.

Cochrane, J.H. "How did Paul Krugman get it so wrong?" Downloaded and printed, 6 September, 2009; <http://faculty.chicagobooth.edu/john.cochrane/research/Papers/#news>.

DeLong, J.B. "Is today's unemployment structural." *The Economists' Voice*, www.bepress.com/ev, September, 2010.

I. INTRODUCTION TO MONETARY ECONOMICS AND THE GENERAL TRADITION IN MONETARY THEORY

I.1. Concepts and paradigms of macro and monetary economics

*Handa (2009), Chs. 1.

I.2. Inherited theory: the quantity theory from Hume, Fisher, Pigou and Wicksell

*Handa (2009), Chs. 2.

Fisher, Irving. *The Purchasing Power of Money*. Macmillan, 1911, Chs. 1-4, 8.

Hume, D. "Of Money" and "Of Interest". 1752. Paper downloaded on 29 Nov 2012 from: www.csus.edu/indiv/c/chalmersk/ECON%20101/HumeOfMoney.pdf

Pigou, A. C. "The Value of Money". In the American Economic Association, ed., *Readings in Monetary Theory*. Homewood, 1951. pp. 162-185.

Wicksell, K. "The Influence of the Rate of Interest on Prices". *Economic Journal*, 17, June 1907, pp. 213-20.

I.3. Inherited theory: Keynes and Friedman

*Handa (2009), Ch. 2.

*Keynes, J. M. *The General Theory of Employment, Interest and Money*, 1936, Chs. 13, 15.

Hicks, J. R. 'Mr. Keynes and the "classics": a suggested interpretation,' *Econometrica* 5 (1937), 147-159.

*Friedman, M. "The Quantity Theory of Money - A Restatement". In M. Friedman, ed., *Studies in the Quantity Theory of Money*, 1956, pp. 3-21.

Cowan, Tyler, and Krozner, Randall. "The Development of the New Monetary Economics". *Journal of Political Economy*, 45, June 1987, pp. 567-90.

Friedman, M. "The role of monetary policy". *American Economic Review*, 58, 1968, pp. 1-17.

*Friedman, M. "Nobel prize lecture: inflation and unemployment". *Journal of Political Economy*, 85, 1977, pp. 451-473

Anderson, L.C. and Jordan, J. L. "Monetary and fiscal actions: a test of their relative importance in economic stabilization". *Federal Reserve Bank of St. Louis Review*, 1968.

II. THE THEORY OF AGGREGATE DEMAND FOR THE OPEN ECONOMY

- The relevance of the study of aggregate demand for macroeconomics and monetary economics
- The relevant operating targets of monetary policy: money supply or/and interest rates
- Aggregate demand under money supply targeting: IS-LM model from any macroeconomics textbook (for students to review on their own).
- The (pre-1990) neoclassical-Keynesian synthesis on aggregate demand.
- Aggregate demand under interest rate targeting: IS-IRT analysis of aggregate demand.
- The impact of public deficits on aggregate demand and Ricardian equivalence.

*Handa, 2009, Ch. 13.

F. Alvarez, R. E. Lucas, Jr., and W. E. Weber. "Interest rates and inflation". *Federal Reserve Bank of Minneapolis Working paper* #609, 2001.

Clarida, R., J. Gali and M. Gertler. "Monetary policy rules in practice: some international evidence". *European economic Review*, 42, 1998, pp. 1003-67.

Romer, D. "Keynesian macroeconomics without the LM curve". *Journal of Economic Perspectives*, 14, pp. 149-169, 2000.

*Taylor, J. B. "Discretion versus policy rules in practice". *Carnegie-Rochester Conference Series on Public Policy* 39, 1993, pp. 195-214.

III. MODELS OF THE CLASSICAL PARADIGM

Stylized facts on the relationship between money, inflation and output

- Notions of the neutrality of money, dichotomy between the monetary and real sectors, Say's Law, Walras' Law
- Traditional (Pre-1936) classical ideas and theories
- The neoclassical model
- The modern classical model
 - Rational expectations
 - The Friedman aggregate supply function
 - The Lucas aggregate supply function
- The new classical model
- Disequilibrium: transitory and self-correcting departures from general equilibrium with full employment.
- Equilibrating mechanisms of the classical paradigm: Pigou and real balance effects, the social planner.
- Crises, the impact of monetary and other financial variables, and business cycles in the classical paradigm
- Empirical validity of the models of the classical paradigm

*Handa, 2009, Ch. 14.

*Barro, R. J. "Unanticipated money growth and unemployment in the United States". *American Economic Review*, 67, 1977, pp. 101-115.

Lucas, R. E. Jr. "Expectations and the neutrality of money". *Journal of Economic Theory*, 4, 1972, pp. 103-24.

*-----"Some international evidence on output-inflation tradeoffs". *American Economic Review*, 63, 1973, pp. 326-34.

*----- "Nobel lecture: monetary neutrality". *Journal of Political Economy*, 104, 1996.

*Mishkin, F. S. "Does anticipated aggregate demand policy matter". *American Economic Review*, 1982, pp. 788-802

----- "Are market forecasts rational". *American Economic Review*, 71, 1981, pp. 295-306.

*Sargent, T. J. and Wallace, N. "Rational expectations and the theory of economic policy". *Journal of Monetary Economics*, 2, 1976, pp. 169-83.

IV. MODELS OF THE KEYNESIAN PARADIGM

- Introduction to *Keynes and The General Theory* (1936)
- The relevance of effective and deficient demand to macroeconomic modelling and to monetary policy
- Liquidity trap, Phillips curve, the expectations augmented Phillips curve and the new Keynesian Phillips curve
- Monetary aggregates versus interest rates as the monetary policy instrument
- New Keynesian model
- Differences between the analytical approaches and the implications of the classical and Keynesian paradigms on the need for and the impact of monetary policy
- Empirical validity of the new Keynesian model, and of the earlier models of the Keynesian paradigm

*Handa, Ch. 15.

*Clarida, R., J. Gali, and M. Gertler "The science of monetary policy: a new Keynesian perspective". *Journal of Economic Literature* 37, 1999, pp. 1661-1707.

*Goodfriend, M., and R. King "The new neoclassical synthesis and the role of monetary policy" (available on Goodfriend's website), 1997.

Keynes, J. M. *The General Theory of Employment, Interest and Money*, New York: Macmillan, 1936.

Leijonhufvud, A. *On Keynesian Economics and the Economics of Keynes*, New York, 1968.

----- "Keynes and the Keynesians". *AER Papers and Proceedings*, 1967, pp. 401-410.

Svensson, L. "What is wrong with Taylor rules?" *Journal of Economic Literature*, 41, 2003, pp. 426-477.

V. THE ROLE OF FINANCIAL CAPITAL IN THE DETERMINATION OF AGGREGATE DEMAND AND OUTPUT

- Financial capital in the production function
- The distinction between credit and bonds
- Relevance of a model with money, bonds and credit as financial instruments
- Relationship between the supply of credit and that of money
- Credit crises: the financial and economic private debt crisis that started in 2007 in the USA, and the public debt ones in the European Union since 2008.
- Quantity easing and the pursuit of credit-oriented and structural policies by the central bank.

*Handa, 2015, Ch. 6.

*Bernanke, B., and A. Blinder, "Credit, money, and aggregate demand". *American Economic Review*, 78, 1988, pp. 435-439.

Fisher, Irving, "The debt-deflation theory of the Great Depression." *Econometrica*, 1, 1933, pp. 337-357.

Friedman, B.M. (2013). "The Simple Analytics of Monetary Policy: A Post-Crisis Approach". *National Bureau of Economic Research, NBER Working Paper Series*, No. 18960.

http://scholar.harvard.edu/files/bfriedman/files/the_simple_analytics_of_monetary_policy_-_aea_paper_january_2013.pdf.

Gali, Jordi. "Monetary Policy and Rational Asset Price Bubbles." *American Economic Review*, 104(3), 2014, 721-52.

Kashyap, A., and J. Stein, "Monetary policy and bank lending". In *Monetary Policy*, G. Mankiw, ed., 1994, pp. 221-262.

Kiyotaki, N., and J. Moore, "Credit cycles". *Journal of Political Economy*, 105, 1997, pp. 211-248.

Minsky, H.P. *Stabilising an Unstable Economy*. New Haven: Yale University Press, 1986.

Wicksell, K. "The influence of the rate of interest on prices." *Economic Journal*, 17, 1907, pp. 213-20.

VI. COMPACT MACROECONOMIC MODELS AND POLICY ANALYSIS

*Handa, 2009, Ch. 17.

Friedman, B.M. (2013). "The Simple Analytics of Monetary Policy: A Post-Crisis Approach". *National Bureau of Economic Research, NBER Working Paper Series*, No. 18960.

http://scholar.harvard.edu/files/bfriedman/files/the_simple_analytics_of_monetary_policy_-_aea_paper_january_2013.pdf

VII. MONETARY POLICY

VII.1 Monetary aggregates versus interest rates as the monetary policy instrument, and the role of other policy instruments (quantitative easing and selective policy instruments)

*Handa (2009), Ch. 13.

- *Poole, W. "Optimal Choice of Monetary Policy Instruments in a Simple Stochastic Macro Model." *Quarterly Journal of Economics*, 48, 1970, pp. 197-216.
- *John B. Taylor, ed. *Monetary Policy Rules*. Chicago: University of Chicago Press, 1999.
- Clarida, Richard, Jordi Galí and Mark Gertler. "Monetary Policy Rules in Practice: Some International Evidence." *European Economic Review*, 1998, 42, pp.1033-1067.
- *Orphanides, A. "Historical Monetary Policy Analysis and the Taylor Rule". *Journal of Monetary Economics*, 2003, pp. 983-1022.
- Svensson, L. "Inflation Targeting as a Monetary Policy Rule." *Journal of Monetary Economics*, 43, 1999, pp. 607-54.
- *Taylor, J. "A Historical Analysis of Monetary Policy Rules". In *Monetary Policy Rules*. J. Taylor, ed. Chicago: University of Chicago Press, 1999.
- "The Robustness and Efficiency of Monetary Policy Rules as Guidelines for Interest Rate Setting by the European Central Bank". *Journal of Monetary Economics*, 43, 3, 1999, pp. 655-679.
- Rogoff, Kenneth (1989). "Reputation, Coordination and Monetary Policy". In R. Barro, ed., *Modern Business Cycle Theory*, Oxford, 1989, 236-64.
- Friedman, B.M. (2013). "The Simple Analytics of Monetary Policy: A Post-Crisis Approach". *National Bureau of Economic Research, NBER Working Paper Series*, No. 18960.
http://scholar.harvard.edu/files/bfriedman/files/the_simple_analytics_of_monetary_policy_-_aea_paper_january_2013.pdf
- Walter Eltis, "Lord Overstone and the Establishment of British nineteenth-century monetary orthodoxy." *University of Oxford Discussion papers in Economic and Social History* 42, December, 2001. (On British banking history and central bank policy. Available at: www.nuff.ox.ac.uk/Economics/History/paper42/42eltis or from: <http://www.nuff.ox.ac.uk/Economics/History/>. Then go to paper 42.