





Università Commerciale Luigi Bocconi Paolo Baffi Centre on Central Banking and Financial Regulation

UNIVERSITA' DEGLI STUDI DI TORINO







## THIRTEENTH SUMMER SCHOOL IN INTERNATIONAL AND DEVELOPMENT ECONOMICS

# Investment, Saving and Wellbeing in Developing Countries

**Orazio P Attanasio (UCL) & Pascaline Dupas (Stanford)** 

## Schedule:

Wednesday 11 June	e
9.00 – 10.30	Lecture 1 Professor Orazio Attanasio
10.30 – 11.00	Coffee Break
11.00 – 12.30	Lecture 2 Professor Orazio Attanasio
12.30 - 14.00	Lunch
14.00 - 15.30	Lecture 3 Professor Orazio Attanasio
15.30 - 16.00	Coffee Break
16.00 - 17.30	Lecture 4 Professor Orazio Attanasio
Thursday 12 June 9.00 – 10.30 10.30 – 11.00 11.00 – 12.30	Lecture 5 Professor Pascaline Dupas Coffee Break Lecture 6 Professor Pascaline Dupas
12.30 - 14.00	Lunch
14.00 - 15.30	Lecture 7 Professor Orazio Attanasio
15.30 - 16.00	Coffee Break
16.00 - 17.30	Lecture 8 Professor Orazio Attanasio
Friday 13 June 8.30 – 10.30	Lecture 9 Professor Pascaline Dupas
10.30 - 11.00	Coffee Break
11.00 - 13.00	Lecture 10 Professor Pascaline Dupas
13.00 - 14.00	Lunch at Palazzo Feltrinelli
14.00 - 15.00	Lecture 11 Professor Orazio Attanasio
15.00 - 16.00	Lecture 12 Professor Pascaline Dupas

## Draft Syllabus for lectures by Orazio Attanasio

### Part I

### The production function of human capital in early years.

#### Lecture 1, June 11 9:00-10:30 (90 minutes)

- 1.1 Evidence on human capital accumulation
  - 1.1.1 The Socio Economic Gap in HK in early years in developing countries.
  - 1.1.2 Interventions: community nurseries
  - 1.1.3 Interventions: stimulations
    - 1.1.3.1 The Jamaica Study

#### 1.1.3.2 The Colombia Study

#### Lecture 2, June 11:00-12:30 (90 minutes)

#### 1.2 Models of accumulation of human capital:

- 1.2.1 The production function of human capital
- 1.2.2 Investment in human capital
- 1.2.3 Constraints to the accumulation of human capital.

#### Readings for topic 1.

Readings marked with \*\* are highly recommended.

\*Attanasio, O. V. Di Maro and M Vera-Hernandez (2013) "<u>Community Nurseries and the Nutritional</u> <u>Status of Poor Children. Evidence from Colombia</u>" Economic Journal, Vol 123 (9) pp 1025-1058.

Attanasio, O., Rubio-Codina M, Meghir C, VarelaN., and Grantham- McGregor S. (2014): "The Socio-Economic Gradient of Child Development: Cross-Sectional Evidence from Children 6-42 months in Bogota", forthcoming in Journal of Human Resources.

\*\* Gertler, Paul, James Heckman, Rodrigo Pinto, Arianna Zanolini, Christel Vermeersch, Susan Walker, Susan M. Chang, Sally Grantham-McGregor (2012). "<u>Labor Market Returns to Early Childhood</u> <u>Stimulation: a 20-year Followup to an Experimental Intervention in Jamaica</u>"

Attanasio, Orazio, Emla Fitzsimons , Camila Fernandez , Sally Grantham-McGregor , Costas Meghir and Marta Rubio Codina. "Home Visiting in Colombia: Impacts of a Scalable Intervention"

\*\* Flávio Cunha, 2011. "<u>Recent Developments in the Identification and Estimation of Production</u> <u>Functions of Skills</u>," Fiscal Studies, vol. 32, pages 297-316, 06.

\*\* Flavio Cunha & James J. Heckman & Susanne M. Schennach, 2010. "<u>Estimating the Technology of</u> <u>Cognitive and Noncognitive Skill Formation</u>," Econometrica, vol. 78(3), pages 883-931, 05.

Fernald L.C., P. Kariger, M. Hidrobo and P.J. Gertler. (2012). "<u>Socioeconomic gradients in child</u> <u>development in very young children: evidence from India, Indonesia, Peru, and Senegal</u>", Proceedings of the National Academy of Science, 109 (2): 17273-80.

Fernald Lia., Ann Weber, Emanuela Galasso and Lisy Ratsifandrihamanana. (2011). "<u>Socioeconomic gradients and child development in a very low income population: evidence from Madagascar</u>." Developmental Science, 14(4): 832–847.

Ghuman, S. J. R. Behrman, J. B. Borja, S. Gultiano, and E. M. King. 2005. "<u>Family Background, Service</u> <u>Providers and Early Childhood Development in the Philippines</u>", Economic Development and Cultural Change, 54(1): 129-64. \* Grantham-McGregor S., Y. B. Cheung, S. Cueto, P. Glewwe, L. Richter, B. Strupp and the International Child Development Steering Group. (2007). "<u>Developmental potential in the first 5 years for children in developing countries</u>." The Lancet, 369(9555):60-70.

Hackman, D. A., and M. J. Farah. (2009). "<u>Socioeconomic Status and the Developing Brain</u>." Trends in Cognitive Science 13 (2): 65–73.

Hamadani J. F. Tofail, S. El Arifeen, S. Huda, D. Ridout, O. Attanasio and S. Grantham-McGregor. (2012). "The Early Determinants of the Cognitive Gap Associated with Poverty in Rural Bangladeshi Children", manuscript ICDDR, Bangladesh.

Hamadani, J., F. Tofail, A. Hilaly, S. Huda, P. Engel and S. Grantham-McGregor. (2010). "<u>Use of Family</u> <u>Care Indicators and Their Relationship with Child Development in Bangladesh</u>." Journal of Health Population and Nutrition, 28(1):23-33.

Heckman J. J. and D.V. Masterov. (2007). "<u>The Productivity Argument for Investing in Young Children</u>." Review of Agricultural Economics, 29(3):446-493.

Hoddinott J., J.A. Maluccio, J.R. Behrman, R. Flores and R. Martorell. (2008). "<u>The Impact of Nutrition</u> <u>During Early Childhood on Income, Hours Worked, and Wages of Guatemalan Adults</u>." The Lancet, 371(February):411-416.

\* Macours, K., N. Schady, and R. Vakis. (2012). "<u>Cash Transfers, Behavioral Changes, and Cognitive</u> <u>Development in Early Childhood: Evidence from a Randomized Experiment."</u> American Economic Journal: Applied Economics, 4(2):247-73.

Maluccio J. A., J. Hoddinott, J.R. Behrman, A. Quisumbing, R. Martorell and A.D. Stein. (2009). "<u>The Impact</u> <u>of Nutrition During Early Childhood on Education among Guatemalan Adults</u>." Economic Journal, 119(537):734–763.

Paxson, C., and N. Schady. (2007). "<u>Cognitive Development among Young Children in Ecuador: The Roles</u> of Wealth, Health, and Parenting." Journal of Human Resources 42 (1): 49–84.

Schady, N. (2011). "<u>Parents' Education, Mothers' Vocabulary, and Cognitive Development in Early</u> <u>Childhood: Longitudinal Evidence from Ecuador</u>." American Journal of Public Health, 101 (12): 2299-2307.

\*\* P. Todd & K. Wolpin, 2007. "<u>The Production of Cognitive Achievement in Children: Home, School, and</u> <u>Racial Test Score Gaps</u>," Journal of Human Capital, vol. 1(1), pages 91-136.

\*\* Walker S., S. Chang-Lopez, C. Powell, E. Simonoff and S. Grantham-McGregor. (2005). "<u>Effects of Early</u> <u>Childhood Psychosocial Stimulation and Nutritional Supplementation on Cognition and Education in</u> <u>Growth-stunted Jamaican Children: Prospective Cohort Study</u>." The Lancet, 366(9499):1804-1807.

Walker S.P., S.M. Chang, C. Powell, E. Simonoff and S.M. Grantham-McGregor. (2006). "<u>Effects of</u> <u>Psychosocial Stimulation and Dietary Supplementation in Early Childhood on Psychosocial Functioning</u> <u>in Late Adolescence: Follow-up of Randomized Controlled Trial</u>." British Medical Journal, 333(7566): 472.

Walker S.P., S.M. Chang, C. M. Vera-Hernandez and S.M. Grantham-McGregor. (2011). "<u>Early Childhood</u> <u>Stimulation Benefits Adult Competence and Reduces Violent Behaviour</u>", Pediatrics, 127(5): 849-857.

### Part II

# Consumption smoothing in developing countries: Theory and empirics. How far from first best?

Lecture 3, June 11 14:00-15:30 (90 minutes)

Lecture 4, June 11 16:00-17:30 (90 minutes)

Lecture 7, June 12 14:00-15:30 (90 minutes)

Lecture 8, June 12 16:00-17:30 (90 minutes)

Lecture 11, June 13 14:00-15:00 (60 minutes)

#### Models of insurance markets in developing countries.

- The paradigm of perfect insurance.
- Tests of perfect insurance
- Imperfections and frictions: imperfectly enforceable contracts
- o Imperfections and frictions: asymmetric information

#### **Readings for topic 2.**

Readings marked with \*\* are highly recommended.

Attanasio, O.P. and M. Székely (2004): "<u>Wage shocks and Consumption Variability in Mexico During the</u> <u>1990s</u>", Journal of Development Economics, 73, pp 1-25.

\*\* Attanasio, O.P. and N. Pavoni (2011) "<u>Risk Sharing in Private Information Models with Asset</u> <u>Accumulation: Explaining the Excess Smoothness of Consumption</u>" Econometrica, Vol.79 (4), July 2011, pages 1027-68.

\*\* Attanasio, O.P. and J.V. Rios Rull (2000a): "<u>Consumption Smoothing in Island Economies: Can Public</u> <u>Insurance Reduce Welfare?</u>" European Economic Review, 44, pp. 1225-1258

Attanasio, O.P. and J.V. Rios Rull (2000b): "<u>Consumption Smoothing and Extended Families</u>", Dewatripoint and Hansen (eds) Advances in Economic Theory- The World Congress of the Econometric Society- Seattle 2000.

P. Chiappori & K. Samphantharak & S. Schulhofer-Wohl & R. Townsend, 2011. "<u>Heterogeneity and Risk</u> <u>Sharing in Village Economies</u>" NBER Working Papers 16696

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

Cole, H. & N. Kocherlakota, 2001. "<u>Efficient Allocations with Hidden Income and Hidden</u> <u>Storage</u>," Review of Economic Studies, vol. 68(3), pages 523-42, July.

\* Deaton, A., and C. Paxson. 1994. "<u>Intertemporal Choice and Inequality</u>." Journal of Political Economy 102: 384-94.

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

\*\* Ligon, Ethan, 1998. "<u>Risk Sharing and Information in Village Economics</u>," Review of Economic Studies, vol. 65(4), pages 847-64

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

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

Mazzocco, M. and S. Saini (2012) "<u>Testing Efficient Risk Sharing with Heterogeneous Risk</u> <u>Preferences</u>", American Economic Review, vol. 102, pp.428-68.

\*\* Townsend, R.M. (1994) "<u>Risk and Insurance in Village India</u>" Econometrica, 62(3), 539-91.

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

## Draft Syllabus for lectures by Pascaline Dupas

## Human Capital Investments and Well-Being

Readings marked with \*\* are highly recommended.

## A. Education as an Investment: Empirics

#### A1. Returns to education -- Lecture 5, June 12 (90 minutes)

\* Foster, Andrew D. and Mark R. Rosenzweig (1996). "<u>Technical Change and Human-Capital Returns</u> and Investments: Evidence from the Green Revolution" *The American Economic Review*, 86(4): 931-953

\*\* Duflo, Esther (2001), "<u>Schooling and Labor Market Consequences of School Construction in</u> <u>Indonesia: Evidence from an Unusual Policy Experiment</u>," *American Economic Review* 91 (4): 795-813.

Duflo, Esther. "<u>The Medium Run Effects of Educational Expansion: Evidence from a Large School</u> <u>Construction Program in Indonesia</u>." *Journal of Development Economics* 74, no. 1 (2004): 163-197.

\*\* Owen Ozier (2011). <u>The Impact of Secondary Schooling in Kenya: A Regression Discontinuity</u> <u>Analysis.</u> Working paper.

Bills, Mark, and Pete Klenow. "<u>Does Schooling Cause Growth?</u>" *The American Economic Review* 90, no. 5 (2000): 1160-1183.

Rosenzweig, Mark (1995), "<u>Why Are There Returns to Schooling?</u>" *American Economic Review P&P* 85 (2): 153-158.

#### A2. Demand for education -- Lecture 6, June 12 (90 minutes)

\*\* Attanasio, Orazio, Costas Meghir and Ana Santiago (2012). "<u>Education Choices in Mexico: Using a</u> <u>Structural Model and a Randomized Experiment to Evaluate Progresa</u>". *Review of Economic Studies.* 

\*\* Jensen, Robert (2012). "<u>Do Labor Market Opportunities Affect Young Women's Work And Family</u> <u>Decisions? Experimental Evidence From India</u>". *Quarterly Journal of Economics* 127(2), p. 753-792.

\* Nancy Qian (2013): "Quantity-Quality and the One Child Policy: The Only Child Disadvantage on School Enrollment in Rural China"

Jensen, Robert (2010). "<u>The (Perceived) Returns to Education and the Demand for Schooling</u>," *Quarterly Journal of Economics*, 125(2), p. 515-548.

Foster, Andrew D. and Mark R. Rosenzweig (1996). "<u>Technical Change and Human-Capital Returns and</u> <u>Investments: Evidence from the Green Revolution</u>" *The American Economic Review*, 86(4): 931-953

## **B. Health as Human Capital Investment**

#### B1. Health and Productivity -- Lecture 9, June 13 (120 minutes)

\* Miguel, Ted and Michael Kremer (2004), "<u>Worms: Identifying Impacts on Education and Health in the</u> <u>Presence of Treatment Externalities</u>," *Econometrica* 72 (1): 159.217.

Thomas, D. et al. (2006). "Causal Effect of Health on Labor Market Outcomes: Experimental Evidence".

\*\* Bleakley, Hoyt. "<u>Malaria Eradication in the Americas: A Retrospective Analysis of Childhood</u> <u>Exposure</u>." *American Economic Journal: Applied Economics*, April 2010, 2(2):1-45.

\*\* Acemoglu, Daron and Simon Johnson. (2007). "<u>Disease and Development: The Effect of Life</u> <u>Expectancy on Economic Growth</u>", *Journal of Political Economy* 115(6), 925-985.

David E. Bloom, David Canning, and Günther Fink (2013). "<u>Disease and Development Revisited</u>." *Journal of Political Economy* 

Cervellati, M, and U Sunde (2011), "<u>Disease and Development: The Role of Life Expectancy</u> <u>Reconsidered</u>", *Economics Letters*, 113(3):269-272.

#### B2. Demand for health -- Lecture 10, June 13 (120 minutes)

\*\* Dupas, Pascaline (2013). "<u>Short-Run Subsidies and Long-Run Adoption of New Health Products:</u> <u>Evidence from a field experiment</u>". *Econometrica*.

\*\* Dupas, Pascaline, and Jonathan Robinson (2013). "<u>Why Don't the Poor Save More? Evidence from</u> <u>Health Savings Experiments</u>" *American Economic Review 103(4), pp. 1138-71, June 2013* 

Cohen, Jessica, and Pascaline Dupas (2010). "<u>Free Distribution or Cost-Sharing? Evidence from a</u> <u>Randomized Malaria Prevention Experiment</u>." *Quarterly Journal of Economics*, 125(1): 1–45.

Ashraf, Nava, James Berry and Jesse Shapiro. (2010). "<u>Can Higher Prices Stimulate Product Use?</u> <u>Evidence from a Field Experiment in Zambia</u>." *American Economic Review* 100: 2383–2413.

Cohen, Jessica, Pascaline Dupas and Simone Schaner (2012). "<u>Price Subsidies, Diagnostic Tests, and</u> <u>Targeting of Malaria Treatment</u>".

Field, Erica, Rachel Glennerster and Reshma Hussam (2011). "<u>Throwing the Baby out with the Drinking</u> <u>Water: Unintended Consequences of Arsenic Mitigation Efforts in Bangladesh</u>". Working paper.

#### For Reviews:

Dupas, Pascaline (2011). "<u>Health Behavior in Developing Countries.</u>" Annual Review of Economics Vol 3.

Strauss, John and Duncan Thomas (1995), "<u>Human Resources: Empirical Modeling of Household and</u> <u>Family Decisions</u>," *Handbook of Development Economics* 3 (1): 1883-2023.

Strauss, John and Duncan Thomas (2008), "<u>Health over the life Course</u>," *Handbook of Development Economics* 4 (1): 3375-3474.

### <u>C. Household-level vs. Individual-level Well-Being: Human capital</u> <u>investments under Gender and Birth-order preferences</u>

#### Lecture 12, June 13 (60 minutes)

- Amartya Sen, "<u>More Than 100 Million Women Are Missing</u>," *New York Review of Books* 37(2), December 20, 1990
- Angus Deaton (1989). "Looking for Boy-Girl Discrimination in Household Expenditures". *World Bank Economic Review*, vol. 3, no. 1, pp. 1-15.

Elaina Rose (1999). "<u>Consumption Smoothing and Excess Female Mortality in Rural India</u>." *Review of Economics and Statistics* 81, no. 1: 41-49.

- Nancy Qian (2008). "<u>Missing Women and the Price of Tea in China: The Effect of Sex-Specific Income on</u> <u>Sex Imbalance</u>," <u>The Quarterly Journal of Economics</u>, 123(3), August 2008.
- Jayachandran, Seema, and Rohini Pande (2013): "<u>Why Are Indian Children Shorter Than African</u> <u>Children?</u>"

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