
Lectures: Tuesday and Thursday 2:30-4:00 pm, https://mit.zoom.us/j/96553843618

Recitations: Time TBD based on class availability

Instructors: Robert Townsend, rtownsen@mit.edu
Office Hours, Thursdays 4:10 – 5:00, https://mit.zoom.us/j/92539008571
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Teaching Assistant: Lucy Page, lucypage@mit.edu, OHs: Wed 9-10:30 am, by appointment on Canvas, https://mit.zoom.us/j/98279501375

Website: https://canvas.mit.edu/courses/6654

Course Grading and Requirements:

Grades will be determined based on participation in lectures (10%), regular problem sets (12.5%), quasi-optional problem sets (12.5%), a referee report (10%), a research proposal project (20%), an in-class paper presentation (10%), and a final exam (25%).

Class Participation, in lectures (10%): Classes will be held live over Zoom, and questions are strongly encouraged. Students should attend live if at all possible, but we can make arrangements for students in substantially different time zones. Students are responsible for all content covered in lecture. The starred (*) readings below correspond most closely with featured papers in the lectures. There are review questions posted on Canvas that cover the main takeaways from the lectures.

Regular problem sets (12.5%): Prof. Townsend will assign 2 regular problem sets during the first half of the course, followed by 1 regular problem set from Prof. Bergquist during the second half of the course. All problems on these problem sets will be required.

Quasi-optional problem sets (12.5%): We will post 10 “quasi-optional” problem set questions, of which you must answer 2 by the end of the first half, Townsend segment. These questions are more open-ended than those in the regular problem sets.

Referee report (10%): You will write a referee report on a recent job market paper in development. The list of possible papers from which you may choose will be provided in the second half of the semester, due date TBD.

Research proposal project (20%): Students will write a proposal based on a topic, paper (or a few related papers), method, or theme. The first section of the proposal will be like a referee report on this topic. It should present the motivation for the topic or paper, go through key ideas and equations more succinctly than the original authors, and give a balanced view of strengths and criticisms; the latter are particularly important. The second section builds on the first part by proposing an idea for a project or paper that extends this work in an interesting direction. For
example, the proposal could suggest modifying a model, adding new data, or suggesting novel data analysis. You will present your proposal to the class and turn in a rough draft proposal at the end of the first quarter (4/1), followed by a final draft of the written proposal due at the end of the semester (date TBD).

You should begin thinking about a proposal topic early. Buera, Kaboski, and Townsend (BKT) (2021) is a review paper that should may be helpful in choosing a topic. The extended reading list on Canvas includes many papers cited in BKT, among others. Example proposals from previous years will be posted on Canvas. We will arrange early, quarter-semester meeting(s) with faculty to discuss your preliminary project ideas.

*In-class paper presentation (10%):* During the second half of the course, you will choose one non-starred paper from the Bergquist section of the syllabus, present it to the class, and lead a short discussion on it. The presentation and discussion should take no more than 15 minutes.

*Final exam (25%):* There will be a final exam released during the final class period for the course. The exam will cover material covered in the lectures, required readings, review sheets, and problem sets. Details TBA.

*Other materials:* The readings listed below are all strongly recommended, and starred readings are required as they are coupled with class lectures. You can find additional readings on the extended reading list posted on Canvas. We will also post supplemental materials for skill building, including on method of moments, linear programming, and likelihood functions, to Canvas.

**Townsend Section Key Readings**

(Lectures 2/16 – 3/30)

**Lecture 1: (2/16) Economic Science: It’s All About Experiments**


**Lecture 2: (2/18) Micro Data Tools: Cautionary Tales**


**Lecture 3: (2/23) Sufficient Partial Identification and Aggregation: choosing model; getting by with less structure**


**Lecture 4: (2/25) RCT Through the Lens of Structural Models**


**Lecture 5: (3/2) RCTs Introduced as if at Scale**


**Lecture 6: (3/4) Risk Sharing: Without Obstacles as Key Benchmark, How Close to Data. Building from below**


**Lecture 7: (3/11) Networks and Risk Sharing**


Lecture 8: (3/16) Building from Below: Identifying Real Underlying Obstacles


Lecture 9: (3/18) Life Cycle Models and Data; Behavior and RCT Interventions; With Insurance Limits, Credit Constraints and Transaction Costs for Liquidity, Life Cycle as Basis for Models of Growth and Inequality


Lecture 10: (3/25) Multiple Obstacles in Economy-Wide Models: Realistic vs Ad Hoc


Lecture 11: (3/30) Where is Structure Needed, or Not: Imperfect Competition and Finance


**Student Presentations: (04/01)**
Lecture 1: Economic Science: It’s All About Experiments


Note: All references listed below in Lecture 1 are drawn from Buera, Kaboski, and Townsend (2021), hereafter referred to as “BKT.”

Introductory sections of BKT (2021)


Aggregate Resource Constraints


Heterogeneity


General Equilibrium Effects


https://doi.org/10.1257/app.4.2.98.

Obstacles to Trade


https://doi.org/10.1093/qje/qju016.


https://doi.org/10.1086/697084.


https://doi.org/10.1257/aer.104.10.3186.


*Dynamic Optimization and Capital Accumulation*


**Economies of Scale**


**Lecture 2: Micro Data Tools: Cautionary Tales**


Lecture 3: Sufficient Partial Identification and Aggregation: choosing model; getting by with less structure


*Intermediate Approaches*


*Parallels in the US*


Lecture 4: RCT Through the Lens of Structural Models


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**Lecture 5: RCTs Introduced as if at Scale**


Buera, Kaboski, Shin. “Macro Perspective on Assets Grant Program: Occupation and Wealth Mobility, AER, May 2014


Ji Yan and Robert M. Townsend, Bank Branch Expansion vs International Capital Flows: Integrating Local Spatial Markets and Macro Aggregates, 2018


*Macro gifting natural experiments*


*Macro and regional economies and aggregate effects*


Lecture 6: Risk Sharing: Without Obstacles as Key Benchmark, How Close to Data. Building from below—risk sharing and networks

Basic Risk-Sharing:


Risk Sharing in the US


Lecture 7: Networks and Risk Sharing

Networks and Supply Chains in the US and other Economies


https://pdfs.semanticscholar.org/9bf3/9f16bf5aa2f663ff196dfae6a5a8848af3c.pdf?ga=2.130953862.869240609.1580312341-1559509627.1576540538


https://static1.squarespace.com/static/5bc932127fdcb8476acace36/t/5c2c542e0ebbe85745fc7502/1546409028785/JMP_FHL.pdf

https://margitreischer.files.wordpress.com/2019/11/reischer_tcwp110219_m.pdf

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**Lecture 8: Building from Below: Identifying Real Underlying Obstacles**

*In advanced economies...*


https://faculty.fuqua.duke.edu/~ls111/NSS_FC.pdf


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*Limited Commitment as an Obstacle*


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**Lecture 9: Life Cycle Models and Data; Behavior and RCT Interventions; With Insurance Limits, Credit Constraints and Transaction Costs for Liquidity, Life Cycle as Basis for Models of Growth and Inequality**


*Life Cycle Models with Limited Insurance*

*With Credit Constraints:*

*With Transaction Costs and Liquidity Constraints:*
Lecture 10: Multiple Obstacles in Economy-Wide Models: Realistic vs Ad Hoc

*Flow of Funds Within and Across Countries*


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Lecture 11: Where is Structure Needed, or Not: Imperfect Competition and Finance


*Related literatures and in other countries*


*And in Macro…*
