

# Summer School on Multidimensional Poverty Analysis

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

In collaboration with the International Poverty Reduction Center in China (IPRCC)  
and Beijing Normal University (BNU)

Hosted at the Beijing Normal University

Beijing, China

1 – 13 August 2016



**Welcome!**

Welcome to the OPHI Summer School on Multidimensional Poverty Analysis 2016. 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 Beijing!*  
*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 (AF) method. Participants will revise axiomatic poverty measures, and will get an overview of different techniques of multidimensional poverty measurement and which problems they are best suited to solve. The empirical motivation for measuring multidimensional poverty will be presented as well as the conceptual motivation, drawing on Amartya 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. 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.



Foster, James (JF)

**James Foster** is Professor of Economics and International Affairs at The Elliott School of International Affairs at The George Washington University. Professor Foster received his Ph.D. in Economics from Cornell University where he received the Selma Fine Goldsmith Award for his dissertation. His research focuses on welfare economics — using economic tools to evaluate the well-being of people. His joint 1984 *Econometrica* paper is one of the most cited papers on poverty; it introduced the FGT Index, which has been used in thousands of studies and was the basis for targeting the Progresa/Oportunidades program in Mexico. Other work includes a book project on economic inequality with Nobel Laureate Amartya Sen; a paper on poverty and growth in a recent issue of the *International Economic Review* with Miguel Szekely, Undersecretary of Education in Mexico; a paper measuring multidimensional poverty with Sabina Alkire, Director of OPHI and so on.



Li, Shi (SL)

**Shi Li** is Professor of Economics in the School of Economics and Business and Acting Director of the Institute for Income Distribution at Beijing Normal University. He is member of the Advisory Committee of Ministry of Human Resources and Social Security, and member of Advisory Committee of Poverty Alleviation Office of State Council, China. He was a professor and senior research fellow at the Institute of Economics, Chinese Academy of Social Sciences from 1996 to 2005 and a research fellow at the University of Oxford in 2001 and professor at Hitotsubashi University, Japan in 2002. He has participated as a consultant in the projects supported by UNDP, World Bank, UNICEF, ADB, etc., and a co-author of *China Human Development Report 2005*. His current studies focus on income distribution, poverty and rural migration in China.



Wang, Xiaolin (XW)

**Xiaolin Wang** is the Deputy Secretary-General of the Expert Consultative Committee of the State Council Leading Group for Poverty Alleviation and Development (ECC-CPAD), and the Deputy Director-General of the Information Centre at the State Council Leading Group Office of Poverty Alleviation and Development. He was a senior research fellow and the Director of the Research Division at the International Poverty Reduction Centre in China (IPRCC) between 2009 and 2015. Since joining IPRCC, he has focused on the knowledge sharing of development and poverty reduction among developing countries based on China's past experiences. He is one of the key people for promoting poverty reduction through the quality of development aid under the China-DAC Study Group, which was established by IPRCC and OECD-DAC in 2009. He also has served as a consultant and senior researcher for many international organisations including the World Bank, Asian Development Bank, UNICEF, UNDP, as well as for the Chinese governmental ministries: MOF and MOST.



Conconi, Adriana (AC)

**Adriana Conconi** is Outreach Technical Director at the Oxford Poverty & Human Development Initiative (OPHI). She holds a Master in Public Administration in International Development from Harvard University, as well as M.A. and B.A. degrees in Economics from the Universidad Nacional de La Plata (UNLP) – Argentina. Adriana has been working with OPHI since 2011, and led the MPI computations in 2013 and 2014. She has previously worked as a Researcher at the Centro de Estudios Distributivos, Laborales y Sociales (CEDLAS), at the UNLP and as a Professor in graduate and post-graduate courses at UNLP and Universidad de San Andres (Argentina).



Housseini, Bouba (BH)

**Bouba Housseini** is currently a Research Officer at the Oxford Poverty and Human Development Initiative. 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 includes collaborations with various UN agencies, in particular, the UNDP Human Development Report Office.



Jindra, Christoph (CJ)

**Christoph Jindra** is a Research Officer at the Oxford Poverty & Human Development Initiative (OPHI). His main research interests are multidimensional poverty measurement, quantitative methods, the capability approach and social inequality. He holds a doctoral degree in Social Sciences from Humboldt University Berlin where he studied at the Berlin Graduate School of Social Sciences as a member of the international and interdisciplinary European PhD in Socio-Economic and Statistical Studies programme. For his PhD he worked on issues related to the operationalisation of capabilities using latent variable techniques. During this time, he spent six months at the department of Social Statistics at the University of Southampton. Before that he studied Sociology, Economics and Psychology at the universities of Augsburg and Aachen.



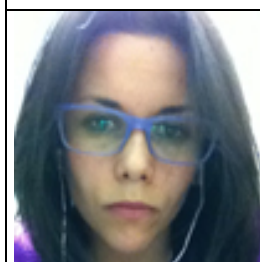
Malaeb, Bilal (BM)

**Bilal Malaeb** is a research officer at the Oxford Poverty and Human Development Initiative (OPHI). He holds a bachelor in Economics from the American University of Beirut, Lebanon, and MSc and PhD in Economics from the University of Manchester, UK. Prior to joining OPHI in June 2016, Bilal worked at the University of Manchester as a lecturer in Econometrics and research methods for post-graduate students at the Global Development Institute, and graduate teaching assistant for undergraduate modules in the Economics department. He also worked as an external consultant with the International Labour Organization and the International Fund for Agricultural Development. At OPHI, Bilal's role entails supporting governments in building their national MPIs and carrying out micro-econometric research on the determinants of multidimensional poverty.



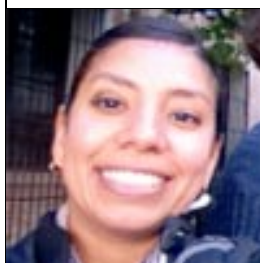
Oldiges, Christian (CO)

**Christian Oldiges** is a Research Officer at the Oxford Poverty & Human Development Initiative (OPHI). He has been involved with computing the global MPI and OPHI's outreach work since 2011. His doctoral thesis at Heidelberg University, Germany focuses on the impact evaluation of welfare programmes in India and the multidimensional measurement of nutrition. Previously, he has worked as a research assistant at the Delhi School of Economics, New Delhi, India and the G.B. Pant Social Science Institute, Allahabad, India.



Pinilla-Roncancio, Monica (MP)

**Monica Pinilla-Roncancio** is a Researcher at the Oxford Poverty and Human Development Initiative (OPHI). She holds a PhD in Social Policy from the University of Birmingham, UK, as well as an M.Sc. in Health Economics, Policy and Law from Erasmus University Rotterdam (Netherlands) and an M.A. in Economics from the Universidad del Rosario (Colombia). Monica has been working with OPHI since 2014, contributing to outreach activities as well as the calculations of the Global MPI.



Robles A., Gisela (GR)

**Gisela Robles Aguilar** is a Research Officer at the Oxford Poverty & Human Development Initiative (OPHI). She has coordinated the estimation and dissemination of the Global MPI since Winter 2014. She completed a DPhil degree in Comparative Social Policy, University of Oxford. Her research is focused in analysing 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.



Shen, Yangyang (YS)

**Yangyang Shen** is currently a Research Officer at the Oxford Poverty and Human Development Initiative (OPHI). She completed a DPhil degree in Development Economics at the University of Nankai. 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.



Vaz, Ana (AV)

**Ana Vaz** is a Research Officer at the Oxford Poverty and Human Development Initiative (OPHI). She is involved in research in the policy applications of multidimensional measurement, and women's autonomy. She holds a DPhil in Economics from the University of Oxford. She previously worked for PricewaterhouseCoopers and at the Catholic University of Portugal.

## 2. Programme

### Week-1:

Sessions begin promptly and are as follows: 8:30-10:15; 10:45-12:30; 13:30-15:15; 15:45-17:30

Session Date		Session-1	Session-2	Session-3	Session-4
		8:30-10:15	10:45-12:30	13:30-15:15	15:45-17:30
D-1	MON, 01 August	Introduction & Overview of the Summer School	Multidimensional (MD) Poverty Measures: Motivation & Properties	Part-1: Rural Poverty & the Evolution of Poverty Reduction Policies in China  Part-2: MPI in the SDGs	Unidimensional Poverty Measures
D-2	TUE, 02 August	MD Poverty Methods & Counting Approaches	Alkire-Foster (AF) Methodology	Case Studies: the Global MPI	Paper-based Exercises on AF Methodology
D-3	WED, 03 August	Solution: Exercises on AF Methodology	Introduction to the Capability Approach	Normative Issues in MD Poverty Measurement Design	Case Studies: National MD Poverty Measures
D-4	THU, 04 August	Working Groups: Normative Issues	Stata Lab & Descriptive Statistics	Data & Indicators	Working Groups: Exploring the Dataset
D-5	FRI, 05 August	Exam	Working Groups: Creating the Deprivation Matrix	Measures of Association & Redundancy	Working Groups: Creating the Deprivation Matrix & Redundancy
D-6	SAT, 06 August	Working Groups: Preparing Presentations	Working Groups: Presentations		
D-7	SUN, 07 August	Field Trip			



## 2. Programme (Continued)

### Week-2:

Sessions begin promptly and are as follows: 8:30-10:15; 10:45-12:30; 13:30-15:15; 15:45-17:30

Date \ Session		Session-1	Session-2	Session-3	Session-4
		8:30-10:15	10:45-12:30	13:30-15:15	15:45-17:30
D-8	MON, 08 August	Working Groups: Aggregated Results (1)	Working Groups: Aggregated Results (2)	Working Groups: Decomposition, Dimensional Breakdown & Maps (1)	Working Groups: Decomposition, Dimensional Breakdown & Maps (2)
D-9	TUE, 09 August	Sensitivity, Robustness Analysis & Standard Errors	Working Groups: Sensitivity, Robustness Analysis & Standard Errors	Changes over Time	Interpreting the MPI Results
D-10	WED, 10 August	Regression Analysis	Accurate Targeting Poverty Alleviation Strategy & Policy in China	Impact Evaluation	Flexible Session
D-11	THU, 11 August	Working Groups: Preparing Final Presentations	Working Groups: Preparing Final Presentations	Communication & Policy	Review of the Course & Closure
D-12	FRI, 12 August	Working Groups: Presentations			
D-13	SAT, 13 August	Non Compulsory Exam			

### 3. Syllabus

#### • Monday 01 August

<b>D1-S1</b> (Monday 01 August, 08:30-10:15)
<p><b>Topic:</b> Introduction &amp; Overview of the Summer School</p> <p><b>Instructor:</b> Sabina Alkire</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● Presentation of the OPHI Team</li> <li>● Presentation of the participants</li> <li>● Presentation of the Summer School, aims and goals</li> <li>● Presentation of the programme of the Summer School</li> <li>● Logistic information</li> </ul>
<p><b>Pre-Summer School Reading List:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, Multidimensional Poverty Measurement and Analysis, Oxford University Press.</li> <li>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. <a href="http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-2a.pdf">http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-2a.pdf</a></li> <li>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 <a href="http://www.ifpri.org/sites/default/files/publications/oc63ch03.pdf">http://www.ifpri.org/sites/default/files/publications/oc63ch03.pdf</a></li> <li>4. Alkire, S. and M. E. Santos (2011), "Training Material for Producing National Human Development Reports" <a href="http://www.ophi.org.uk/wp-content/uploads/MPI-Primer1.pdf">http://www.ophi.org.uk/wp-content/uploads/MPI-Primer1.pdf</a>.</li> </ol>
<b>D1-S2</b> (Monday 01 August, 10:45-12:30)
<p><b>Topic:</b> Multidimensional (MD) Poverty Measures: Motivation and Properties</p> <p><b>Instructor:</b> Sabina Alkire</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● Conceptual and philosophical arguments for multidimensional poverty measures</li> <li>● Empirical evidence of unidimensional versus multidimensional poverty</li> <li>● Examples of interest in multidimensional poverty measures among national governments</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 1 &amp; 2).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>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. <a href="http://www.idrc.ca/en/ev-146721-201-1-DO_TOPIC.html">http://www.idrc.ca/en/ev-146721-201-1-DO_TOPIC.html</a></li> <li>2. Alkire, S. and M. E. Santos (2010), "Acute Multidimensional Poverty: A new Index for Developing Countries", OPHI WP 38. <a href="http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf">http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf</a></li> </ol>



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. Ruggieri-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.

**D1-S3** (Monday 01 August, 13:30-15:15)

**Topic 1:** Rural Poverty & the Evolution of Poverty Reduction Policies in China

**Instructor:** Shi Li

**Topic 2:** MPI in the SDGs

**Instructor:** Sabina Alkire

**Contents of topic 1:**

- Introduction to rural poverty in China
- The evolution of poverty reduction policies in China

**Contents of topic 2:**

- MPI in the SDGs

**D1-S4** (Monday 01 August, 15:45-17:30)

**Topic:** Unidimensional Poverty Measures

**Instructor:** Sabina Alkire

**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:**

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press, forthcoming, (Chap. 2.1).

2. 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>.
3. Foster J. E. and A. K. Sen (1997), Annexe of "On Economic Inequality", Oxford University Press.
4. 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.

• **Tuesday 02 August**

<b>D2-S1</b> (Tuesday 02 August, 08:30-10:15)
<p><b>Topic:</b> Multidimensional Poverty Methods and Counting Approaches  <b>Instructor:</b> Sabina Alkire</p>
<p><b>Contents</b></p> <ul style="list-style-type: none"> <li>● The counting approach as a method for identifying the poor</li> <li>● Salient implementations of the counting approach to measure of poverty over time and their use as policy tool</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 3 &amp; 4).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Atkinson, A. B. (2003). Multidimensional Deprivation: Contrasting Social Welfare and Counting Approaches. <i>Journal of Economic Inequality</i> 1, 51-65.</li> </ol>
<b>D2-S2</b> (Tuesday 02 August, 10:45-12:30)
<p><b>Topic:</b> Alkire-Foster (AF) Methodology  <b>Instructor:</b> James Foster</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● Key literature on multidimensional poverty measures</li> <li>● The identification and aggregation steps</li> <li>● The importance of joint distribution versus marginal distribution</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 5).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire, S. (2008) "Choosing dimensions: The Capability Approach and Multidimensional Poverty." In <i>The Many Dimensions of Poverty</i>, eds., N. Kakwani and J. Silber. Basingstoke: Palgrave Macmillan.</li> <li>2. Alkire, S. and S. Deneulin (2009). "The Human Development and Capability Approach." In <i>An Introduction to the Human Development and Capability Approach: Freedom and Agency</i>, eds., S. Deneulin and L. Shahani. London: Earthscan.</li> <li>3. Alkire, S., and J.E. Foster (2011). "Counting and Multidimensional Poverty Measurement." <i>Journal of Public Economics</i>. 95(7-8): 476-487.</li> <li>4. Alkire, S., and J.E. Foster (2011). "Understandings and Misunderstandings of Multidimensional Poverty Measurement." <i>Journal of Economic Inequality</i>. 9(2):289-314.</li> <li>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).</li> <li>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.</li> </ol>

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. Yalonzky, G. 2011. "A Note on the Standard Errors of the Members of the Alkire Foster Family and Its Components", OPHI Reach in Progress Paper 25.

**D2-S3** (Tuesday 02 August, 13:30-15:15)

**Topic:** Case Studies: the Global MPI

**Instructor:** Yangyang Shen and Gisela Robles Aguilar

**Contents:**

- An introduction to the Global MPI – one possible implementation of one measure in the AF class of measures

**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 Paper 32a. <http://www.ophi.org.uk/wp-content/uploads/OPHI-RP-32a-2011.pdf>

**D2-S4** (Tuesday 02 August, 15:45-17:30)

**Topic:** Paper-based Exercises on AF Methodology

**Instructor:** Bilal Malaeb and OPHI team

**Contents:**

- Useful exercises on the AF method

### • Wednesday 03 August

<b>D3-S1</b> (Wednesday 03 August, 08:30-10:15)
<p><b>Topic:</b> Solution: Paper-based Exercises on AF Methodology</p> <p><b>Instructor:</b> Bilal Malaeb</p>
<b>D3-S2</b> (Wednesday 03 August, 10:45-12:30)
<p><b>Topic:</b> Introduction to the Capability Approach (CA)</p> <p><b>Instructor:</b> Sabina Alkire</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● History and motivation of the capability approach</li> <li>● Capabilities</li> <li>● Functionings</li> <li>● Agency</li> <li>● Implications for economics</li> <li>● Issues for measurement</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire, S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 6).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire, S. (2005) Capabilities and Functionings: Definition and Justification. <a href="http://hd-ca.org/pubs/HDCA_Briefing_Concepts.pdf">http://hd-ca.org/pubs/HDCA_Briefing_Concepts.pdf</a></li> <li>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. <a href="http://www.idrc.ca/en/ev-146685-201-1-DO_TOPIC.html">http://www.idrc.ca/en/ev-146685-201-1-DO_TOPIC.html</a></li> <li>3. Sen, A. (1989), "Development as Capability Expansion" In S. Fukud-Parr and A.K. Shiva Kumar, Readings in Human Development, Oxford University Press (2003).</li> <li>4. Sen, A. (1999), Development as Freedom, Oxford University Press. Chapters 1-3.</li> </ol>
<b>D3-S3</b> (Wednesday 03 August, 13:30-15:15)
<p><b>Topic:</b> Normative Issues in Multidimensional Poverty Measurement Design</p> <p><b>Instructor:</b> Sabina Alkire</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● Choice of the unit of analysis</li> <li>● Order of aggregation</li> <li>● Choice of dimensions</li> <li>● Choice of variables/indicators for dimensions</li> <li>● Choice of poverty lines</li> <li>● Choice of weights</li> <li>● Choice of identification criterion &amp; aggregate measures</li> </ul>

**Reading:**

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), *Multidimensional Poverty Measurement and Analysis*, Oxford University Press (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](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.
3. Alkire, S. (2007), "Choosing Dimensions: The Capability Approach and Multidimensional Poverty"
4. Decancq, 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](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1348985)

**D3-S4** (Wednesday 03 August, 15:45-17:30)

**Topic:** Case Studies: National Multidimensional Poverty Measures

**Instructor:** Monica Pinilla, Gisela Robles and Adriana Conconi

**Contents:**

- An overview of national AF measures in Colombia, Mexico, Pakistan and Bhutan

**Reading List:**

1. Hernandez-Llicona (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 of Bhutan (2014) "Bhutan Multidimensional Poverty Index", Thimphu: NSB [available at: [www.nsb.gov.bt/publication/download.php?id=279](http://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](http://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].
8. Hanandita, W., & Tampubolon, G. (2015). Multidimensional poverty in Indonesia: trend over the last decade (2003–2013). *Social Indicators Research*, 1-29. <http://link.springer.com/article/10.1007/s11205-015-1044-0>



## •Thursday 04 August

<b>D4-S1</b> (Thursday 04 August, 08:30-10:15)
<p><b>Topic:</b> Working Groups: Normative Issues  <b>Instructor:</b> Adriana Conconi and OPHI Team</p>
<b>D4-S2</b> (Thursday 04 August, 10:45-12:30)
<p><b>Topic:</b> Stata Lab and Descriptive Statistics  <b>Instructor:</b> Adriana Conconi</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● Review of Stata</li> <li>● Descriptive statistics (categorical and continuous variables)</li> <li>● Generating variables using loops</li> <li>● Stata do-file steps following the AF method</li> </ul>
<p><b>Reading List:</b></p> <ol style="list-style-type: none"> <li>1. Cameron A.C. and P.K. Trivedi. "Microeconometrics using Stata" Revised Edition (2010), Stata Press, 706 pages, Chapter 1-2</li> <li>2. Stata Press. Getting Started with Stata for Windows.</li> </ol>
<p><b>Useful resource:</b></p> <ol style="list-style-type: none"> <li>1. General help can be found at <a href="http://www.stata.com/links/resources-for-learning-stata">http://www.stata.com/links/resources-for-learning-stata</a>.</li> <li>2. UCLA Academic Technology Services available at <a href="http://www.ats.ucla.edu/stat/stata">www.ats.ucla.edu/stat/stata</a></li> <li>3. Prof. Cameron's webpage at the University of Davis, available at <a href="http://cameron.econ.ucdavis.edu/stata/stata.html">http://cameron.econ.ucdavis.edu/stata/stata.html</a></li> </ol>
<b>D4-S3</b> (Thursday 04 August, 13:30-15:15)
<p><b>Topic:</b> Data and Indicators  <b>Instructor:</b> Christoph Jindra</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>● An overview of common data issues related to the use of household surveys for multidimensional poverty measurement</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 7).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Deaton, Angus (1997) The Analysis of Household Surveys: A Microeconomic Approach to Development Policy, Washington: The World Bank. (Specially chapters 1 and 2)</li> <li>2. Brogan, D. "Sampling Error Estimation for Survey Data", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.</li> <li>3. Chromy, J. R. and Aveyasekera, S. (2005) "Statistical Analysis of Survey Data", in Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.</li> <li>4. Kasprzyk, D (2005) "Measurement Error in Household Surveys: Sources and Measurement", in</li> </ol>

Household Sample Surveys in Developing and Transition Countries, New York: United Nation Publication.

5. 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.
6. 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.

**D4-S4** (Thursday 04 August, 15:45-17:30)

**Topic:** Working Groups: Exploring the Dataset

**Instructor:** Adriana Conconi and OPHI Team

• **Friday 05 August**

<b>D5-S1</b> (Friday 05 August, 08:30-10:15)
<p><b>Topic:</b> Mid-term Exam  <b>Instructor:</b> Monica Pinilla and OPHI Team</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Why multidimensional (MD) poverty measures?</li> <li>• Unidimensional poverty measurement</li> <li>• Properties of unidimensional and MD poverty</li> <li>• Alkire-Foster (AF) methodology</li> <li>• Introduction to capability approach</li> <li>• Normative issues in MD poverty measurement</li> <li>• Global Multidimensional Poverty Index (MPI)</li> </ul>
<b>D5-S2</b> (Friday 05 August, 10:45-12:30)
<p><b>Topic:</b> Working Groups: Creating the Deprivation Matrix  <b>Instructor:</b> Adriana Conconi and OPHI Team</p>
<b>D5-S3</b> (Friday 05 August, 13:30-15:15)
<p><b>Topic:</b> Measures of Association and Redundancy  <b>Instructor:</b> Gisela Robles Aguilar</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Measuring association in contingency tables: local, and global odds ratios</li> <li>• Non-model based analysis of ordinal association: concordance and discordance measures of association, gamma, Kendall-tau</li> <li>• Introduction to redundancy: principles of EFA</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 7).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Agresti, A. (1990) Categorical Data Analysis, New York, NY; Toronto: John Wiley &amp; Sons. Chapter 2.</li> <li>2. Anderson, T.W. (2003) An Introduction to Multivariate Statistical Analysis, 3rd Edition, John Wiley &amp; Sons. Chapter 14.</li> <li>3. Agresti, A. (1984). Analysis of Ordinal Categorical Data, New York, NY; Toronto: John Wiley &amp; Sons.</li> </ol>
<b>D5-S4</b> (Friday 05 August, 15:45-17:30)
<p><b>Topic:</b> Working Groups: Creating the Deprivation Matrix and Redundancy  <b>Instructor:</b> OPHI Team</p>

**• Saturday 06 August**

<b>D6-S1</b> (Saturday 06 August, 08:30-10:15)
<b>Topic:</b> Working Groups: Preparing Presentations <b>Instructor:</b> OPHI Team
<b>D7-S2</b> (Saturday 06 August, 10:45-12:30)
<b>Topic:</b> Working Groups: Presentations <b>Instructor:</b> OPHI Team

**• Sunday 07 August**

<b>D7</b> (Sunday 07 August, whole day)
<b>Topic:</b> Field Trip <b>Instructor:</b> IPRCC (Organiser)

## • Monday 08 August

<b>D8-S1</b> (Monday 08 August, 08:30-10:15)
<p><b>Topic:</b> Working Groups: Aggregated Results (1)  <b>Instructor:</b> Adriana Conconi and OPHI Team</p>
<b>D8-S2</b> (Monday 08 August, 10:45-12:30)
<p><b>Topic:</b> Working Groups: Aggregated Results (2)  <b>Instructor:</b> OPHI Team</p>
<b>D8-S3</b> (Monday 08 August, 13:30-15:15)
<p><b>Topic:</b> Working Groups: Decomposition, Maps and Dimensional Breakdown (1)  <b>Instructor:</b> Gisela Robles Aguilar and Christian Oldiges</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Decompositions by population subgroups</li> <li>• Break-down by dimension</li> <li>• Analysis of trends in AF Measure</li> </ul>
<p><b>Reading List:</b></p> <ol style="list-style-type: none"> <li>1. Alkire, S. and J. M. Roche (2013), "How Multidimensional Poverty Went Down: Dynamics and Comparison", Research briefing <a href="http://www.ophi.org.uk/wp-content/uploads/How-Multidimensional-Poverty-went-down.pdf?7ff332">http://www.ophi.org.uk/wp-content/uploads/How-Multidimensional-Poverty-went-down.pdf?7ff332</a></li> <li>2. Alkire, S. and M. E. Santos (2010), "Acute Multidimensional Poverty: A New Index for Developing Countries", OPHI WP 38. <a href="http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf">http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf</a></li> <li>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.</li> <li>4. Alkire, S. and S. Seth (2013), "Multidimensional Poverty Reduction in India Between 1999 and 2006: Where and How?" OPHI Working Paper No 60.</li> <li>5. Apablaza, M., Ocampo, J.P., &amp; Yalonzky, G. (2010). 'Decomposing Changes in Multidimensional Poverty in 10 Countries', mimeo, OPHI, Oxford Department of International Development, University of Oxford.</li> <li>6. Batana, Y. (2008), "Multidimensional Measurement of Poverty in Sub-Saharan Africa", OPHI WP. No 13.</li> <li>7. Bennett, C. and S. Slingh, (2010), "Multidimensional poverty: Measurement, Estimation and Inference", manuscript.</li> <li>8. Roche J. M. (2013), "Monitoring Progress in Child Poverty Reduction: Methodological Insights and Illustration to the Case Study of Bangladesh", Social Indicators Research, Vol. 112, Issue 2, pp 363-390.</li> <li>9. Santox, M. E. and Ura, K. (2008), "Multidimensional Poverty in Bhutan: Estimates and Policy Implications", OPHI WP. 14</li> <li>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.</li> </ol>
<b>D8-S4</b> (Monday 08 August, 15:45-17:30)
<p><b>Topic:</b> Working Groups: Decomposition, Maps &amp; Dimensional Breakdown (2)  <b>Instructor:</b> OPHI Team</p>

## • Tuesday 09 August

<b>D9-S1</b> (Tuesday 09 August, 08:30-10:15)
<p><b>Topic:</b> Sensitivity, Robustness Analysis and Standard Errors  <b>Instructor:</b> Bouba Housseini</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Unidimensional versus multidimensional dominance</li> <li>• Application of stochastic dominance in AF context</li> <li>• Computation of standard errors of point estimates</li> <li>• Rank robustness; Spearman, and Good &amp; Kruskal's correlation coefficients and rank concordance</li> <li>• Robustness of point estimates with respect to the selection of weights, poverty cut-off and deprivation cut-offs</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), <i>Multidimensional Poverty Measurement and Analysis</i>, Oxford University Press (Chap. 8).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., and J.E. Foster (2011). "Counting and Multidimensional Poverty Measurement." <i>Journal of Public Economics</i>. 95(7-8): 476-487.</li> <li>2. Alkire S., ME. Santos, S. Seth and G. Yalonetzky (2010). <i>Is the Multidimensional Poverty Index Robust to Different Weights?</i> OPHI Working Paper 22a</li> <li>3. Atkinson, A.B and F. Bourguignon (1982), "The Comparison of Multidimensioned Distributions of Economic Status", <i>Review of Economic Studies</i>, 49(2): 183-201.</li> <li>4. Deaton, A. (1997). <i>The analysis of household surveys. A Microeconomic Approach to Development Policy</i>. The World Bank</li> <li>5. Duclos, J-Y., Sahin, D and S. Younger (2006), "Robust Multidimensional Poverty Comparisons", <i>The Economic Journal</i>. 116(514): 943-68.</li> <li>6. Lynn, P. (2007). <i>Hypothesis Testing Using Complex Survey Data</i>.  <a href="http://www.restore.ac.uk/Longitudinal/surveynetwork/documents/PragueCourseNotesPLv3.pdf">http://www.restore.ac.uk/Longitudinal/surveynetwork/documents/PragueCourseNotesPLv3.pdf</a></li> <li>7. Yalonetzky, G (2011), <i>Conditions for the Most Robust Poverty Comparisons Using the Alkire Foster Family of Measures</i>. OPHI Working Paper 44b.</li> <li>8. Yalonetzky, G (2011). <i>A Note on the Standard Errors of the Members of the Alkire-Foster Family and its Components</i>. OPHI Working Paper 25a (work in progress)</li> <li>9. Yalonetzky, Gaston (2009), "Testing for Stochastic Dominance among Additive, Multivariate Welfare Functions", manuscript.</li> <li>10. Aanderson, G. (1996), 'Nonparametric Tests of Stochastic Dominance in Income Distributions', <i>Econometrica</i>, 64(5): 1183-1193.</li> <li>11. Aanderson, 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", <i>Journal of Economic Inequality</i>, 6(1): 73-87.</li> <li>12. Davidson, R. and J. Duclos, (2000), "Statistical Inference for Stochastic Dominance and for the Measurement of Poverty and Inequality", <i>Econometrica</i>, 68(6): 1435-65.</li> <li>13. Duclos, J-Y., Sahn, D and S. Younger (2006), "Robust Multidimensional Poverty Comparisons with Discrete Indicators of Well-being", <i>CIRPEE Working Paper</i>, 06-28.</li> </ol>



**D9-S2** (Tuesday 09 August, 10:45-12:30)

**Topic:** Working Groups: Sensitivity, Robustness Analysis and Standard Errors

**Instructor:** OPHI Team

**D9-S3** (Tuesday 09 August, 13:30-15:15)

**Topic:** Changes over Time

**Instructor:** Ana Vaz

**Contents:**

- Analysis of changes in multidimensional poverty
- Empirical examples
- Time decompositions for panel datasets
- Remarks on decomposition of changes using cross-sectional data

**Reading:**

1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chapter 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 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.

**D9-S4** (Tuesday 09 August, 15:45-17:30)

**Topic:** Interpreting the MPI Results

**Instructor:** Adriana Conconi

**Contents:**

- Analysis and Interpretation of aggregated results (MO, 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 headcount 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.
3. Ravallion, Martin. "On Multidimensional Indices of Poverty." *The Journal of Economic Inequality* 9.2 (2011): 235-248.

## • Wednesday 10 August

<b>D10-S1</b> (Wednesday 10 August, 08:30-10:15)
<p><b>Topic:</b> Regression Analysis  <b>Instructor:</b> Bilal Malaeb and Bouba Housseini</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Introduction to Generalised Linear Models (GLMs)</li> <li>• Regression models for indicators of deprivation: Poisson models for count data</li> <li>• Regression models for subnational MPI: Linear regression</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Alkire S., J. E. Foster, S. Seth, S. Santos, J. M. Roche, P. Ballon, (2015), Multidimensional Poverty Measurement and Analysis, Oxford University Press (Chap. 10).</li> </ol> <p><b>Further reading:</b></p> <ol style="list-style-type: none"> <li>1. Ballon, P. (2011). A Structural Model for Female Empowerment. PhD dissertation. Mimeo, University of Geneva, Switzerland, 2011.</li> <li>2. Bollen, K. A. (1989). Structural Equations with Latent Variables. Wiley Series in Probability and Mathematical Statistics. New York</li> <li>3. Cameron A.C. and P.K. Trivedi (2005). Microeconometrics: Methods and Applications. Cambridge University Press, Cambridge.</li> <li>4. Krishnakumar, J. &amp; P. Ballon (2008). "Estimating Basic Capabilities: A Structural Equation Model Applied to Bolivia". World Development Vol 36 (6) pages 992-110.</li> <li>5. Kuklys, W. (2005) Amartya Sen's Capability Approach: Theoretical Insights and Empirical Applications, Berlin, Springer.</li> </ol>
<b>D10-S2</b> (Wednesday 10 August, 10:45-12:30)
<p><b>Topic:</b> Accurate Targeting: Poverty Alleviation Strategy and Policy in China  <b>Instructor:</b> Xiaolin Wang</p>
<ul style="list-style-type: none"> <li>• Accurate targeting</li> <li>• Indicators, cutoffs, and measurement design used for China</li> <li>• Policy activities, successes and challenges</li> </ul>
<b>D10-S3</b> (Wednesday 10 August, 13:30-15:15)
<p><b>Topic:</b> Impact Evaluation  <b>Instructor:</b> Ana Vaz</p>
<p><b>Contents:</b></p> <ul style="list-style-type: none"> <li>• Impact evaluation and multidimensional poverty</li> </ul>
<p><b>Reading:</b></p> <ol style="list-style-type: none"> <li>1. Robano, V. &amp; 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: <a href="http://www.ophi.org.uk/multidimensional-targeting-and-evaluation-a-general-framework-with-an-application-to-a-poverty-program-in-bangladesh/">http://www.ophi.org.uk/multidimensional-targeting-and-evaluation-a-general-framework-with-an-application-to-a-poverty-program-in-bangladesh/</a></li> </ol>

**Further reading:**

1. Loschmann C., C. R. Parsons and M. Siegel (2015) "Does Shelter Assistance Reduce Poverty in Afghanistan?" *World Development*, 74, 305-322.

**D10-S4** (Wednesday 10 August, 15:45-17:30)

**Topic:** There are a number of possible extension topics such as missing dimensions, women empowerment, etc that we could cover in this session. We – the OPHI team – are happy to take your suggestions into account.

### • Thursday 11 August

<b>D11-S1</b> (Thursday 11 August, 08:30-10:15)
<b>Topic:</b> Working Groups: Preparing Final Presentation <b>Instructor:</b> OPHI Team
<b>D11-S2</b> (Thursday 11 August, 10:45-12:30)
<b>Topic:</b> Working Groups: Preparing Final Presentation <b>Instructor:</b> OPHI Team
<b>D11-S3</b> (Thursday 11 August, 13:30-15:15)
<b>Topic:</b> Communication and Policy <b>Instructor:</b> Sabina Alkire
<b>D11-S4</b> (Thursday 11 August, 15:45-17:30)
<b>Topic:</b> Review of the Course & Closure <b>Instructor:</b> Sabina Alkire
<b>Contents:</b> <ul style="list-style-type: none"> <li>• Recapping key lessons and topics covered during the course</li> <li>• General advice and next steps</li> </ul>

### • Friday 12 August

<b>D12-S1 to D12-S4:</b> (Friday 12 August, 08:30-10:15, 10:45-12:30, 13:30-15:15, 15:45-17:30)
<b>Topic:</b> Working Group: Presentation <b>Instructor:</b> OPHI Team

### • Saturday 13 August (NOTICE: Session begins at 9am)

<b>D13-S1</b> (Saturday 13 August, 09:00-10:30)
<b>Topic:</b> Non-Compulsory Exam <b>Instructor:</b> Monica Pinilla, Bilal Maleab and OPHI Team
<b>Contents:</b> <ul style="list-style-type: none"> <li>• The whole of the course</li> </ul>