Economics and Society

History of Economic Thought

Course Manual SSC2067

Academic Year 2017/2018

Course Period 1

Course Coordinators: Thomas Meissner (t.meissner@maastrichtuniversity.nl) and Tom Van Veen (t.vanveen@maastrichtuniversity.nl)

Department of Economics

School of Business and Economics

Maastricht University

1. Introduction

The first part of this course is about how people make economic decisions. We will start out with an introduction to the "standard" economic paradigm of expected utility theory and rational choice. We will then continue to look at how the influence of other disciplines, such as psychology and sociology, has changed the understanding of how people make economic decisions. In particular, we will analyze how people deviate systematically from the self-interested, utility maximizing, rational behavior that has been traditionally assumed when modelling economic choice.

The second part of this course discusses macroeconomic theories and policies. The main question that macro-economists try to address is: is macroeconomic demand policy effective? This is a big question that has caused and still causes huge debates among macro-economists. The link with the first part of the course is that the more behavior deviates from standard rational behavior, the more the government needs to act as a coordinator in an economy. Hence, discussions about modelling economic behavior have been all around in discussions among macro-economists.

Meetings

The course consists of 13 meetings (see Table 1). For sessions 1-7 the following holds. With the exception of the first two meetings, each meeting deals with two topics. Each of these two topics will be presented by one or more students. This means that there are two presentations in each meeting. A presentation should lead to a discussion in which all students, not only those presenting, actively participate. The presentation of one topic should take about 30-40 minutes.

The presentation should provide a complete treatment of the main text and should discuss the additional texts in relation to the main text.

The students who are not presenting should prepare for the meeting in two ways. First, they should carefully read the main texts corresponding to the two topics. (The additional texts are of course an interesting read, but are not compulsory). Second, each student should prepare at least one question for each of the two topics (so at least two questions in total). Students should pose their questions during the meeting.

Sessions 8-13 have different structure and use Problem Based Learning in combination with assignments and presentations. There is no split between main texts and additional texts.

Note that for the written exam only the main texts (and not the additional texts) need to be studied (this refers to the literature for session 1-7). For sessions 8-13 all texts are compulsory for the exam.

1.2. LITERATURE

The first part of the course mainly uses original articles as listed in Section 2. The literature for the second part is mainly overview articles/book chapters.

1.3. COURSE COORDINATORS

The course is jointly corrdinated by Thomas Meissner (<u>t.meissner@maastrichtuniversity.nl</u>), and Tom van Veen (<u>t.vanveen@maastrichtuniversity.nl</u>). Thomas Meissner tutors the first part, and Tom van Veen the second part.

Table 1: Meetings

Meeting	Date	
1		Introduction to the course
Part 1		
2		Lecture: Expected utility theory and rational (probabilistic) choice
3		Heuristics and biases
4		Prospect theory
5		Present bias
6		Fairness & social preferences
7		Markets, emotions and morals
Part 2		
8		Ricardo, Malthus and Marx: macroeconomics avant-la-lettre
9		Keynes and the (re?)- birth of macroeconomics
10		The start of the end of the Keynesian paradigm: Friedman's attack on Keynes
11		Post-Keynesian theory
12		Behavioural macroeconomics
13		Is economics an art or a science?

1.3. ATTENDANCE REQUIREMENTS

Students are expected to attend all tutorial sessions and lectures. Nevertheless, unforeseen circumstances might cause absence. To pass attendance, students can miss at most 3 of the 13 meetings.

1.4 Grade

The final grade for this course is constituted as follows:

- Participation (weight: 30%):
 Students are expected to participate actively during the meetings. The participation grade constitutes 30% of the final grade. The minimum requirement to pass the course is a 5 out of 10 for participation.
- Presentations (weight: 30%):
 The presentation grade constitutes 30% of the final grade. The minimum requirement to pass the course is a 5 out of 10 for the presentations.
- Exam (weight: 40%):

There will be a written final exam during the exam week. The exam grade constitutes 40% of the final grade. The minimum requirement to pass the course is a 5 out of 10 on the exam.

To pass the course a final grade of at least 5.5 out of 10 is required. A student who scored less than 5.5 has to take the resit. A student will also have to take the resit if he or she has an insufficient grade for participation (< 5), for the presentations (< 5) or for the exam (< 5).

2. Course Material per Meeting

Meeting 2: Expected utility theory and rational (probabilistic) choice. (Lecture)

Main Texts:

- Perloff (2012). Microeconomics (Textbook), Sects 17.0-3
- Lecture Slides

Guide: This lecture will give a quick introduction of why economists care about models of individual choice to understand aggregated phenomena. We will then revisit the standard workhorse model of individual choice in economics: Expected Utility Theory (EUT), and its underlying axiomatic foundation.

Meeting 3: Heuristics and Biases

Topic 1: Representativeness & Errors in evaluating probabilities

Main Texts

• Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, vol. 185, no. 4157, pp. 1124–1131. *JSTOR*, www.jstor.org/stable/1738360.

Additional Texts:

- Gilovich, T. & Griffin, D. "Heuristics and Biases" (Introduction)
- Dohmen, T., Falk, A., Huffman, D., Marklein, F., & Sunde, U. (2009). The non-use of Bayes rule: representative evidence on bounded rationality.

Guide: The article by Tversky and Kahnemann lists a number of heuristics and biases that people have when dealing with choice under uncertainty. Make sure to introduce and distinguish the concepts of heuristics and biases. The remaining part of the presentation should focus on the representativeness heuristic, and also mention how people fail to use Bayes rule when making probability judgements (see the article by Dohmen et al.). The article by Gilovich and Griffin provides some interesting background information on the heuristics and biases program, that might be useful when preparing your presentation.

Topic 2: Availability, Adjustment & Anchoring

Main Texts:

• Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, vol. 185, no. 4157, pp. 1124–1131. *JSTOR*, www.jstor.org/stable/1738360.

Additional Material:

- Gilovich, T. & Griffin, D. "Heuristics and Biases" (Introduction)
- Furnham, A., & Boo, H. C. (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics*, *40*(1), 35-42.:

Guide: The presentation of the second part of this meeting should focus on the remaining two heuristics: "Availability" and "Adjustment & Anchoring". The survey paper by Furnham and Boo gives a nice summary on the existing research on the anchoring heuristic, that was initiated by the article of Kahnemann and Tversky.

Meeting 4: Prospect Theory

Topic 1: Introduction to prospect theory

Main Texts:

- "Prospect Theory" from The New Palgrave Dictionary of Economics.
- Kahneman, Daniel, and Amos Tversky (1979), "Prospect theory: An analysis of decision under risk." *Econometrica*, 263-291.

Additional Material:

• Perloff (2012). Microeconomics (Textbook), Sects 17.5

Guide:

This part should be an introduction into prospect theory. Make sure to illustrate the main components of prospect theory (e.g. loss aversion, probability weighting) intuitively, and explain how they differ from the standard expected utility paradigm. Section 17.5 of the book by Perloff contains a preliminary introduction to Prospect theory.

Topic 2: Applications of prospect theory

- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior & Organization*, 1(1), 39-60.
- Colin Camerer (2004), "Prospect theory in the wild: evidence from the field"

Guide:

Both articles give an overview of a number of interesting and important empirical findings, that are at odds with expected utility theory, but can be explained with the help prospect theory. Here you should focus on the explanations of the empirical findings in terms of prospect theory. You can focus on the regularties/biases that you deem most important.

Meeting 5: Present Bias

Topic 1: Introduction to intertemporal choice & present bias

Main Text:

• Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. Journal of economic literature, 40(2), 351-401.

Additional Material:

- Dan Ariely: Self Control (TEDx Talk)
 https://www.youtube.com/watch?v=PPQhj6ktYSo&t=302s
- Perloff (2012). Microeconomics (Textbook), Sects 16.0-3

Guide:

The article by Frederick Loewenstein and O`Donoghue first provides an introduction into the standard discounted utility (DU) model. Please make sure you understand (and explain in your presentation) the basic principles of DU. If the exposition in this article is too difficult, please consult an introductory microeconomics textbook, such as Perloff (2012) Sects 16.0-3.

In your presentation, please make sure to mention common problems and violations of the DU models, such as observed preference reversals. As an alternative (i.e. more realistic) model, you can focus on hyperbolic discounting. Please explain (shortly, e.g. with an example) how hyperbolic discounting can lead to preference reversals. Do not spend too much time on this though, since preference reversals are also part of the following topic. The TEDx Talk give a nice and intuitive exposition of present bias, which can be helpful for understanding, but does not need to be part of the presentation.

Topic 2: Self Control & Preference Reversals

Main Texts:

- Vigna, S. D., & Malmendier, U. (2006). Paying not to go to the gym. The American Economic Review, 96(3), 694-719.
- Shlomo Benartzi: Saving for tomorrow, tomorrow (TED Talk) https://www.youtube.com/watch?v=gzcw_02ZB1o

Additional Material:

- Thaler, R. H., & Benartzi, S. (2004). Save more tomorrow™: Using behavioral economics to increase employee saving. Journal of political Economy, 112(S1), S164-S187.
- Dan Ariely: Self Control (TEDx Talk)
 https://www.youtube.com/watch?v=PPQhj6ktYSo&t=302s

Guide:

Topic 2 mostly deals with how preference reversals can be problematic (e.g. paying for the gym, but not visiting it, or not saving enough for retirement). Can you think of other examples where present bias may lead to undesirable outcomes? The TED talk "save more tomorrow" (see also the article by Benartzi and Thaler) gives an example of how problems with present biased preferences (among other behavioral biases) can be alleviated by clever policy design. Make sure to explain this in your presentation too.

Meeting 6: Fairness & Social Preferences

Topic 1: Social Preferences

Main Texts:

- Fehr, E., & Gächter, S. (2000). Fairness and retaliation: The economics of reciprocity. The journal of economic perspectives, 14(3), 159-181.
- Sigmund, K., Fehr, E., Nowak, M. (2002). The Economics of Fair Play. Scientific American. 286.1 80-85

Guide:

In this topic, you should give an introduction into social preferences. How does the idea of fairness and social preferences deviate from standard economic theory? Also give a quick introduction into the types of experiments that researchers have conducted to identify social preferences. What behavior would standard economic models predict in these experiments , and how do people deviate from this?

Topic 2: Social Preferences in the field

Main Texts:

- Falk, A. (2007). Gift exchange in the field. *Econometrica*, *75*(5), 1501-1511.
- Daly, M. C., Wilson, D. J., & Johnson, N. J. (2013). Relative status and well-being: evidence from US suicide deaths. Review of Economics and Statistics, 95(5), 1480-1500.

Additional Material:

Frans de Waal: Do Animals have morals (TED Talk)
 https://www.ted.com/talks/frans de waal do animals have morals

Guide: This topic deals mostly with examples of social preferences and their repercussions in "the field" (that is, in real life). The two articles showcase different aspects of social preferences. Generally, social preferences should arguably be considered as beneficial to society (e.g. charitable giving, see the article of Falk), but there also maybe negative repercussions to caring about social comparisons (e.g. suicides, see the article of Daly et al.). For the article of Daley et al., focus on the main points and intuition, you don't have to understand all the details of their empirical estimation strategy. The (quite funny) TED Talk by Frans de Waal shows that social preferences are not only a human trait, but can be observed in animals as well (The part on fairness starts at about 12:30).

Meeting 7: Markets, Emotions and Morals

Topic 1: Efficient markets hypothesis and its critics

Main Texts:

• Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *The Journal of Economic Perspectives*, 17(1), 83-104.

Additional Texts:

"Efficient Markets Hypothesis" from The New Palgrave Dictionary of Economics.

Guide:

Explain the intuition behind the efficient market hypothesis (EMH), and what the implications are if markets actually are efficient. Are commonly observed asset price bubbles (e.g. tulip mania, dotcom bubble, housing bubble, bitcoin bubble?) consistent with the efficient markets hypothesis? What are common criticisms of the efficient market hypothesis (you may focus on a few main points, rather than listing the extensive list of failures of the EMH)?

Topic 2: Markets, Emotions and Morals

- Lo, A. W., Repin, D. V., & Steenbarger, B. N. (2005). Fear and greed in financial markets: A clinical study of day-traders. AEA Papers and Proceedings
- Falk, A., & Szech, N. (2013). Morals and markets. science, 340(6133), 707-711.

Guide:

In this part we will see how emotions may affect behavior on financial markets, and also revisit the often iterated claim that markets may erode morals. Can you think of other ways emotions may affect market behavior? Do you think the paper by Falk and Szech makes a good argument for the erosion of morals in market interactions?

Please read the introduction to part 2 and the text for session 8 before the session and read the literature before the session.

Part 2: The development of macroeconomic theories

Introduction to meeting 8-13

The second part of the course discusses macroeconomics and the debates among macroeconomists. In an article in The Quarterly Journal of Economics, celebrating the 100th anniversary of Marshall's famous Principles book, the economist William Baumol wrote that after Marshall not much has happened in the development of microeconomic theory, but that major developments have taken place in macroeconomics and in testing economic theories¹. Note that the article was written before behavioral economics really took off as an important branch in economics.

What have been important developments in macroeconomics?

- 1. In the 18th and 19th century, macroeconomic analyses were primarily discussing income distribution, that is distribution between the labor share and the capital share in income. Economists like David Ricardo and Karl Marx laid the basis for much of these discussions.
- 2. Before the 1940s and before Keynes, there was no real macroeconomic theory that analyzed the demand side of the economy. As far as macroeconomic variables were analyzed, the analysis was very much based on a market clearing economy with fully informed rational decision makers: macroeconomics was "inflated" microeconomics and macroeconomic equilibrium was a Walrasian equilibrium where all markets clear via the price mechanism. Take a representative agent, analyze his or her behavior and from this you can draw conclusions for macroeconomic demand, supply and the aggregate price level. This is what we call the Classical School in macroeconomics. Neo-Classical and New-Classical Schools use the same paradigm of an economy that tends to move to an equilibrium.
- 3. There were some exceptions though, but these economics schools stood outside "traditional" economics schools and developed a completely different view on economics. These schools are currently united under the heading "heterodox economics" which is an umbrella name for a large number of economic approaches. Some of these approaches focus on the methodology of economics (the Institutional School) whereas others focus on specific topics (feminist economics). Three examples. The Institutional School, founded by Thorsten Veblen, very much focused on a combination of sociology and economics to analyse economic behavior. Second, Joseph Schumpeter developed ideas about economic development. This so-called Schumpeterian economics or their modern version, evolutionary economics, claim the there is no Walrasian equilibrium in the economy but that the economy is continuously developing. Third Marxian economists focused on the power relations between labor and capital..
- 4. Interestingly, in de mid of the 20th century, there was a big "systems" debate in economics. The question was whether we should leave the regulation of the economic processes to the market (Ludwig von Mises) or to the government (Oskar Lange). The debate however, evolved around the question whether the government could reach Pareto-optimal results as well, just like the market. Hence, the debate was very much driven from standard micro-economic theories.

This was the economic input for Keynes to develop his ideas about macroeconomics. Economics was a theoretical discipline, very much based on classical assumptions about rational behavior and focused

¹ Baumol, W.J. (2000), What Marshall *Didn't* Know: On the Twentieth Century's Contributions to Economics, *The Quarterly Journal of Economics*, CXV, (1), pp. 1-44.

on equilibrium economics. In the 1930s Keynes observed huge unemployment rates and idle capacity of capital. These problems were not solved by the market. On the contrary, the market seemed to aggravate these problems. Keynes analyzed these problems and came up with a new view on economic relations at an aggregate level. In this sense, Keynes is the father of macroeconomic theory. Keynes also brought behavioral economics avant-la-lettre in economic theory with his ideas about animal spirits and his ideas about how uncertainty influences economic behavior.

The theoretical insights of Keynes lead to two developments in economic theory. The first one is the question whether a government can and need to co-ordinate economic decisions and how effective fiscal and monetary policies are. Second, and much to Keynes disapproval, his models inspired a number of economists to develop economic models and techniques to empirically test Keynes' theories. Keynes himself was not so fond of these developments, as evidenced by his at times unfriendly, debates with Jan Tinbergen, one of the fathers of the development of econometrics.

Keynes' theories have inspired many macroeconomists to further develop his ideas (post-Keynesian, neo-Keynesian, new-Keynesian) or to attack his ideas (Monetarists, neo-classicals, new-classicals). These are the main Schools in macro-economics at this moment. The big point of discussion is: is demand management by the government effective to solve unemployment and inflation problems or will the market solve these problems?

In addition there are the evolutionary economists who focus on economic growth and development. Marxian economists play a marginal role in the economic debate nowadays.

How do we discuss this development of macroeconomics in the remaining 6 meetings of the course?

We start with the ideas of "early macroeconomists" or better, macroeconomists avant-la-lettre: Malthus, Ricardo and Marx. I would not label them as macroeconomists in the way that Keynes discussed macroeconomics as an analysis of the relation between aggregate markets. But Malthus, Ricardo and Marx discussed macro-economic problems, in particular the development of the economy in the long run and the distribution of income between capital and labor (meeting 8). One can say that Malthus, Ricardo and Marx focus much more on the supply side of the economy than on the demand side of the economy.

The Great Depression of the 1930s inspired Keynes to focus on the demand side of the economy and to deeply think about the relation between aggregate markets in an economy. His view was quite different form the prevailing so-called classical view in economics and we will pay attention to both classical macroeconomics and Keynes' reaction and innovations. The key question that we discuss will be: can the government be an effective agent in the economy to co-ordinate decisions of the various agents in an economy? We extensively discuss the Keynesian point of view (meeting 9).

Keynesian theory was the prevalent theory and paradigm until the 1960's when Milton Friedman from Chicago (THE breeding place for (neo/new) classical economists) started a counter attack and redefined the quantity theory of money, the neo-classical dichotomy and the neutrality of money. Moreover, he introduced the expectations-augmented Phillips curve. His policy conclusions are quite different from Keynes. The current policies of the ECB and the FED are heavily based on Friedmans' view. Second, the ideas of Friedman started a thorough discussion about the role of expectations in the economy. This resulted in the incorporation of rational expectations in economic theory (meeting 10).

In the 1970s, the so-called Post –Keynesians led the counter-attack from a Keynesian point of view. They revised Keynesian theory and brought in new variables just like Friedman did with the neo-classical theory (meeting 11).

The strength of classical macroeconomics has always been that it builds on microeconomic concepts. This is the weak point in Keynesian theory. In the 1970s some Post-Keynesian economists (Tobin, Leijonhufvud) took the challenge to build a micro-foundation for Keynesian economics but they were not all very influential. Nevertheless the problem of the micro-foundation of disequilibrium macroeconomics remained and in the late 1980s a number of Keynesian economists (Romer, Akerlof, Yellen) succeeded to develop theories to show that optimizing individual behavior can lead to unemployment, sticky prices and a deviation from the Walrasian equilibrium. These economists are called the new-Keynesian economists..

New-Keynesian theories can easily be combined with new-classical theory (which is classical theory combined with rational expectations). A specific type of models, Dynamic Stochastic General Equilibrium models (DGSE models) combines these theories. The policy conclusions of this model bring us back to the classical economists: demand-led government policy is at most effective in the short run. But this model does not seem to capture economic developments very well. In particular Paul de Grauwe tries to bring in more behavior in these types of models and the results are quite surprising and show how sensitive the DSGE models are for the assumptions about rational behavior. This brings us back to the first part of the course (meeting 12).

The discipline of economics has changed dramatically over the years. Smith, Ricardo and Marx did not use formulas and explicit mathematics in their writings. Even Marshall and Keynes were reluctant to use mathematics to illustrate their theories. Second, economics has been evolving from a largely theoretical discipline to a discipline where empirical testing and doing experiments has become common. Have these developments make economics a science? We will discuss this question and the developments in economics in meeting 13.

The strength of the set-up that we have chosen for this part of the course is that students get a deep and good insight in the development of modern macroeconomic theory, which is the theoretical foundation for macroeconomic policies all over the world. Second, students will extensively discuss the Post-Keynesian view which is the main alternative theoretical view. But our choice comes with an (opportunity) cost. We do not discuss and pay attention to all sorts of heterodox economics such as (neo-) Schumpeterian economics, neo-Ricardian economics, feminist economics, Sraffian economics, sociological economics to mention just a few of the many "schools" that call themselves "heterodox". One argument is that quite a few of these "schools" are not based on strong theories or focus only on a limited part of economics. Second, our approach makes very clear that in a market economy either prices or quantities adjust on markets and the more prices adjust, the less quantities need to adjust and the other way around. And whether and how fast prices adjust is a matter of economic behavior of the many economic agents in an economy, but also on the institutional arrangements in an economy. Our choice also aims to make students aware of the strengths and the limits of the assumptions about behavior that are being made in various theories and this relates the first and the second part of the course.

Session 8 Ricardo, Malthus and Marx: macroeconomics avant-la-lettre

The "classical" economists (not in the sense of theoretical approach but in the sense of the economists who lived in the 18th and 19th century) were very much political economists. Economists like Adam Smith, David Ricardo, John Stuart Mill, Robert Malthus and Karl Marx analyzed a number of what they observed as economic problems. In modern language, they could be micro-economic problems or macro-economic problems.

They observed the consequences of the industrial revolution: the emergence of a large labor force, growing cities and growing poverty. For Ricardo and Marx, a key question was: what determines the value of a good? In their views, it was not supply and demand (this idea was developed much later by Marshall), but it was related to the effort of inputs, in particular labor input. Why were wages then so low? And what about profits and rents? Hence, in essence both discussed the distribution of income between labor and capital. Marx and Malthus also analyzed the longer term development of the economy. Both developed a quite pessimistic view on the future of a capitalist society, although they use different arguments.

These theories were developed in the 18th and 19th century. Do you think that they are still relevant today?

Heilbronner, R.(2000), *The Worldy Philosophers*, revised 7th ed,, Penguin Books, Ch. IV (Malthus, Ricardo), VI (Marx). Later editions are also allowed.

Sandmo, A. (2011), Economics Evolving, Princeton University Press, Chapter 4, 6

Session 9 The first real macroeconomist or the re-birth of macroeconomics?

Many adherents to Keynes like to talk about the "Keynesian Revolution" in economic thinking. But did Keynes really cause a "revolution" and a paradigm shift in economics? What then made Keynes' ideas so different from his predecessors?

Let me shortly describe the classical macroeconomic theory. Utility maximizing consumers and profit maximizing firms interact in the economy. On the labor market, wages clear the market and hence, involuntary unemployment cannot occur. Savings and investments depend on the real interest rate and hence the real interest rate clears the goods market. The aggregate price level and inflation are determined by demand for and supply of money, thus on the money market. All markets will continuously be in equilibrium (this would be the Walrasian general equilibrium) or market forces will bring markets back to equilibrium in case of a disequilibrium. There is no need for the government to interfere in the economy.

Friedman, M. (1997), John Maynard Keynes, Federal Reserve Bank of Richmond, Economic Quarterly, 83/2, pp. 1-23.

Sandmo, A. (2011), *Economics Evolving*, Princeton University Press, Chapter 15 Skidelsky, R. (2009), *Keynes, The Return of the Master*, Allen Lane, Ch. 3, 4

Session 10 The start of the end of the Keynesian paradigm: Friedman's attack on Keynes

Until the early 1960s Keynesian theory was the dominant macroeconomic theory. The Keynesian cross, extended with the money market in the IS/LM model from Hicks and Hansen, was an attractive model for economists and politicians. The model was simple and one could easily calculate the effects of increasing government expenditures, tax cuts and changes in the interest rates. In addition, government policy was effective to solve unemployment. The statistician A.W. Phillips supported Keynes' theory as he discovered a negative trade-off between inflation and unemployment. Thus, the spirit in economic policy was: "tell me what unemployment rate you (politicians) prefer and I (economist) tell you what rate of inflation you must accept". And any point along a Phillips curve could be chosen.

This idea of a government that can fine-tune the outcomes of an economy has always been a nightmare for the so-called Chicago economists who strongly believe in market forces that govern economic decisions, but it was not until the 1960s when Milton Friedman entered the stage, that Keynes' theories were seriously attacked. In his famous article on the role of monetary policy, Friedman challenged the idea of a stable Phillips curve and argued that non-stability of the Phillips curve has severe implications for economic policy. These implications strongly relate to the quantity theory of money, which was developed by Irving Fisher and supported by Knut Wicksell in the early 20^{th} century. Friedman's approach has also been labelled as the re-definition of the quantity theory and started the debate about the neutrality of money in an economy.

Friedman, M. (1968), The Role of Monetary Policy, American Economic Review, Vol. 58 (1), pp 1-17.

Sandmo, A. (2011), Economics Evolving, Princeton University Press, Chapter 12

Session 11 Post-Keynesian theory

There are many kinds of Post-Keynesian theories and theorists. In fact, many Post-Keynesians are engaged in strong debates about who is the real Post-Keynesian. It is not so easy to exactly pinpoint what unites them except for a strong rejection of classical equilibrium economics. Second, they focus heavily on uncertainty as opposed to risk and elaborate on the consequences of this difference. Third, they have a different view on money and the monetary processes in an economy. They strongly advocate the non-neutrality of money in an economy. The policy implications and their analyses are quite different from what Post-Keynesians use to call "orthodox economics". Instead, they prefer to label themselves as one of the most prominent schools in "heterodox economics".

We will study a general overview and 3 examples of Post-Keynesian analyses. Focus again on how they differ from classical economic theory and on the policy implications of their analyses.

Holt, R. and S. Pressman (2001), A New Guide to Post-Keynesian economics, Routledge, Ch.1 an Ch. 2.

Minsky, H.P. (1992), *The Financial Instability Hypothesis*. The Jerome Levy Economics Institute of Bard College Working Paper

Mitchell, W. (2013), Full Employment Abandoned: the Triumph of Ideology over Evidence, Working Paper 02-13, Centre of Full Employment and Equity (CofFEE), Darwin/Newcastle, Australia also in H. Meijers and T. van Veen (2013), 3 Decades of Economic Diversity, Essays in honour of prof. J. Muysken, Canon Business Services, Maastricht.

Pressman, S. (2011), Microeconomics After Keynes: Post Keynesian Economics and Public Policy, *American Journal of Economics and Sociology*, 70, 2, pp. 511-539.

Please pre-read the task in session 12 in session 11 and divide the literature.

Session 12 Behavioral macro-economics

The concept of "rationality" has always been an important concept in economics. One major question has always been: why would people NOT behave rational? This question has been relevant for the further development of macro-economic theory.

Keynes and the Post-Keynesians were/are a bit sloppy on individual economic behavior and implicitly seem to suggest that people and firms do not behave rational in the sense of the classical economists. Concepts like money illusion and animal spirits are evidence of these thoughts. This has always been a major topic for critique on Keynesian theories. In particular among economists who claim that macroeconomic theory must be solidly founded on micro-economic principles. Hence, the relevant question is: if people behave rational, is an underemployment macro-economic equilibrium a possible outcome? Alternatively, even if people behave rational, is there then still a role for the government to play to "correct" the market forces? Or, if people behave irrational or non-rational, how can this be? And what do we mean by non-rational and what is the effect on the macroeconomy?

Various economists have taken the challenge to tackle this problem. In particular George Akerlof (alone and in cooperation with Robert Shiller) and Paul DeGrauwe have been working on this topic, albeit from a different perspective.

Let us split the group in 3 sub-groups. The first sub-group presents and discusses Akerlof (2002), the second sub-group discusses Akerlof and Shiller (2009) and the last sub-group discusses DeGrauwe (2010). We plan at maximum 25 minutes for the presentations of the sub-groups (1) and (3) and 35 minutes for the presentation of sub-group (2). Focus again on the innovations that the authors claim to make and on the policy implications.

Akerlof, G. (2002), Behavioral Macroeconomics and Macroeconomic behavior, *American Economic Review*, Vol. 92, No. 3 (Jun., 2002), pp. 411-433

Akerlof, G. and R. Shiller (2009), Animal Spirits, Part one (pp. 1-58), nine (pp. 107-115), thirteen (157-166) and fourteen (pp. 167-176).

Grauwe, P. de (2010), *Lectures on Behavioral Macroeconomics*, Princeton University Press, Ch. 1 and 2.

Session 13 Is economics an art or a science?

This session is divided in three parts. First we discuss trends and perspectives in economics. On a pessimistic note, physicians and mathematicians have taken over economics and this has led to further formalization of economic theories. Second, with English as the lingua franca these developments paved the way for dominant view(s) to exist. Is this the way to move forward with our discipline? Second, we discuss the birth of econometrics. Econometrics enriched economic theory because econometricians develop methods to test hypotheses that follow from theoretical models, which economists develop. However, what does "test" really means in the context of a social science?

This point brings us to the third question: is economics a science? Some people claim that economics is at most a dismal science. Other people claim that economics is a science and still others call economics an art. An art with a Nobel prize. So the answer seems to depend on the definition of what a science is.

Hausman, D.M. (2012), Philosophy of Economics, parts 1, 2 and 3, Stanford Encyclopedia of Philosophy http://plato.stanford.edu/entries/economics/

Heilbronner, R.(2000), The Worldy Philosophers, revised 7th ed,, Penguin Books, Ch. XI: The End of the Worldly Philosophy? . Later editions are also allowed

Sandmo, A. (2011), Economics Evolving, Princeton University Press, Chapter 1, 16, 19