# Guidelines for Final Exam (April 10, 2017)

The exam will last for two hours and will have two sections, which will carry equal weights:

1. The first section will feature a choice of different short questions where you are asked to briefly explain an important aspect of the course. You will be asked to answer 6 questions from a list of 10.

2. The second section will be a mixture of discussion questions and technical questions focused on models. You will be asked to answer 2 questions from a list of 4.

If you decide to answer more than the required number of questions, I will grade the best six from Section 1 and the best two from Section 2.

The potential questions from both sections will be given out over the term by regular updates of this handout.

## Sample Short Questions for Section One

1. History shows it is possible to have monetary systems without the involvement of government. In practice, though, currencies are generally issued and controlled by governments. Discuss why this is the case.

2. What is a fiat currency system and how does it compare with non-fiat systems? Is it right to draw a sharp distinction between these two kinds of systems?

3. What is fractional-reserve banking and how does it work? Provide an example.

4. What does it mean when we say a bank has a solvency problem? How does it differ from a liquidity problem? How might the problems interact with each other? Provide examples.

5. How do central banks create money? Provide at least one concrete example.

6. What is described by a central bank's balance sheet? Should the public be concerned about a central bank's solvency?

7. Discuss the relationship between the monetary base and the money supply.

8. What is the Quantity Theory of Money and how well does it work in practice?

9. How has the Federal Reserve traditionally influenced the Federal funds rate? Why and how are its procedures changing?

10. How does the ECB influence short-term European money market interest rates?

11. What is value at risk and how is this concept used in banking regulation?

12. Discuss the points that Haldane and Madouros's paper "The Dog and the Frisbee" makes about banking regulation.

13. What is meant by "macro-prudential policy"? Give some specific examples of policies of this type.

14. What is a bond? What is the yield to maturity on a bond? Describe the relationship between movements in bond prices and movements in bond yields.

15. How do default risk and quality of collateral affect interest rates on different types of debt?

16. What is a liquidity trap?

17. What is quantitative easing? Why might a central bank employ it and what are the channels through which it might boost an economy?

18. What are the expectations-augmented and accelerationist Phillips curves? Discuss how these theories were developed.

19. Why might a government appoint a central banker who dislikes inflation more than the members of the government?

**Sample Long Questions for Section Two**

1. Milton Friedman proposed that central banks should operate by controlling the supply of money and expanding it at a low average rate. What was the basis for this advice? In light of the evidence available today, what are the strengths and weaknesses of such a policy?

2. Why do banking crises lead to large restrictions in credit? Describe the features of modern banking systems that have made systemic banking crises a greater risk and the issues these have raised for policy makers.

3. Describe the process in which various types of creditors get repaid when a bank is put into liquidation. Then describe some of the alternatives to a straight liquidation that regulators use as part of “bank resolution”. What considerations do governments have to take into account when deciding how to deal with a failing bank? How has European policy in this area evolved in recent years?

4. What is the economic case for government regulation of the banking sector? What are the main types of banking regulation and how are these regulations changing around the world? How might banking regulation be further improved?

5. Discuss the expectations theory of the term structure of interest rates. How well does the theory work in practise at explaining the shape and movements in the yield curve? How do we extend this theory to cover the interest rates on mortgages or loans to businesses that have a risk of default?

6. What determines the interest rates that firms and household borrow at and how are they related to the interest rates set by monetary policy? How do these interest rates affect economic activity? What can central banks do to influence the economy once short-term interest rates are zero?

7. Discuss the expectations-augmented Phillips curve and the role it plays in models such as the one presented by Barro and Gordon. What do models like this imply for the design of central bank institutions? What influence have they had on international central banks over the past 20 years?

**Strategies for the Exam**

Some suggestions about the final exam:

- **Whelan's Golden Rule of Exams**: Please answer the required amount of questions. Even if you don't know much about a question, *write something*. I do not want to fail people but the rules are that if you write nothing, you get zero. Even a short and very poor answer could still get 30%. The difference between this and zero could be the difference between passing and failing.

- Read all parts of the question and attempt to answer each part. If a question contains two elements (e.g. "Discuss … " and "Why is …?") then I am expecting you to address both elements. Answers that ignore one of them will score poorly.

- I am not looking for very long discursive answers to the Section A questions. Short but accurate answers will do just fine. However, if I think three points are necessary for a good answer, then answers that only make two of these points will only get lower grades.

- In general, I don't have a good answer to "how long should questions be?" Ultimately, you have about ten minutes per answer in Section A and half an hour per answer in Section B. There is a wide range in ability among students in terms of how much material than can write. My only recommendations are to make as many good points as you can in the allotted time and to try to avoid making bad points that show you don't understand the relevant issues.

- For some of the topics in the course, I use equations to explain concepts and theories. I do this because I believe this is a useful way to explain these topics. For this reason, you should keep in mind that if you decide to answer questions on these topics without using any equations, chances are you are not explaining this topics as well as I would like. This will likely be reflected in your grade.

- Be careful about studying in groups and sharing sample answers. It is common for me to see a number of very similar essays on particular topics, with each of them repeating the same specific mistakes. The lecture notes and materials and the class website will be a much more reliable source of answer material than answers obtained from a friend.

- Using arguments from the additional readings provided is a really good way to improve your essays and to allow you to discuss issues in more

depth than you'd get from repeating my notes back to me.

- Some students answer questions on this exam by giving their own opinions without any reference to the material taught in class. I guess this mainly happens when students have not spent much time preparing but there have been occasions where students have clearly put in time preparing answers separately from the course materials or readings or have used ideas borrowed from other people (e.g. once a student told me his brother who "worked in finance" helped him prepare some of his – very bad – answers.) This is generally not a good idea.

- Don't re-write the questions for me. Just list the numbers. I wrote the questions. I know what they are.

- If you are making a number of points in favour of or against an argument, it may help to number your points or at least make it clear where one point ends and another begins.

- I know that those of you with poor handwriting cannot do much about it (and the exam is not a test of handwriting) but spacing out your answers well and numbering your points can make it easier to assess your answers.

- Let me give you a rough guide to how I grade questions in this exam:

    - A: This tends to be given for answers that explain the issue very well, including each of the key points that I am looking for.
    - B: These tend to be answers that explain the issue reasonably well but that miss some of the key points that I think are important.
    - C: These answers tend to explain some parts of the topic correctly but perhaps leave out important points or get some things wrong.
    - D: These answers tend to show the student has only a very basic grasp of the topic.
    - E: Worse than D answers.

- Check out the next page for samples of what would be a good or bad ways to answer "Discuss the relationship between the monetary base and the money supply."

**Example of Good and Bad Answers: Monetary Base and the Money Supply**

A typical A answer would cover

- Definition of money supply and monetary base.
- Definition of the money multiplier as the ratio of the money supply to the monetary base.
- Brief description of the simple money multiplier model in which the multiplier is 1/r
- Extensions incorporating currency and excess reserves.
- Other factors influencing bank lending decisions and thus the money multiplier.
- Perhaps a brief reference to the recent behaviour of the money multiplier.

An example of a B answer would be one that would cover

- Definition of money supply and monetary base.
- Definition of the money multiplier as the ratio of the money supply to the monetary base.
- Description of the simple money multiplier model in which the multiplier is 1/r
- Extensions incorporating currency and excess reserves.

An example of a C answer would be one that would cover

- Definition of money supply and monetary base.
- Definition of the money multiplier as the ratio of the money supply to the monetary base.
- Description of the simple money multiplier model in which the multiplier is 1/r
- A low C answer may get some of the above a bit confused.

A D answer would perhaps state what the money supply and monetary base are but not much more.

A fail answer would be one that shows the student does not know what the money supply or monetary base are.