### PHD Workshop on: Risk Sharing: Theory and Empirics.

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In this lecture I will discuss different models of risk sharing and their empirical implications. I will start with the model of perfect risk sharing and complete insurance markets. I will then move on to models with imperfect risk sharing where the nature of imperfections is given exogenously. Finally I will consider models of two specific imperfections that prevent first best allocations: imperfect information and imperfect enforceability of contracts. For all models I will develop the main theoretical concepts and consider the empirical implications of the theory as well as the available empirical evidence.

In the reading list below you will find a fourth topic, risk sharing in networks, which in all likelihood I will not be able to cover at all.

The reading list below is quite long and could probably be covered in an entire course, rather than a day. The papers I will discuss in depth are in bold. The others will be mentioned (if at all). They are however important papers that those of you who would like to work in this area should know.

### 1. Perfect risk sharing.

# Townsend, R.M. (1994) "Risk and Insurance in Village India" *Econometrica*, 62(3), 539-91.

Udry, C. (1994): "Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria" Review of Economic Studies, 61(3), 495-526

## Attanasio, O. P., and S. J. Davis (1996), "Relative Wage Movements and the Distribution of Consumption, *Journal of Political Economy*, 104:1227-1262.

Mace, B. J. 1991. "Full Insurance in the Presence of Aggregate Uncertainty", *Journal of Political Economy*, 99: 928-956

Cochrane, J. (1991): "A Simple Test of Consumption Insurance", Journal of Political Economy, 99, 957-76.

Attanasio, O. P., and T. Jappelli (2001), "Intertemporal Choice and the Cross-Sectional Variance of Marginal Utility", *Review of Economics and Statistics*, 83(1), 13-27.

Attanasio, O. P. and E. M. Szekely (2004) "Wage shocks and consumption variability in Mexico during the 1990s", *Journal of Development Economics*, 73(1), 1-25.

Blundell, Richard, Luigi Pistaferri, and Ian Preston (2008), "Consumption Inequality and Partial Insurance", *Americal Economic Review*.

Mazzocco, M. and S. Saini: (2009): "Testing Efficient Risk Sharing with Heterogeneous Risk Preferences", Mimeo available at: http://www.econ.ucla.edu/mazzocco/doc/EfficiencyInVillages.pdf

#### 2. Imperfectly enforceable contracts.

Kocherlakota, N. (1996): "Implications of Efficient Risk Sharing without Commitment" *Review of Economic Studies*, 63, 595-609.

Ligon, E., Thomas, J. and T. Worrall (2000) "Mutual Insurance, Individual Savings, and Limited Commitment", *Review of Economic Dynamics*, 3, 216-246.

## Ligon, E., Thomas, J. and T. Worrall (2002) "Informal Insurance Arrangements in Village Economies", *Review of Economic Studies*, 69, 209-244.

Foster, A. and M. Rosenzweig (1999):"Imperfect Commitment, Altruism, and the Family: Evidence from Transfer Behavior in Low-Income Rural Areas", *forthcoming in Review of Economics and Statistics*.

Dubois P, Jullien, B. and T. Magnac, (2008): "Formal and Informal Risk Sharing in LDCs: Theory and Empirical Evidence," *Econometrica*, vol. 76(4), pages 679-725, 07.

Attanasio, O. (2010): "The Empirical Implications of Self-Enforceable Contracts; Measuring Sticks and Carrots in Rural México" slides available at: http://www.homepages.ucl.ac.uk/~uctpjrt/Files/impenf\_slides\_8\_8.pdf

#### 3. Imperfect Information

Thomas, J. and T. Worrall (1990): "Income Fluctuations and Asymmetric Information: An Example of a Repeated Principal-Agent Problem", *Journal of Economic Theory*, *51*, *367-390*.

Ligon, E. (1998), "Risk Sharing and Information in Village Economies", *Review* of *Economic Studies*, 65: 847-864.

Cole, H.L. and N. R. Kocherlakota (2001), "Efficient Allocations with Hidden Income and Hidden Storage", *Review of Economic Studies*, 68(3): 523-542.

Attanasio, O. P. and N. Pavoni (2009): "Risk sharing in private information models with Asset Accumulations", Mimeo. Available at http://www.homepages.ucl.ac.uk/~uctpjrt/Files/rispiREV\_final.pdf.

Kinnan, C. (2010): "Distinguishing barriers to insurance in Thai villages", Mimeo available at: <u>http://faculty.wcas.northwestern.edu/~cgk281/BtI.pdf</u>.

### 4. Risk Sharing in networks

Ambrus, A. Mobius, M. and A. Szeidl (2010) "Consumption risk-sharing in social networks", Mimeo, available at: http://www.economics.harvard.edu/faculty/ambrus/files/limits\_to\_risksharing2010.pdf

Angelucci, M., DeGiorgi, G., Rangel, M. and I. Rasul, "Insurance and Investment within Family Networks", Mimeo available at: <u>http://www.stanford.edu/~degiorgi/progresa\_insurance\_webJUNE2010.pdf</u>

Karlan, D. Mobius, M., Rosenblat, T. and A. Szeidl, (2009) "Trust and Social Collateral", *Quarterly Journal of Economics*, November 2009, 124 (4).