

Summer School on Multidimensional Poverty Analysis

**Oxford Poverty and Human Development Initiative (OPHI)
Oxford Department of International Development, University of Oxford**

hosted at the Georgetown University

Washington, DC, USA

3 – 15 August 2015

Welcome!

Welcome to the OPHI Summer School on Multidimensional Poverty Analysis 2015. We are very pleased to be able to share with you our interest in these important topics. We hope that you find your experience at the Summer School an interesting and valuable one. We are sure that we will learn a lot from you at the same time that you are learning from us. Please do not hesitate to ask questions or request clarifications on any matter at any point during the course. We will present the course content through lectures but there will also be exercises and working group sessions that will help you to incorporate the new content from the lectures through learning-by-doing. It is important that you take the time to work on these exercises since they will help you to understand the subject matters better.

Welcome to Washington!
The Instructors

The capability approach formulated by Amartya Sen, and further developed by the philosopher Martha Nussbaum and others, provides a conceptual framework that grounds many multidimensional approaches to poverty and social protection. This includes the MDGs, PRSPs, rights-based development, integrated social policy, and other specific initiatives.

In the past few years, interest in multidimensional quantitative techniques of analysis has surged. New quantitative methodologies have been developed for measurement, comparison, and analysis. Many more are still under development. It is a fast-moving area.

The purpose of this intensive summer school is to provide a thorough conceptual and technical introduction to some techniques of measuring multidimensional poverty with a strong emphasis on the Alkire-Foster method. Participants will revise axiomatic poverty measures and they will learn different multidimensional poverty techniques and problems they best solve. The empirical motivation for measuring multidimensional poverty will be presented as well as the conceptual motivation drawing on Sen's Capability approach.

1. Instructors

Alkire, Sabina (SA)

Sabina Alkire directs the Oxford Poverty and Human Development Initiative (OPHI), a research centre within the Department of International Development, University of Oxford. She is also the Oliver T. Carr Professor and Professor of Economics and International Affairs at George Washington University (part time until 2016). She also continues as research collaborator of the Harvard Global Equity Initiative at Harvard University. Her research interests and publications include multidimensional poverty measurement and analysis, welfare economics, the capability approach, the measurement of freedoms and human development. She holds a DPhil in Economics from the University of Oxford.

Ballon, Paola (PB)

Paola Ballon is Assistant Professor of Econometrics at the Department of Economics of Universidad del Pacifico in Peru, and Senior Researcher at the Partnership of Economic Policy. She is also a Research Associate and former Research Officer at the Oxford Poverty and Human Development Initiative of the University of Oxford, U.K. She holds a Ph.D in Econometrics from the University of Geneva, Switzerland. Her expertise is on multidimensional poverty measurement and the econometric analysis of poverty and inequality. Paola's research interests comprise structural equation models for human development and well-being, and applied micro-econometrics to development economics. Paola has been a consultant and a researcher for various international organizations comprising The World Bank, UNICEF, The International Labour Office, The United Nations University (UNU-WIDER), and the United Nations Research Institute for Social Development.

Conconi, Adriana (AC)

Adriana Conconi is a Research Officer at the Oxford Poverty & Human Development Initiative (OPHI). She holds a Degree and Master Degree in Economics from the Universidad Nacional de La Plata (UNLP) – Argentina, and has completed the Master in Public Administration in International Development (MPA/ID) at Harvard University. She has been working with OPHI since 2011, and has led the MPI 2013 and 2014 computations. Her research interests include poverty analysis, development welfare and inequality. She is also heavily involved with outreach activities at OPHI. She has previously worked as a Researcher at the Centro de Estudios Distributivos, Laborales y Sociales (CEDLAS), at the UNLP and as a Teaching Fellow and Professor in graduate and post-graduate courses at UNLP, Universidad de San Andres (Argentina), Harvard Kennedy School and Oxford University.

Hammock, John (JH)

Prof. John Hammock is Co-Founder and Director of Outreach of the Oxford Poverty and Human Development Initiative. He is an Associate Professor of Public Policy at Tufts University's Fletcher School. He founded and was director of the Feinstein International Famine Center at Tufts University. He served as Executive Director at Oxfam America from 1984-1995 and as Executive Director at ACCION International from 1973-1980. He holds a Ph.D. in International Relations from Tufts University and an Honorary Doctor of Laws degree from Denison University. He was born in Cuba. He has two daughters and three grandchildren.

Housseini, Bouba (BH)

Bouba Housseini is currently a Research Officer at the Oxford Poverty and Human Development Initiative (OPHI). His research interests include welfare economics, demographic economics, economic growth and applied econometrics. He is mainly in charge of OPHI's outreach work in Africa. Bouba holds a Ph.D. in Economics from Université Laval in Canada and a M.Sc. in Statistics from Institut National de Statistique et d'Économie Appliquée (INSEA) in Morocco. Prior to joining OPHI, Bouba has taught Development Economics in undergraduate and graduate programmes at Université Laval in Canada. He has served as a consultant to the International Development Research Center (IDRC) in Canada, and for Capital Consulting in Morocco. His previous work

experience also includes collaborations with various UN agencies, in particular, the UNDP Human Development Report Office (HDRO).

Jindra, Christoph (CJ)

Christoph Jindra is a Research Officer at OPHI. His primary research interest lies in the area of the capability approach, poverty measurement as well as quantitative methods. He studied Sociology, Economic and Psychology at the Universities of Aachen and Augsburg and holds a PhD in Social Sciences from Humboldt University Berlin, Germany. During his time as a PhD-student he spent six month as a visiting MPhil student at the department of Social Statistics at the University of Southampton.

Oldiges, Christian (CO)

Christian Oldiges is a Research Assistant at the Oxford Poverty & Human Development Initiative (OPHI). He is studying for a Ph.D in Development Economics with a focus on India (Employment Guarantee, Food Security, Poverty) at the University of Heidelberg. He has been working with OPHI since January 2011.

Robles A., Gisela (GR)

Gisela Robles Aguilar is a Research Officer at the Oxford Poverty & Human Development Initiative (OPHI). She has recently completed a DPhil degree in Comparative Social Policy, University of Oxford. Her research is focused in analyzing the extent to which participation in cash transfers is constrained by the conditionality attached to such anti-poverty programmes. She worked as a research assistant for the Oxford Poverty and Human Development Initiative (OPHI) from 2008 to 2012.

Seth, Suman (SS)

Suman Seth is a Lecturer in Economics at the Leeds University Business School and a Research Associate at the Oxford Poverty & Human Development Initiative (OPHI). Earlier he had been a Research Officer as well as a Senior Research Officer at OPHI. His primary research interest lies in Development Economics, Public Economics and Applied Microeconomics, with particular emphasis in distributional analysis and measurement. He holds a PhD in economics from Vanderbilt University, USA.

Shen, Yangyang (YS)

Yangyang Shen is currently a Research Officer at the Oxford Poverty and Human Development Initiative (OPHI). She is also a post-doc in Beijing Normal University in China. Her research interests include human development and welfare economics. She specially interests in the relationship between economic growth and poverty reduction, and policy applications of the Alkire Foster method for multidimensional measurement. She holds a Ph.D. in Economics from Nankai University in China.

Vaz, Ana (AV)

Ana Vaz is a Research Officer at the Oxford Poverty and Human Development Initiative (OPHI). Her primary research interests are Development Economics and Applied Microeconomics, and her work at OPHI has focused on the policy applications of the Alkire Foster method for multidimensional measurement. Ana previously worked for PricewaterhouseCoopers and at the Catholic University of Portugal.

2. Programme

<i>Day 1 ~ Monday 03 August</i>	<i>Day 2 ~ Tuesday 04 August</i>	<i>Day 3 ~ Wednesday 05 August</i>	<i>Day 4 ~ Thursday 06 August</i>	<i>Day 5 ~ Friday 07 August</i>	<i>Day 6 ~ Saturday 08 August</i>
Introduction & Overview of the Summer School	MD Poverty Methods & Counting Approaches	Paper-based Exercises on AF Methodology	Working Groups: Normative Issues	Exam (All)	Working Groups' Preparing Presentations
Multidimensional (MD) Poverty Measures: Motivation and Properties	Case Study: the International MPI & Databank	Introduction to the Capability Approach	Survey Design, Bias Analysis, Missing Values, & Sample Drop	Indicators: Unit of Identification, Reference period, Redundancy etc.	Working Groups' Results Presentations
More Relatively-Poor People in a Less Absolutely-Poor World	Alkire Foster (AF) Methodology	Case Studies: National MD Poverty Measures	STATA Lab & Descriptive statistics	Working Groups: Creating the Deprivation Matrix	
Unidimensional Poverty Measures	Paper-based Exercises on AF Methodology	Normative Issues in MD Poverty Measurement Design	Working Groups: Exploring the Dataset	Working in Groups: Creating the Deprivation Matrix	
<i>Day 7 ~ Monday 10 August</i>	<i>Day 8 ~ Tuesday 11 August</i>	<i>Day 9 ~Wednesday 12 August</i>	<i>Day 10 ~ Thursday 13 August</i>	<i>Day 11 ~ Friday 14 August</i>	<i>Day 12 ~ Saturday 15 August</i>
Aggregated Results	Sensitivity, Robustness Analysis & SE	Inequality Among The Poor	Targeting & Impact Evaluation	Presentations of Working Group Results	Non Compulsory Exam
Working Groups: National Results	Working Groups: Sensitivity, Robustness Analysis & SE	Regression Analysis	Institutions & Policy	Presentations of Working Group Results	
Subgroup Decomposition & Dim Breakdown	Time Series & Chronicity	Clarifying Concepts and Communicating your Results	Missing Dimensions of Household Surveys on Poverty	Presentations of Working Group Results	
Working Groups: Decomposition, Maps & Dimensional Breakdown	Interpreting the MPI Results	Working Groups' Results Presentations	Review of the Course & Closure	Presentations of Working Group Results	

3. Syllabus

Topic: Introduction & Overview of the Summer School

Session: Monday 03 August, 09:00-10:45

Instructor: Sabina Alkire

Contents:

- Presentation of the OPHI Team
- Presentation of the Participants
- Presentation of the Summer School, aims and goals.
- Presentation of the programme of the Summer School
- Logistic Information

Pre-Summer School Reading List:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming.
2. ALKIRE, S. (2008), "The Capability Approach to the Quality of Life". Background paper to the Commission on the Measurement of Economic Performance and Social Progress. <http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-2a.pdf>
3. ALKIRE, S. and J. FOSTER (2009), "Counting and Multidimensional Poverty" in von Braun, Joachim, Vargas Hill, Ruth and Rajul Pandya-Lorch eds, The Poorest and Hungry: Assessment, Analysis and Actions, p 77-90. Washington DC: International Food Policy Research Institute <http://www.ifpri.org/sites/default/files/publications/oc63ch03.pdf>
4. ALKIRE, S. and M. E. SANTOS (2011), "Training Material for Producing National Human Development Reports" <http://www.ophi.org.uk/wp-content/uploads/MPI-Primer1.pdf>.

Topic: Why Multidimensional (MD) Poverty Measures?

Session: Monday 03 August, 11:15-13:00

Instructor: Sabina Alkire

Contents:

- Conceptual and Philosophical arguments for multidimensional poverty measures
- Empirical evidence of Uni vs. Multi-Dimensional Poverty
- Examples of interest in multidimensional poverty measures in government agencies of different countries.

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 1).

Further reading:

1. ALKIRE, S. and M. E. SANTOS (2009), "Poverty and Inequality Measurement", in DENEULIN, S. and SHAHANI, L. An Introduction to the Human Development and Capability Approach, Chapter 6. London, Earthscan. http://www.idrc.ca/en/ev-146721-201-1-DO_TOPIC.html
2. ALKIRE, S. and M. E. SANTOS (2010), "Acute Multidimensional Poverty: A new Index for Developing Countries", OPHI WP 38. <http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf>
3. ALKIRE, S. and S. SETH (2008), "Multidimensional Poverty Measurement and BPL Methods in India: A Comparison of Methods". OPHI Working Paper No 15.
4. DUCLOS, J.-Y. and ARAAR, A. 2006. 'Poverty and Equity Measurement, Policy, and Estimation with DAD', Springer and IDRC, Berlin and Ottawa.
5. OPHI (2010), Bhutan's Gross National Happiness Index. <http://www.ophi.org.uk/policy/national-policy/bhutan/>
6. OPHI (2011), Colombia's National Poverty Measure. <http://www.ophi.org.uk/policy/national-policy/colombia-mpi/>
7. RUGGERI-LADERCHI, C., SAITH, R. and F. STEWART (2003), "Does it Matter that we do not agree on the definition of poverty? A Comparison of Four Approaches." Oxford Journal of Development Studies. 31:3 243-274.
8. SANTOS, M.E. and K. URA (2008), "Multidimensional Poverty in Bhutan: Estimates and Policy Implications". OPHI Working Paper No 13.
9. SEN, A. (1999), Development as Freedom, Oxford University Press. Chapter 4.
10. SEN, A. K. (2009), The Idea of Justice, Chapter 12, London, Allen Lane.
11. United Nations (2003). Indicators for Monitoring the Millennium Development Goals, New York: United Nations.
12. United Nations (2008). The Millennium Development Goals Report 2008. New York: United Nations.

Topic: More Relatively-Poor People in a Less Absolutely-Poor World

Session: Monday 03 August, 14:00-15:45

Instructor: Martin Ravallion

Contents:

- Alternative approaches to measuring global poverty.
- Taking social effects on welfare seriously in global poverty measurement.
- New measures of absolute poverty are interpreted as providing a lower bound, assuming no social effects
- New measures of relative poverty provide an upper bound, allowing for social effects
- A truly global perspective on poverty

Reading List:

- (1) Shaohua Chen and Martin Ravallion, 2013, "More Relatively-Poor People in a Less Absolutely-Poor World," *Review of Income and Wealth* 59(1): 1-28.
- (2) Martin Ravallion and Shaohua Chen, 2014, "A Proposal for Truly Global Poverty Measures," *Global Policy*, Vol. 4(3), pp. 258-265.

Topic: Unidimensional Poverty Measurement

Session: Monday 03 August, 16:15-18:00

Instructor: Suman Seth

Contents:

- Steps in poverty measurement: identification and aggregation.
- Properties of unidimensional poverty measures.
- Unidimensional poverty measures.
- Poverty Orderings (Unidimensional stochastic dominance conditions and the links to poverty measures)

Reading List:

2. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 2.1).
3. Foster, J. E., S. Seth, M. Lokshin, and Z. Sajaia (2013), A Unified Approach to Measuring Poverty and Inequality: Theory and Practice, The World Bank, Free Download:
<https://openknowledge.worldbank.org/handle/10986/13731>
4. Foster J. E. and A. K. Sen (1997), Annexe of "On Economic Inequality", Oxford University Press.
5. Foster (2006): "Poverty Indices" in A. de Janvry and R. Kanbur (eds), Poverty, Inequality and Development: Essays in Honor to Erik Thorbecke. New York: Springer Science.

Further readings:

1. Atkinson, A. B. (1987): "On the Measurement of Poverty", *Econometrica*. 55: 749-764.
2. Fields, G. (2001): *Distribution and Development*. New York: Russell Sage Foundation and Cambridge, MA: MIT. Chapter 4.
3. Foster, J. E. and A. SHORROCKS. (1988): "Poverty Orderings and Welfare Dominance", *Social Choice and Welfare*. 5: 179-198.
4. Ray, D. (1998): *Development Economics*. New Jersey: Princeton. Chapter 8.

Topic: Multidimensional Poverty Methods and Counting Approaches

Session: Tuesday 04 August, 09:00-10:45

Instructor: Sabina Alkire and Suman Seth

Contents

- The counting approach as a method for identifying the poor. Steps involved.
- Links of this approach to the concept of poverty.
- Salient implementations of the counting approach to measure poverty over time. Their use in policy.

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 3 & 4).

Further reading:

1. ATKINSON, A. B. (2003). Multidimensional deprivation: contrasting social welfare and counting approaches. *Journal of Economic Inequality* 1, 51-65.
2. ALKIRE, S., BALLON, P., FOSTER, J. E., ROCHE, J. M., SANTOS, M. E. and SETH, S. (forthcoming) "Counting Approaches", Draft of section from Chapter 3 from forthcoming book on Multidimensional Poverty Measurement and Analysis.

Topic: Case Studies: International MPI and Databank

Session: Tuesday 04 August, 11:15-13:00

Instructors: Sabina Alkire, Adriana Conconi, Christoph Jindra, Yangyang Shen, Bouba Housseini, Chris Oldiges

Contents:

- An introduction to the choices and limitations behind the international comparable MPI and the many types of possible analyses.

Reading List:

1. ALKIRE, S., and M.E. SANTOS. (2010) "Acute Multidimensional Poverty: A New Index for Developing Countries." Background paper for the 2010 Human Development Report. UNDP (United Nations Development Programme).
2. ALKIRE, S., J.M. ROCHE and S. SETH (2012). "Sub-national Disparities and Inter-temporal Evolution of Multidimensional Poverty across Developing Countries" OPHI research in progress 32a. <http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-32a-2011.pdf>

Topic: Alkire Foster (AF) Methodology

Session: Tuesday 04 August, 14:00-15:45 (theory) 16:15-18:00 (Paper exercises) 05 Aug 09:00-10:45 (Revisions)

Instructor: Sabina Alkire and James Foster

Contents:

- Key literature on multidimensional poverty measures
- The steps of identification and aggregation in Alkire Foster method
- The importance of a joint distribution vs. a marginal distribution

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 5).

Further reading:

1. ALKIRE, S. (2008) "Choosing dimensions: The capability approach and multidimensional poverty." In The Many Dimensions of Poverty, eds., N. Kakwani and J. Silber. Basingstoke: Palgrave Macmillan.
2. ALKIRE, S. and S. DENEULIN (2009). "The Human Development and Capability Approach." In An Introduction to the Human Development and Capability Approach: Freedom and Agency, eds., S. Deneulin and L. Shahani. London: Earthscan.
3. ALKIRE, S., and J.E. FOSTER (2011). "Counting and Multidimensional Poverty Measurement." Journal of Public Economics. 95(7-8): 476-487.
4. ALKIRE, S., and J.E. FOSTER(2011). "Understandings and Misunderstandings of Multidimensional Poverty Measurement." Journal of Economic Inequality. 9(2):289-314.
5. ALKIRE, S., and M.E. SANTOS. 2010. "Acute Multidimensional Poverty: A New Index for Developing Countries." Background paper for the 2010 Human Development Report. UNDP (United Nations Development Programme).
6. ALKIRE, S., M.E SANTOS, S. SETH and G. YALONETZKY. 2010. "Is the Multidimensional Poverty Index robust to different weights?" OPHI Research in Progress Paper 22a.
7. ALKIRE, S. and M. E. SANTOS (2011), "Training Material for Producing National Human Development Reports" <http://www.ophi.org.uk/wp-content/uploads/MPI-Primer1.pdf>.
8. SEN, A, K. 1999. Development as Freedom. Oxford: Oxford University Press.
9. UNDP (United Nations Development Programme). 2010. Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development. UNDP, New York.
10. YALONETZKY, G. 2011. "A note on the standard errors of the members of the Alkire Foster family and its components", OPHI RP. No 25.

Topic: Introduction to the Capability Approach

Session: Wednesday 05 August, 11:15-13:00

Instructor: Sabina Alkire and Christoph Jindra

Contents:

- History and Motivation
- Capabilities
- Functionings
- Agency
- Implications for economics
- Issues for measurement

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 6).

Further reading:

1. ALKIRE, S. (2005) Capabilities and Functionings: Definition and Justification. http://hd-ca.org/pubs/HDCA_Briefing_Concepts.pdf
2. ALKIRE, S. and S. DENEULIN (2009), "The Human Development and Capability Approach" in DENEULIN, S. and L. SHAHANI (eds) An Introduction to Human Development and Capability Approach, draft chapters. Chapter 2. http://www.idrc.ca/en/ev-146685-201-1-DO_TOPIC.html
3. SEN, A. (1989), "Development as Capability Expansion" In S. FUKUDA-PARR and A.K. SHIVA KUMAR, Readings in Human Development, Oxford University Press (2003).
4. EN, A. (1999), Development as Freedom, Oxford University Press. Chapters 1-3.

Topic: Normative Issues in Multidimensional Poverty Measurement

Session: Wednesday 05 August, 14:00-15:45 (theory), 06 August, 09:00-10:45 (working groups)

Instructor: Sabina Alkire and Paola Ballon

Contents:

- Choice of the unit of analysis
- Order of aggregation
- Choice of dimensions
- Choice of variables/indicators for dimensions
- Choice of poverty lines
- Choice of weights
- Choice of identification criterion & aggregate measures

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 6).

Further reading:

1. ALKIRE, S. and M. E. SANTOS (2009), "Poverty and Inequality Measurement", in DENEULIN, S. and SHAHANI, L. An Introduction to the Human Development and Capability Approach, Chapter 6. London, Earthscan. http://www.idrc.ca/en/ev-146721-201-1-DO_TOPIC.html
2. ALKIRE, S. (2002), "Dimensions of Human Development" World Development 30: 181-205. (This article surveys the 'lists' of dimensions of human development that have been proposed – on the basis of participatory planning or research, philosophy, synthesis of existing literature, cross-cultural psychology, psychology of human development, and so on).
3. ALKIRE, S. (2007), "Choosing Dimensions: The Capability Approach and Multidimensional Poverty." (This paper observes how researchers have, in practice, selected dimensions of poverty, and finds they generally use one of five methods).
4. DECANCO, K. and M. A. LUGO (2008), "Setting weights in multidimensional indices of well-being". <http://www.ophi.org.uk/pubs/W1.Decancq-Lugo.pdf.pdf> and the references therein.
5. FOSTER, J. E. (1998) "Absolute versus Relative Poverty" American Economic Review, Papers and Proceedings. 88: 335-341.
6. RAVALLION, M. and S. CHEN (2009), "Weakly Relative Poverty" Policy Research Working Paper 4844, World Bank, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1348985

Topic: Case Studies: National Multidimensional Poverty Measures

Session: Wednesday 05 August, 16:15-18:00

Instructors: Sabina Alkire, Gisela Robles A., Bouba Housseini, Christoph Jindra and Paola Ballon

Contents:

- An overview of national A&F measures in Colombia, Mexico, Bhutan and Chile.

Reading List:

1. HERNANDEZ-LICONA (2014) "Multidimensional Poverty Measurement: The Mexican Wave", Mexico: National Council for the Evaluation of Social Development Policy (CONEVAL), July [available at: <http://www.mppn.org/wp-content/uploads/1-Mexico-Berlin-CONEVAL2.pdf> accessed on 9 Aug 2014]
2. MAC MASTER, B (2013) "Multidimensional Poverty Index Applications - Colombia", Bogota: Department of Social Prosperity, June [available at: <http://www.ophi.org.uk/wp-content/uploads/The-Case-of-Colombia-Mr-Bruce-Mac-Master-Director-of-the-Department-fro-Social-Prosperity-DPS-Colombia.pdf?0a8fd7> accessed on 9 Aug 2014]
3. NATIONAL STATISTICS BUREAU (2014) "Bhutan Multidimensional Poverty Index", Thimphu: NSB [available at: www.nsb.gov.bt/publication/download.php?id=279 accessed on 9 Aug 2014]
4. STATISTICS SOUTH AFRICA (2014) "The South African MPI", Pretoria: Stats SA [available at <http://beta2.statssa.gov.za/publications/Report-03-10-08/Report-03-10-082014.pdf> accessed on 9 Aug 2014]
5. TOBGYAL, S. (2014) "The Bhutan Multidimensional Poverty Index", Thimphu: Gross National Happiness Commission, July [available at: <http://www.mppn.org/bhutan-multidimensional-poverty-index/> accessed on 9 Aug 2014]
6. CONPES (Consejo Nacional de Politica Economica y Social) (2012) "Metodologias oficiales y arreglos institucionales para la medicion de la pobreza en Colombia", Bogota, 28 May. (Documento Conpes Social, 150) [available at: dnp.gov.co/LinkClick.aspx?fileticket=...tabid=1473 accessed on 9 Aug 2014]
7. DIARIO OFICIAL DE LA FEDERACION (2004) "Ley General de Desarrollo Social [General Law of Social Development]", México: Camara de Diputados, 20 January [available at <http://www.diputados.gob.mx/LeyesBiblio/pdf/264.pdf> accessed on 9 Aug 2014].

Topic: Survey Design, Bias Analysis, Missing Values and Sample Drop

Session: Thursday 06 August, 11:15-13:00

Instructors: Ana Vaz and Bouba Housseini

Contents:

- An overview of common data issues related to the use of Household Surveys for
- Multidimensional poverty measurement

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 7).

Further reading:

1. DEATON, Angus (1997) The Analysis of Household Surveys: A Microeconomic Approach to Development Policy, Washington: The World Bank. (Specially chapters 1 and 2)
2. BROGAN, D. "Sampling error estimation for survey data", in Household Sample Surveys in
3. Developing and Transition Countries, New York: United Nation Publication.
4. CHROMY, J. R. and ABEYASEKERA, S. (2005) "Statistical analysis of survey data", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.
5. KASPRZYK, D (2005) "Measurement error in household surveys: sources and measurement", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.
6. LEPKOWSKI, J. "Non-observation error in household surveys in developing countries", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.
7. YANSANEH, I (2005) "Overview of sample design issues for household surveys in developing and transition countries", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.

Topic: Stata Lab & Descriptive Stats

Session: Thursday 06 August, 14:00-15:45 (lecture), 16:15-18:00 (Working Groups: exploring the dataset)

Instructor: Adriana Conconi

Contents:

- Review of STATA
- Descriptive Statistics (categorical and continuous variables)
- Generating variables using loops
- The structure of the AF - do file.

Reading List:

1. CAMERON A.C. and P.K. TRIVEDI. "Microeconometrics using STATA" Revised Edition (2010) Stata Press, 706 pages. Chapter 1-2
2. STATA Press. Getting Started with Stata for Windows.

Useful resource:

1. General help can be found at <http://www.stata.com/links/resources-for-learning-stata>.
2. UCLA Academic Technology Services available at www.ats.ucla.edu/stat/stata
3. Prof. Cameron's webpage at the University of Davis, available at <http://cameron.econ.ucdavis.edu/stata/stata.html>

Topic: Exam

Session: Friday 07 August, 09:00-10:45

Instructors: Bouba Housseini, Christoph Jindra and Yangyang Shen

Contents:

- Why Multidimensional (MD) Poverty Measures?
- Unidimensional Poverty Measurement
- Properties of MD Poverty
- Alkire Foster (AF) Methodology
- Introduction to the Capability Approach
- Normative Issues in MD Poverty Measurement.

Topic: Measures of Associations and Redundancy

Session: Friday 07 August, 11:15-13:00

Instructors: Sabina Alkire and Paola Ballon

Contents:

- Measuring association in contingency tables: local, and global odds ratios
- Non-model based analysis of ordinal association: concordance and discordance measures of association, gamma, Kendall-tau.
- Introduction to redundancy: Principles of EFA.

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 7).

Further reading:

1. AGRESTI, A. (1990) Categorical data analysis, New York, NY; Toronto: John Wiley & Sons. Chapter 2.
2. ANDERSON, T.W. (2003) An Introduction to Multivariate Statistical Analysis, 3rd Edition, John Wiley & Sons. Chapter 14.
2. AGRESTI, A. (1984). Analysis of ordinal categorical data, New York, NY ; Toronto: John Wiley & Sons.

Topic: Aggregated Results, Decomposition by Subgroup and Dimensional Breakdown

Session: Monday 10 August, 09:00-10:45 (Aggregated Results), 11:15-13:00 (Working Groups), 14:00-15:45 (Decomposition by Subgroup and dimension), 16:15-18:00 (Working Groups).

Instructors: Adriana Conconi, Bouba Housseini, Suman Seth and Paola Ballon

Contents:

- Decompositions by population subgroups
- Breaks-down by dimension
- Analysis of Trends in AF Measure.

Reading List:

1. ALKIRE, S. and J. M. ROCHE (2013), "How Multidimensional Poverty went down: Dynamics and Comparison", Research briefing <http://www.ophi.org.uk/wp-content/uploads/How-Multidimensional-Poverty-went-down.pdf?7ff332>
2. ALKIRE, S. and M. E. SANTOS (2010), "Acute Multidimensional Poverty: A new Index for Developing Countries", OPHI WP 38. <http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf>
3. ALKIRE, S. and S. SETH (2013), "Selecting a Targeting Method to Identify BPL Households in India". Social Indicators Research, Volume 112, Issue 2, pp 417-446.
4. ALKIRE, S. and S. SETH (2013), "Multidimensional Poverty Reduction in India Between 1999 and 2006: Where and How?". OPHI Working Paper No 60.
5. APABLAZA, M., OCAMPO, J.P., & YALONETZKY, G. (2010). 'Decomposing Changes in Multidimensional Poverty in 10 Countries', mimeo, Oxford Poverty and Human Development Initiative, Oxford Department of International Development, University of Oxford.
6. BATANA, Y. (2008), "Multidimensional Measurement of Poverty in Sub-Saharan Africa", OPHI WP. NO 13.
7. BENNETT, C. and S. SINGH, (2010), "Multidimensional poverty: Measurement, Estimation and Inference", manuscript.
8. ROCHE J. M. (2013), "Monitoring Progress in Child Poverty Reduction: Methodological Insights and Illustration to the Case Study of Bangladesh", Social Indicators Research, Volume 112, Issue 2, pp 363-390
9. SANTOS, M. E. and URA, K. (2008), "Multidimensional Poverty in Bhutan: Estimates and Policy Implications", OPHI WP. 14
10. SANTOS, M.E, LUGO, M. A., LOPEZ-CALVA, L. F., CRUCES, G., BATTISTON, D. (2010), "Refining the Basic Needs Approach: A Multidimensional Analysis of Poverty in Latin America", Research on Economic Inequality, Chapter 1, Vol. 18, forthcoming.

Topic: Sensitivity, Robustness Analysis and Standard Errors

Session: Tuesday 11 August, 09:00-10:45 (lecture), 11:15-13:00 (working groups)

Instructors: Suman Seth and Bouba Housseini

Contents:

- Unidimensional versus multidimensional dominance
- Application of Stochastic Dominance in Alkire-Foster context
- Computation of standard errors of point estimates
- Rank robustness; Spearman, and Good & Kruskal's correlation coefficients and Rank concordance
- Robustness of point estimates with respect to the selection of weights, poverty cut-off and deprivation cut-offs.

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 8).

Further reading:

1. ALKIRE, S., and J.E. FOSTER (2011). "Counting and Multidimensional Poverty Measurement." Journal of Public Economics. 95(7-8): 476-487.
2. ALKIRE, S., ME. SANTOS, S. SETH, and G. YALONETZKY (2010). Is the Multidimensional Poverty Index robust to different weights? OPHI Working Paper 22a
3. ATKINSON, A.B and F. BOURGUIGNON (1982), "The comparison of multidimensioned distributions of economic status", Review of Economic Studies, 49(2): 183-201.
4. DEATON, A. (1997). The analysis of household surveys. A microeconomic approach to development policy. The World Bank
5. DUCLOS, J-Y., SAHN, D and S. YOUNGER (2006), "Robust Multidimensional Poverty Comparisons", The Economic Journal. 116(514): 943-68.
6. LYNN, P. (2007). Hypothesis testing using complex survey data.
<http://www.restore.ac.uk/Longitudinal/surveynetwork/documents/PragueCourseNotesPLv3.pdf>
7. YALONETZKY, G (2011), Conditions for the Most Robust Poverty Comparisons Using the Alkire-Foster Family of Measures. OPHI Working Paper 44b.
8. YALONETZKY, G (2011). A note on the standard errors of the members of the Alkire Foster family and its components. OPHI Working Paper 25a (work in progress)
9. YALONETZKY, Gaston (2009), "Testing for stochastic dominance among additive, multivariate welfare functions", manuscript.
10. ANDERSON, G. (1996), 'Nonparametric tests of stochastic dominance in income distributions', Econometrica, 64(5): 1183-1193.
11. ANDERSON, G. (2008), "The empirical assessment of multidimensional welfare, inequality and poverty: Sample weighted multivariate generalizations of the Kolmogorov-Smirnov two sample test for stochastic dominance", Journal of Economic Inequality, 6(1): 73-87.
12. DAVIDSON, R. and J. DUCLOS (2000), "Statistical inference for stochastic dominance and for the measurement of poverty and inequality", Econometrica, 68(6): 1435-65.
13. DUCLOS, J-Y., SAHN, D and S. YOUNGER (2006), "Robust Multidimensional Poverty Comparisons with Discrete Indicators of Well-being", CIRPEE Working Paper, 06-28.

Topic: Time Series and Chronicity

Session: Tuesday 11 August, 14:00-15:45

Instructors: Sabina Alkire and Ana Vaz

Contents:

- Time decompositions for panel datasets introducing transitional probabilities.
- Empirical examples in both cross section and panel data.
- Remarks on time comparability in cross section data

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 9).

Further reading:

1. APABLAZA, M. and G. YALONETZKY (2011). Measuring the dynamics of multiple deprivations among children: the cases of Andhra Pradesh, Ethiopia, Peru, and Vietnam. OPHI Working Paper 26a
2. APABLAZA, M., J.P OCAMPO and G. YALONETZKY, (2010). 'Decomposing Changes in Multidimensional Poverty in 10 Countries', mimeo, Oxford Poverty and Human Development Initiative, Oxford Department of International Development, University of Oxford
3. FOSTER, J.E. (2009). A class of chronic poverty measures. In: Addison A, Hulme D, Kanbur R (eds) Poverty Dynamics: Towards Inter-disciplinary Approaches. Oxford University Press, Oxford.
4. FOSTER, J.E. and M.E. SANTOS (2012). Measuring Chronic Poverty. OPHI Working Paper.
5. BOSSERT, W., S. CHAKRAVARTY, and C. D'AMBROSIO. (2010). Poverty and Time. Working Papers with number wp2010-74. World Institute for Development Economic Research (UNU-WIDER)
6. BOUILLON, C. and P. YANEZ-PAGANS (2011). Dynamic Consistency of Multidimensional and Income Targeting: An Application for Mexico Using Panel Data Information. RES Working Papers. Inter-American Development Bank, Research Department.
7. CALVO, C and S. DERCON (2007). Chronic poverty and all that: the measurement of poverty over time. University of Oxford.
8. CARTER, M.R. and C.B. BARRETT (2006) The economics of poverty traps and persistent poverty: an asset-based approach. Journal of Development Studies, 42(2): 178-99.
9. HULME, D. and A. MCKAY (2005). Identifying and measuring chronic poverty: beyond monetary measures. Chronic Poverty Research Centre Working Paper No 30.
10. RAY, N.A. (2011). Duration and persistence in multidimensional deprivation: methodology and Australian application. Economic Record 88, 280, 106-126.

Topic: Interpreting the MPI Results

Session: Tuesday 11 August, 16:15-18:00

Instructors: Suman Seth, Bouba Housseini and Paola Ballon

Contents:

- Analysis and Interpretation of aggregated results (M0, H, A)
- Comparing the MPI to other measures of welfare or poverty
- Analysis and Interpretation of results by subgroup
- Analysis and Interpretation of dimensional results (Raw and Censored Headcounts Ratios)

Reading List:

1. Alkire, S., Santos, M.E.: Acute multidimensional poverty: a new index for developing countries. OPHI working paper series, 38 (2010)
2. Alkire, S.: Multidimensional poverty and its discontents. (OPHI working paper series, 44) (2011)
3. Alkire, Sabina, and James Foster. "Understandings and misunderstandings of multidimensional poverty measurement." *The Journal of Economic Inequality* 9.2 (2011): 289-314.

Further readings:

1. Battiston, D., Cruces, G., et al. (2009). Income and beyond: Multidimensional poverty in six Latin American countries. *OPHI Working Paper 17*, University of Oxford.
2. Dynamic Comparison between Multidimensional Poverty and Monetary Poverty, Research workshop, 21-22 November 2012, Oxford Department of International Development, Oxford 2012.
<http://www.ophi.org.uk/workshop-on-monetary-and-multidimensional-poverty-measures/>
3. Ravallion, Martin. "On multidimensional indices of poverty." *The Journal of Economic Inequality* 9.2 (2011): 235-248.

Topic: Inequality Among the Poor

Session: Wednesday 12 August, 09:00-10:45

Instructor: Suman Seth

Contents:

- An inequality sensitive poverty index or a separate inequality measure?
- Which Inequality measure?
- Capturing inequality across the Poor
- Capturing disparity in poverty across population subgroups

Reading:

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 9).

Further reading:

1. ALKIRE, S. and S. SETH (2013), Analysis of Inequality across the Multi-dimensionally Poor and across Population Subgroups for Counting Approaches, Oxford Poverty and Human Development Initiative, Work in Progress.
2. ALKIRE, S., J. M. ROCHE, and S. SETH (2011) "Sub-national Disparities and Inter-temporal Evolution of Multidimensional Poverty across Developing Countries", Research in Progress 32a, Oxford Poverty and Human Development Initiative, University of Oxford. Available at: <http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-32a-2011.pdf>.
3. KOLM, S. C. (1976), "Unequal inequalities I", Journal of Economic Theory, 12(3), 416-42.
4. STEWART, F. (2000), "Crisis prevention: tackling horizontal inequalities". Oxford Development Studies, 28(3), 245-262.

Topic: Regression Analysis

<p>Session: Wednesday 12 August, 11:15-13:00</p> <p>Instructors: Paola Ballon, Bouba Housseini and Christoph Jindra</p>
<p>Contents:</p> <ul style="list-style-type: none">● Introduction to Generalised linear models.● Regression models for Indicators of deprivation: Poisson models for count data.● Regression models for MPI by district: Linear regression● Introduction to Structural Equation Modelling: MIMIC models for Female empowerment
<p>Reading:</p> <ol style="list-style-type: none">1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 10). <p>Further reading:</p> <ol style="list-style-type: none">1. BALLON, P. (2011). A Structural Model for Female Empowerment. PhD dissertation. Mimeo, University of Geneva, Switzerland., 2011.2. BOLLEN, K. A. (1989). Structural Equations with Latent Variables. Wiley Series in Probability and Mathematical Statistics. New York3. CAMERON A.C. and P.K. TRIVEDI (2005). Microeconometrics: Methods and Applications. Cambridge University Press, Cambridge.4. DI TOMMASO, M. L. (2007) "Children capabilities: A structural equation model for India". The Journal of Socio-Economics, 36, 436-450.5. KRISHNAKUMAR, J. & P. BALLON (2008). "Estimating Basic Capabilities: A Structural Equation Model Applied to Bolivia". World Development Vol 36 (6) pages 992-110.6. KUKLYS, W. (2005) Amartya Sen's Capability Approach: Theoretical Insights and Empirical Applications, Berlin, Springer.

Topic: Clarifying Concepts and Communicating your Results

<p>Session: Wednesday 12 August, 14:00-15:45</p> <p>Instructors: Sabina Alkire and John Hammock</p>
<p>Contents:</p> <ul style="list-style-type: none">● Clarifying the different concepts used in multidimensional poverty analysis● Communicating your multidimensional poverty measure● OPHI's experience in communicating the global MPI● General communication advice.
<p>Reading List:</p>
<p>Further readings:</p>

Topic: Targeting & Impact Evaluation

<p>Session: Thursday 13 August, 09:00-10:45</p> <p>Instructor: Sabina Alkire, Ana Vaz and Marcos Robles</p>
<p>Contents:</p> <ul style="list-style-type: none">● Methods of MPI poor targeting and applications● Impact evaluation and multidimensional poverty
<p>Reading List:</p> <ol style="list-style-type: none">1. ALKIRE, S. and S. SETH (2013), "Selecting a Targeting Method to Identify BPL Households in India". Social Indicators Research, Volume 112, Issue 2, pp 417-446.2. Robano, V. & Smith, S. C. (2014) Multidimensional targeting and evaluation: A general framework with an application to a poverty program in Bangladesh. OPHI Working Paper 65. Available at: http://www.ophi.org.uk/multidimensional-targeting-and-evaluation-a-general-framework-with-an-application-to-a-poverty-program-in-bangladesh/3. AZEVEDO, V. and M. ROBLES (2013), "Multidimensional Targeting: Identifying Beneficiaries of Conditional Cash Transfer Programs". Social Indicators Research, Volume 112, Issue 2, pp 447-475.

Topic: Institutions and Policy

<p>Session: Thursday 13 August, 11:15-13:00</p> <p>Instructor: John Hammock and Joao Pedro</p>
<p>Contents:</p> <ul style="list-style-type: none">● Practical and policy considerations in implementing multidimensional poverty measures● Political purposes – users and incentives created● Process of developing a measure – how it will be used? Who will have interest in using it?● How measures will be updated? What institutions will be involved?
<p>Reading List:</p>
<p>Further readings:</p>

Topic: Missing Dimensions of Household Surveys on Poverty

Session: Thursday 13 August, 14:00-15:45

Instructor: Sabina Alkire and Christoph Jindra

Contents:

- Informational Analysis of moral principles
- Review – the choice of dimensions
- The problem of ‘missing data’
- Four survey instruments producing most MDG-type data
- Various search engines and initiatives to improve data
- Characteristics of internationally comparable data
- OPHI’s Missing Dimensions: Employment, Empowerment, Safety from Violence, Ability to go about without Shame, Psychological and Subjective well-being.

Reading List:

1. ALKIRE, S. (2007), "The Missing Dimensions of Poverty Data: Introduction to the Special Issue." *Oxford Development Studies* 35:347-359.
2. ALKIRE, S. (2009) The MDGs: Multidimensionality and Interconnection. *Background paper for DFID White Paper*. <http://ophi.org.uk/pubs/RP-Alkire%20OPHI-DFID%20Background%20Paper.pdf> Please see section 2.

Further readings:

1. DIPROSE, R. (2007), "Physical Safety and Security: A Proposal for Internationally Comparable Indicators of Violence." *Oxford Development Studies* 35:431-458.
2. GROVES, R. M., F. J. FOWLER, M. P. COUPER, J. M. LEPKOWSKI, E. SINGTER and R. TOURANGEAU (2004) *Survey methodology*, Hoboken, NJ, J. Wiley. (Chapter Eight: Evaluating Survey Questions)
3. IBRAHIM, S., and S. ALKIRE (2007), "Agency and Empowerment: A Proposal for Internationally Comparable Indicators." *Oxford Development Studies* 35:379-403.
4. LUGO, M. A.(2007), "Employment: A Proposal for Internationally Comparable Indicators." *Oxford Development Studies* 35:361-378.
5. NARAYAN, D, CHAMBERS, R., SHAH, M.K. and P. PETESCH (2000), *Voices of the poor: Crying out for change*. New York: Oxford University Press for the World Bank
6. RANIS, G., F. STEWART, and E SAMMAN. (2006). "Human Development: Beyond the Human Development Index." *Journal of Human Development* 7(3): 323-358.
7. SAMMAN, E. (2007), "Psychological and Subjective Well-being: A Proposal for Internationally Comparable Indicators." *Oxford Development Studies* 35:459-486.
8. ZAVALETA, D. (2007), "The ability to go about without shame: a proposal for international comparable indicators on shame and humiliation." *Oxford Development Studies*.

Topic: Review of the Course & Closure

<p>Session: Thursday 13 August, 16:15-18:00 Instructor: Sabina Alkire</p>
<p>Contents:</p> <ul style="list-style-type: none">● Recapping key lessons and topics covered during the course● General advice and next steps.
<p>Reading List:</p>
<p>Further readings:</p>

Topic: Non-Compulsory Exam

<p>Session: Saturday 15 August 09:00-11:00 Instructors: Bouba Housseini, Christoph Jindra and Yangyang Shen</p>
<p>Contents:</p> <ul style="list-style-type: none">● The whole of the course.