

**14.772 Development Economics: Macroeconomic Issues  
Spring 2014**

Lectures: Tuesdays and Thursdays 2:30 - 4:00 (E51-361)

Recitations: Thursdays 12:00-1:00 (E51-151)

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Website: <https://stellar.mit.edu/S/course/14/sp14/14.772/>

**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 a combination of problem sets and referee reports.

**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).

**Links to the macro course:**

The class has been designed to emphasize the links that exist between development/macro and macro theory. Each Tuesday and Thursday, a macro class is taught right before the development class, in the same room and on the same topic. Students are encouraged to attend both lectures.

**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 - 5:30 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 E51-376, the macro lunch in E19-758.

	Lecture		14.462 Topic	14.772 Topic
1-Apr	1	Tuesday	<b>Introduction</b>	<b>Introduction: micro-founded macro models</b>
3-Apr	2	Thursday	<b>Complete markets, full risk-sharing</b>	<b>Risk and Insurance in Village India</b>
4-Apr	<i>Rec 1</i>	<i>Friday</i>		
8-Apr	3	Tuesday	<b>Macro and labor supply</b>	<b>Micro and labor supply</b>
10-Apr	4	Thursday	<b>Limited information: welfare theorems</b>	<b>Limited information: first-order approach, lotteries, and distinguishing regimes in data.</b>
11-Apr	<i>Rec 2</i>	<i>Friday</i>		
15-Apr	5	Tuesday	<b>Industrial organization of financial services providers</b>	<b>Karlan-Zinman, Einav-Levin</b>
17-Apr	6	Thursday	<b>Limited commitment: theory</b>	<b>Limited commitment: empirics</b>
18-Apr	<i>Rec 3</i>	<i>Friday</i>		
22-Apr	Patriot's Day	Tuesday		
24-Apr	7	Thursday	<b>Macro and Financial Frictions</b>	<b>Development and Financial Frictions</b>
25-Apr	<i>Rec 4</i>	<i>Friday</i>		
29-Apr	8	Tuesday	<b>Bank runs</b>	<b>Financial Stability in Emerging Markets with Financial Frictions</b>
1-May	9	Thursday	<b>Retrading and externalities</b>	<b>Platforms</b>
5-May	<i>Rec 5</i>	<i>Friday</i>		
6-May	10	Tuesday	<b>Incomplete markets, banks, and default</b>	<b>Incomplete markets and consumption</b>
8-May	11	Thursday	<b>Bubbles: theory</b>	<b>Bubbles: empirics</b>
9-May	<i>Rec 6</i>	<i>Friday</i>		
13-May	12	Tuesday	<b>Foundations of money</b>	<b>Cash management</b>
15-May		Thursday		

### (1) April 1 – Introduction

- Workshop on Financial Deepening, Macro-Stability, and Growth in Developing Countries (IMF September 2012)  
<http://www.imf.org/external/np/seminars/eng/2012/spr/>
- Jeong, Hyeok and Robert M. Townsend (2008) "Growth and Inequality: Model Evaluation Based on an Estimation-Calibration Strategy," *Macroeconomic Dynamics* 12, Supplement S2: 231-84.
- Jeong, Hyeok and Robert M. Townsend (2007) "Sources of TFP Growth: Occupational Choice and Financial Deepening," *Economic Theory Special Edition Honoring Edward Prescott* 32, no. 1: 179-221.
- Gine, Xavier and Robert M. Townsend (2004) "Evaluation of Financial Liberalization: A general equilibrium model with constrained occupation choice," *Journal of Development Economics* 74 (2004): 269-304.
- Robert M. Townsend and Kenichi Ueda (2010) "Welfare Gains from Financial Liberalization," *International Economic Review*, 51 (3): 553-597.
- Robert M. Townsend and Kenichi Ueda (2006) "Financial Deepening, Inequality, and Growth: A Model-Based Quantitative Evaluation," *Review of Economic Studies* 73, Issue : 251-93.
- Felkner, John and Robert M. Townsend (2011) "The Geographic Concentration of Enterprise in Developing Countries," *Quarterly Journal of Economics*, 126 (4): 2005-2061.
- Townsend, R.M. *Insurance and Credit: Micro Financial Underpinnings for Entire Economies*. IIES 50<sup>th</sup> Anniversary Lecture slides (annotated)  
[http://www-2.iies.su.se/Nobel2012/page\\_nobel\\_programme\\_java.html](http://www-2.iies.su.se/Nobel2012/page_nobel_programme_java.html)

### (2) April 3 - Tests of full risk-sharing

- Townsend, Robert (1994) "Risk and Insurance in Village India." *Econometrica* 62(3), 539–591
- Lim, Youngjae and Robert M. Townsend (1998) "General Equilibrium Models of Financial Systems: Theory and Measurement in Village Economies," *Review of Economic Dynamics*, 1, no. 1: 59-118.
- Alem, M. & R.M. Townsend, 2013. An Evaluation of Financial Institutions: Impact on Consumption and Investment Using Panel Data and the Theory of Risk-Bearing." *Annals Issue of the Journal of Econometrics in Honor of Bill Barnett*, Forthcoming
- Kinnan, C. & Townsend, R.M., 2012. Kinship and Financial Networks, Formal Financial Access, and Risk Reduction. *American Economic Review Papers and Proceedings*, 102(3), pp.289–293.
- Pierre Andre Chiappori, Krislert Samphatharak, Sam Schulhofer-Wohl, and Robert M. Townsend. 2014. "Heterogeneity and Risk-Sharing in Village Economies." *Quantitative Economics*, Forthcoming.

- Tazhibayeva and Townsend (2012) “The Impact of Climate Change on Rice Yields: Heterogeneity and Uncertainty,” Working paper, MIT.
- Kapphan (2012) “Weather Risk Management in Light of Climate Change Using Financial Derivatives,” Dissertation Zurich ETH, DISS. ETH Nr. 20233
- Paweenawat, Archawa, and Robert M. Townsend. 2012. "Village Economic Accounts: Real and Financial Intertwined," *American Economic Review*, 102(3): 441-46.
- Suri (2011) “Estimating the Extent of Local Risk Sharing Between Households,” Working Paper MIT.

### **(3) April 8 – Micro and Labor Supply**

- S. Bonhomme, P.A. Chiappori, R. Townsend, H. Yamada (2012). “Sharing Wage Risk.”
- Sun-Bin Kim & Richard Rogerson & Yongsung Chang, 2012. "[Hours and Employment in the Cross-Section and Over the Cycle](#)," 2012 Meeting Papers 82, Society for Economic Dynamics.
- Jonathan Heathcote & Kjetil Storesletten & Giovanni L. Violante, 2009. "[Consumption and Labor Supply with Partial Insurance: An Analytical Framework](#)," NBER Working Papers 15257, National Bureau of Economic Research, Inc.
- Jayachandran, Seema. 2006. “Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries,” *Journal of Political Economy*, 114, 538-575
- Ahmed Mushfiq Mobarak & Mark R. Rosenzweig (2013) “Risk, Insurance and Wages in General Equilibrium”, [Yale Economics Department Working Paper No. 127](#).

### **(4) April 10 – Limited information: first-order approach**

- Karaivanov, A. & Townsend, R.M., 2012. *Dynamic Financial Constraints: Distinguishing Mechanism Design from Exogenously Incomplete Regimes*, working paper, MIT.
- Kinnan, C., 2012. Distinguishing barriers to insurance in Thai villages. Working Paper, Northwestern University.
- Abrahám, A. & Pavoni, N., 2005. The Efficient Allocation of Consumption Under Moral Hazard and Hidden Access to the Credit Market. *Journal of the European Economic Association*, 3(2-3), pp.370–381.
- Attanasio, O.P. & Pavoni, N., 2011. Risk Sharing in Private Information Models With Asset Accumulation: Explaining the Excess Smoothness of Consumption. *Econometrica*, 79(4), pp.1027–1068.

### **(5) April 15 – Moral Hazard, Adverse Selection and Offered Contracts: Theory/ empirics with limited information**

- Adams, W., Einav, L. & Levin, J., 2009. Liquidity Constraints and Imperfect Information in Subprime Lending. *The American Economic Review*, 99(1), pp.49–84.
- Einav, L., Jenkins, M. & Levin, J., 2012. Contract Pricing in Consumer Credit Markets. *Econometrica*, 80(4), pp.1387–1432.
- Karlan, D. & Zinman, J., 2009. Observing Unobservables: Identifying Information Asymmetries With a Consumer Credit Field Experiment. *Econometrica*, 77(6), pp.1993–2008.
- Ahlin, C. & Townsend, R.M., 2007. Using Repayment Data to Test Across Models of Joint Liability Lending. *The Economic Journal*, 117(517), pp.F11–F51.
- Ahlin, C. & Townsend, R.M., 2007. Selection into and across credit contracts: Theory and field research. *Journal of Econometrics*, 136(2), pp.665–698.
- Einav, Finkelstein, Levin, "Beyond Testing: Empirical Models of Insurance Markets" (Annual Review of Economics, 2010)
- Karlan and Zinman, "Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment" (Econometrica 2009)

**(6) April 17 – Limited commitment: theory/empirics**

- Ligon, E., Thomas, J.P. & Worrall, T., 2002. Informal Insurance Arrangements with Limited Commitment: Theory and Evidence from Village Economies. *The Review of Economic Studies*, 69(1), pp.209–244.

Melanie Morten, 2013. "Temporary Migration and Endogenous Risk Sharing in Village India". Working paper, Stanford Economics.

**(7) April 24 – Development and Financial Frictions**

- Song, Zheng, Storesletten, Kjetil, and Zilibotti, Fabrizio, "Growing like China", *American Economic Review* 101 (March 2011): 196-233.
- Buera, F.J., Kaboski, J.P. & Shin, Y., 2011. Finance and Development: A Tale of Two Sectors. *The American Economic Review*, 101(5), pp.1964–2002.
- Coeurdacier, Guibaud and Jin (2012), "Credit Constraints and Growth in a Global Economy"
- Buera and Shin (2012), "Financial Frictions and the Persistence of History: A Quantitative Exploration"
- Buera, Kaboski, and Shin (2012), "The Macroeconomics of Microfinance"
- ask Yan Ji for paper written for IMF

**(8) April 29 – Micro/macro modeling in Emerging Markets with Financial Frictions**

- Benjamin Moll, Rob Townsend and Victor Zhorin, "Finance and Development: Limited Commitment vs. Moral Hazard"

**(9) May 1 – Platforms, e-money**

- Jain and Townsend (2014) "The Economics of Platforms in a Walrasian Framework", working paper.
- Prescott, Edward Simpson, and Robert M. Townsend. 2006. "Firms as Clubs in Walrasian Markets with Private Information." *Journal of Political Economy* 114,

no. 4: 644-671

- Rochet, J.-C. and Tirole, J. (2003) “Platform Competition in Two-sided markets,” *Journal of the European Economic Association*, 1: 990–1029.
- Rysman, Marc (2009) “The Economics of Two-Sided Markets,” *Journal of Economic Perspectives*, 23(3):125–43.

**(10) May 6 – Incomplete markets and consumption**

- D Krueger, Fabrizio Perri (2010), “How do households respond to income shocks?”, Working Paper University of Pennsylvania
- Blundell, R., Pistaferri, L. & Preston, I., 2008. Consumption Inequality and Partial Insurance. *The American Economic Review*, 98(5), pp.1887–1921.
- Kaplan, G. & Violante, G.L., 2010. How Much Consumption Insurance Beyond Self-Insurance? *American Economic Journal: Macroeconomics*, 2(4), pp.53–87.
- A Deaton, C Paxson (1994), “Intertemporal Choice and Inequality”, *Journal of Political Economy*, Vol. 102, No. 3, pp. 437-467.

**(11) May 8 – Bubbles: empirics**

- Abel, A.B., N.G. Mankiw, L.H Summers and R.J Zeckhauser, 1989. Assessing Dynamic Efficiency: Theory and Evidence. *The Review of Economic Studies*, 56(1), pp.1–19.
- Geerolf, F. (2013) Reassessing Dynamic Efficiency, working paper
- Karabarbounis, L. & Neiman, B., 2014. The Global Decline of the Labor Share. *The Quarterly Journal of Economics*, 129(1), pp.61–103.
- Piketty, T., 2014. *Capital in the Twenty-First Century*, Belknap Press.

**(12) May 13 – Cash Management , E-money, and Payments**

- Alvarez, F., Pawasutipaisit, A. & Townsend, R.M., 2011. Household as Firms: Cash Management in Thai Villages. *mimeo University of Chicago*
- Baumol, William J. and Tobin, James (1989), "The Optimal Cash Balance Proposition: Maurice Allais' Priority," *Journal of Economic Literature*, September, Vol. 27, No. 3, pp. 1160–1162.
- Miller, M.H. & Orr, D., 1966. A Model of the Demand for Money by Firms. *The Quarterly Journal of Economics*, 80(3), pp.413–435.
- Alvarez, F. & Lippi, F., 2012. The Demand of Liquid Assets with Uncertain Lumpy Expenditures. *National Bureau of Economic Research Working Paper*, No. 18152.
- William Jack, Tavneet Suri, and Robert M. Townsend. 2010. Monetary Theory and Electronic Money: Reflections on the Kenyan Experience. *Economic Quarterly* 96(1), 83-122.