

College of William and Mary

ECON-463 Entrepreneurial Choice and Industrial Policy

Professor: Shi Qi

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Office Hours W 2:15-3:15 PM; TH 3:45 - 4:45 PM

Term: Spring 2020

Class Times: MWF 10:00 - 10:50 am

Location: Tyler 121

1 Course Description

The goal of this course is provide you with the theoretical foundations and practical skills to evaluate Industrial policies that can profoundly affect entrepreneurial choices and competition. In particular, we look into policies that can affect entrepreneurial occupational choice, business formation, pricing strategies, legal forms, advertising, and innovation. This class builds the micro-economic theories you have learned from Econ 303, and apply these concepts using the econometric methodology from Econ 308.

The class will cover both important theoretical topics and discuss important policies issues relating to entrepreneurial choices. Combining both theoretical understanding and policy applications, we will look into a real-world firm survey data. In particular, we will use the data to study new business formation activity; characteristics of business strategies; the nature of business organizational arrangements; and the characteristics of entrepreneurs. Through studying the data, you will learn how to apply theoretical models to project the outcomes of industrial policies and evaluate their economic welfare consequences. In particular, you will learn the importance of using micro-foundation structural models in predicting the effect of a policy, per the Lucas critique. You will also be asked to hone your effective communication skills including written reports, preparing graphs and figures, and presenting analysis results to an audience.

2 Prerequisites

Students should have completed Econ 303 Intermediate Microeconomic Theory, or an equivalent class. In addition, basic calculus skills are assumed (differentiation, integration, chain rule, quotient rule, etc.) To succeed in this class, we will understand the intuition behind many economic models, which require algebraic and graphic analyses. Students should also have completed Econ 308 Econometrics, or an equivalent class. You will need to use the software STATA extensively in completing the group projects.

The course is intended to juniors and seniors in the Economics Major, and satisfies the COLL 400 requirement.

3 Grading

A total of 100 points are possible for the course. They are distributed as follows:

- Attendance and In-class participation - 10%
- Lead class discussion - 20%;
- Exam 1 - 10%;
- Exam 2 - 10%;
- Group Project - 50%.
 - Replication Exercises - 10%;
 - Phase 2 Prospectus - 10%;
 - Phase 4 Presentation - 15%;
 - Final Report - 15% (Must Contain Two Parts).

Grading Scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
	92.9%	89.9%	86.9%	82.9%	79.9%	76.9%	72.9%	69.9%	66.9%	62.9%	
\geq	to	to	to	to	to	to	to	to	to	to	<
93%	90%	87%	83%	80%	77%	73%	70%	67%	63%	60%	59.9%

Please note that the grade scales above are ABSOLUTELY firm. This means, for example, if you get a class score of 89.99, you will absolutely get a B+, not a A-.

4 Topics Covered

We will cover and discuss a series of relevant topics. Most of the topics will take about three classes to cover. You are required to read assigned academic papers, or news articles, or listen to relevant Pod-casts before coming to class. Please refer to the course reading list for the relevant dates of the required materials. I will post the PDFs or web-links on-line at least a week before the class.

These articles are concerning specific industrial practices and policies, which we will discuss in class. You do not need to understand all the technical details of the papers, but are required to understand the backgrounds and important discussions in the paper. In particular, you should focus on identifying the following aspects of the article. What question is the author attempting to answer? Why is this an important question? What does previous research have to say about the question? What sort of evidence does the author rely on? Are there any drawbacks or limitations to this evidence? What conclusions does the author reach? What are the implications of these conclusions for larger economic questions? These will be the type of questions we discuss in class, and use in exams.

In addition, I will spend some class time discussing relevant models, which provide the necessary theoretical backgrounds. (You can take a look of the textbook *Modern Industrial Organization. 4th Edition.* by Carlton & Perloff; but the textbook is not required.) Again, the

technical details are not as important as the implications and intuitions behind the models. You will be asked to understand the theoretical assumptions , and how changing the assumptions might affect the predictions of the models.

In each discussion class, two students will be designated ahead of time to lead class discussion. When you are assigned to lead class discussion, you are expected to do a thorough reading of the paper. In class, the discussion leaders will detail the backgrounds of the paper, present any potential evidence provided in the papers, and review the main results. You can provide handouts (I can help with the printing), Powerpoint slides, or any format you think might aid your discussion. This will take 20-25 minutes. Then the discussion leaders will prepare and present a few discussion questions for the class. Then, we will go around the room to discuss the topic. You are encouraged bring outside related materials to discuss in class. Your participation is mandatory.

Please see the class calendar for all the topics covered.

5 Exams

Exams, based on readings and in-class discussions, contain mostly open-ended essay questions regarding the topics covered in class. There may be some theoretical questions, in multiple choice formats, regarding assumptions, predictions, etc.

There will be two exams, please see class calendars for the exact dates. If you need to miss an exam, you must notify me with a written/email request at least 24 hours before the exam. The only valid reasons for requesting a makeup exam would be: (1) A documented College sponsored events; (2) A documented medical emergency; (3) Some other documented extraordinary events. A makeup exam will be scheduled as soon as it can.

6 Group Project

This project provides you with an opportunity to apply the theories of this course to actual data. You will be assigned to a group of 2-3 people. The project, which is worth 50% of your overall class grade, will be completed in five phases.

Phase 0: You will be introduced to a business survey datasets, the *Survey of Small Business Finance* (SSBF). This dataset is publicly available. I will present to you a detailed instruction on how to access and use the data. You will use the data complete a replication exercise. This is to help you getting used to navigating the dataset and finding potentially interesting insights for coming up with your own research topics.

Phase 1: Find an interesting entrepreneurial decision to study. At the same time, identify a potential/real-world policy that can affect the entrepreneurial decision/outcome of your choice. This entrepreneurial decision/outcome MUST be identifiable in a dataset of your choice. You

must also choose a list of independent variables that can potentially be affected by an industrial policy. You must first get my approval on your choices of the entrepreneurial decision/outcome and industrial policy, and no two groups can have the same research topic. In the rare cases, if you choose to use a dataset other than the SSBF, you must also get approval from me first.

Phase 2: Develop and submit a short prospectus before the Spring Break. The prospectus must address the following:

1. What is the entrepreneurial decision/outcome you are studying?
2. What is policy issue that can affect this entrepreneurial decision/outcome? How does it work?
3. Brief description of your dataset, including a table of summary statistics.
4. What are the main variables from the dataset you will use in your research?
5. Why are these variables chosen?

I will meet with your group face-to-face after the Spring Break to discuss your prospectus.

Phase 3: Find empirical evidence similar to what you have done in Phase 0, and identify the important (i.e. economically significant) factors that can affect the entrepreneurial decision/outcome of your choice. Then you will develop a simply theoretical model, preferably using the tools and methods we discuss in class. This model must clarify the relationship between the industrial policy and the important factors identified from your regression analysis. You will then use this model to make predictions on the effects of policy experiments of your design. I will ask you to give me a project update by email or office meeting in the later half of the semester.

Phase 4: Your group will present your findings to the class at the end of the semester. Each group has 20-25 minutes. The presentation must include:

1. A brief review of the short presentation you did in Phase 2, especially if you have updated/changed anything;
2. The empirical evidence, and the econometric interpretation of your findings;
3. Your theoretic model on industrial policy analysis;
4. Your policy experiments and predictions.

After getting feedbacks from the in-class presentation, you will prepare a final written report to be submitted on the day of the final exam. This report must contain two parts. The first part is a research paper, no more than 10 pages long, containing all the analyses and technical details. The second part is a letter to the regulators or an Op-Ed, 2-3 pages long, in accessible language (i.e. no maths, only intuitions), suggesting a better policy stance based on your findings. If you only turn in one part, your final report will not be graded, and you will earn zero point for the final project.

7 Academic Honor Policy:

You are expected to follow the William & Mary Honor Code. If I discover any academic misconduct, I will initiate an Honor Council proceeding and recommend failure of the course. If you have any questions about how the Honor Code relates to this course, feel free to talk to me or refer to the Student Handbook and the William & Mary Honor Council's website.