14.772 Development Economics: Macroeconomic Issues  
Spring 2012

Lectures:  Tuesday 2:30 – 4:00  
Thursday 2:30 - 5:30

Note: Because of the 3hr on Thursdays, we will only have two more weeks after spring break

Location: E51-361  
Recitations: TBD

Instructor:  
Robert Townsend: E52-252c; 617- 452-3722, rtownsen@mit.edu

Teaching Assistant:  
Michael Peters, mipeters@mit.edu

Website:  
MIT https://stellar.mit.edu/S/course/14/sp12/14.772/

Prerequisites:  
This class contributes to the fulfillment of requirements for the Development field for Economics Ph.D. students at MIT. People other than Economics Ph.D. students should consult with the instructors before enrolling. Students should have taken or be concurrently taking Ph.D. level macroeconomics, microeconomics, and econometrics.

Requirements:  
The grade will be based on a final exam, class participation and three problem sets. Two problem sets will cover theoretical and empirical problems related to papers discussed in the class. One problem set will consist of a research proposal based on the covered material. The proposal should consist of a research strategy to address questions that came up during the class. Ideally such proposal could lead to a third year paper. We will discuss some of the proposals during the last lecture of the class. We plan to have three or four students presenting their proposals. So if you like to present your ideas to get feedback, please let the TAs know. All research proposals are due in the last lecture.

Readings:  
Most readings can be reached through the stellar website. Please inform the TA of any broken links. You may need to be on campus to access links to copy-written materials (e.g. NBER working papers, JSTOR). Readings that are not available online will be available via library reserve.

Development/Macro Seminar:  
Everyone is encouraged to attend the Development Seminar, which meets on Wednesdays, 2:30 - 4:00 p.m. When there is an out-of-town speaker, we normally take the speaker out to dinner, and we will try to save a couple of spots for graduate students
each time. Let us know if you are interested. You are also encouraged to go to the Macro Seminar, which meets Tuesdays, 4.15 - 5:45 at MIT in the Freeman Room. Usually, there are 3 or 4 graduate students taking the speaker for lunch on Tuesdays. Again, let us know if you are interested.

Development/Macro Lunch:
Everyone is also encouraged to attend the Development or the Macro Lunches. Unfortunately both lunches meet at the same time, namely Mondays from 12:00PM to 1:00PM. The development lunch meets in Building E51-095, the macro lunch in the Freeman Room.

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<th>Date</th>
<th>Lecture</th>
<th>Day</th>
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<td>02/07/2012</td>
<td>1</td>
<td>Tuesday</td>
<td>Introduction</td>
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<td>02/09/2012</td>
<td>2</td>
<td>Thursday</td>
<td>(1) CGE, DSGE, Gorman (2) Financial Frictions: Zilibotti, Growing like China, Buera-Shin</td>
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<td>02/14/2012</td>
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<td>Tuesday</td>
<td>Financial Deepening: Jeong, Townsend (TFP) (model comp), Felkner Townsend (QJE)</td>
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<td>02/16/2012</td>
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<td>Thursday</td>
<td>(1) Measurement: Samphantharak, Townsend “Households as Corporate Firms” (2) Villages: Accounts (3) National: Flow of Funds</td>
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<td>02/21/2012</td>
<td>Monday schedule (Presidents Day)</td>
<td>Tuesday</td>
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<td>02/23/2012</td>
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<td>Thursday</td>
<td>(1) Insurance: Village India (2) Inter-regional risk sharing (3) Insurance: Shiller, Remittances, Instruments, International</td>
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<td>02/28/2012</td>
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<td>Insurance: Kinnan, Insurance in Networks</td>
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<td>03/01/2012</td>
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<td>(1) Labor Risk: Bonhomme et. al. (2) Elasticities: Rogerson, Sargent</td>
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<td>03/06/2012</td>
<td>12</td>
<td>Tuesday</td>
<td>Alvarez et al, Demand for Cash</td>
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<td>03/08/2012</td>
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<td>Thursday</td>
<td>(1) CAPM and Campbell (2) Poor Economies: Samphantharak, Rampini</td>
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<td>03/13/2012</td>
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<td>Heterogeneity: Schulhofer-Wohl</td>
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<td>03/15/2012</td>
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<td>(1) Barriers to Insurance: Kinnan (2) Karaivanov et al, including Spain</td>
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<td>03/20/2012</td>
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<td>Tuesday</td>
<td>How do macroeconomist think about this? Bundell, Krueger, Perri…</td>
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<td>03/22/2012</td>
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<td>Thursday</td>
<td>(1) IO and Devo: Keniston et al, Spain (2) Assuncao et al.</td>
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<td>03/27/2012</td>
<td>Spring break</td>
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<td>03/29/2012</td>
<td>Spring break</td>
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<td>04/03/2012</td>
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<td>Tuesday</td>
<td>Moll et al.</td>
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| 04/05/2012 | 22  | Thursday | (1) Methods: Chetty
              (2) Methods: Wolpin                                                 |
| 04/10/2012 | 24  | Tuesday  | Discussion, Research Proposals                                       |
| 04/12/2012 | 25  | Thursday | (1) IO and Development Working Group Meeting
              (2) Flow of Funds Working Group Meeting                             |

Syllabus and Reading List:

**Lecture 1: Introduction to the Course**

Related Literature:
- Raphael Bergoeing, Timothy J. Kehoe, Patrick Kehoe, Raimundo Soto, “A Decade Lost and Found: Mexico and Chile in the 1980s”
- Workshops of the Consortium on Financial Systems and Poverty
  - Financial Underpinnings of Macroeconomic Models
    - [http://www.cfsp.org/research/workshops](http://www.cfsp.org/research/workshops)

**Lecture 2 + 3: General Equilibrium Modeling with Financial Frictions**

**Main Readings:**
- *Lecture Notes: CGE, DSGE*
- Juan Pablo Xandri and R. Townsend (2010) *Lecture Notes about Calibration (Gorman)*
Related Literature:
- Buera, Moll, “Aggregate Implications of a Credit Crunch” (2011)

Lecture 4: Macro Development Models (continued: transitions, geography, model comparisons)
Main Reading:
- Assuncao, J. Madeira, G. and R. M. Townsend: Brazil Project: Slides
- Yan Ji –Computation Slides

Main Reading:
- Lecture Notes: Flow of funds

Related Literature:
- A Banerjee, E Breza and R Townsend, “Productive Heterogeneity and Household Investment in Rural Thailand”
- Caballero, Antras, Trade and Capital Flows, A Financial Frictions Perspective, JPE

Lecture 7+8: Insurance: from Village Insurance to Risk Instruments in advanced, OECD countries
Main Reading:
• Village as small open economies, continued
• Rainfall Insurance
• Handout for Case-Shiller-Index
• Handouts for Cat Bonds and Reinsurance
• Literature on International Risk-Sharing

Lecture 9: Financial Networks and Shadow Banking
Main Reading:

Related Literature:
• W Sripakdevong, R Townsend, “Refinancing Loans”
• Bertrand et al. tunneling
• Chaibols, Joint Liability Groups
• R Townsend, “Saving and Risk in Developing Countries: Theory and Evidence”, NBER Summer Institute Report

Lecture 10+11: Labor Supply: Intensive and Extensive Margin in Villages to Families, Lotteries, and Elasticities in Macro
Main Readings:

Additional Readings:
• Ljungqvist, Lars and Sargent, Thomas J., “A Labor Supply Elasticity Accord?”,
Lecture 12: Demand for Cash
Main reading:
- F Alvarez, Pwasutipaisit, Townsend, “Cash management in Thai Villages”

Related Literature:

Lecture 13+14: Capital Asset Pricing: Idiosyncratic and Aggregate Risk, Mean Variance Frontiers, Lack of Insurance among the poor and modern corporations
Main reading:
- K. Samphantharak, ”Understanding Income Volatility in Village Economies”

Lecture 15: Heterogeneity in Structural and Reduced Form Models
Main Reading:
- Schulhofer-Wohl, “Heterogeneity and Tests of Risk Sharing“

Related Literature:

Lecture 16+17: Barriers to Sharing Risk (moral hazard, limited commitment, exogenous incomplete markets): Common Methods in Village and OECD countries
Main Reading:
- Kinnan, Cynthia, “Distinguishing barriers to insurance in Thai villages“

Related Literature:
- Alexander Karaivanov, Sonia Ruano, Jesus Saurina and Rob Townsend (2010), “No Bank, One Bank, Several Banks: Does It Matter for Investment?”
Lecture 18: Links to the Macro Literature: Panel Data and Model of Smoothing
Main Reading:

Related Literature:
- Juan F. Rubio-Ramirez, J. Villaverde, 'Our Research Agenda: Estimating DSGE Models'. A useful overview by Villaverde and Rubio-Ramirez, which can be found on Villaverde's website http://economics.sas.upenn.edu/~jesusfv/research.html#Estimation/

Lecture 19+20: IO and Development: Modeling Financial Service Providers in Various Country Contexts
Main reading:

Lecture 21: Information Constraints in General Equilibrium: measured micro foundations in an integrated macro model
Main reading:
- Benjamin Moll, Rob Townsend and Victor Zhorin, “Entrepreneurship, Inequality and Growth with Information Constrained Factor Markets”

Lecture 22+23: Welfare and the Evaluation of Impact: Reduced Form Econometrics and Structural Parameters
Main Reading:
- Kenneth Wolpin, Ex ante Policy Evaluation, Structural Estimation and Model Selection, AER PP
• Keane, Wolpin, “Empirical Applications of discrete choice dynamic programming models,” RED, 2009

Lectures 24 and Onward: Discussion, Research Proposals

Lecture 25: IO and Development Working Group Meeting
• April 11-12: Financial Systems, Industrial Organization, and Economic Development Workshop, Sloan School of Management – Room TBD

Lecture 26: Flow of Funds Working Group Meeting
• April 13-14: Savings and Flow of Funds: Enhancing and Improving Flow of Funds Accounts Workshop, Marriott Hotel, Kendall Sq.