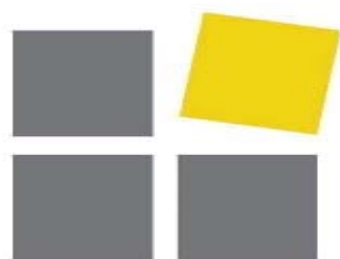# How resilient are escapes out of poverty in Africa?

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Advisory Network

How resilient are escapes out of poverty?

Challenge Paper 2

Lucy Scott, Katharina Hanifnia, Andrew Shepherd, Milu Muyanga and Elsa Valli
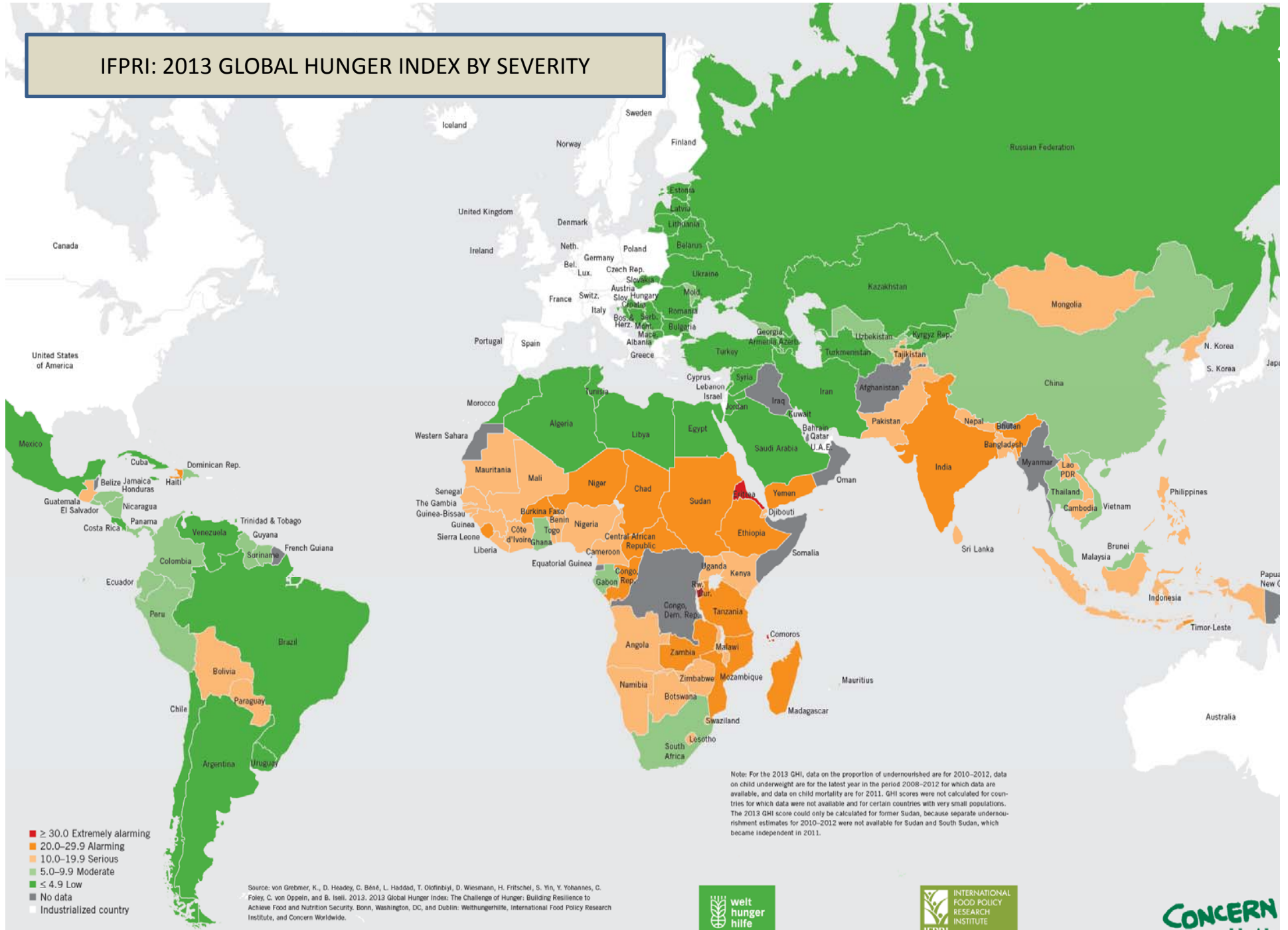Chronic Poverty Advisory Network, Overseas Development Institute, London

March 2014

Poverty in Africa

- Reducing poverty and hunger have been a critical policy issue in all of the African countries for the past half-century

- Globally, there have been great strides in the reduction of extreme poverty in recent years.

  - The poverty headcount ratio halved between 1990 and 2010 from 42% to 21%

  - A decline in the absolute number of people living in extreme poverty, as measured by living below $1.25 a day purchasing power parity, from 1.9 to 1.2 billion.

- Success in the reduction of extreme poverty has been concentrated in China, East and Southeast Asia and to a certain extent South Asia.

IFPRI: 2013 GLOBAL HUNGER INDEX BY SEVERITY

Legend:
- ≥ 30.0 Extremely alarming
- 20.0–29.9 Alarming
- 10.0–19.9 Serious
- 5.0–9.9 Moderate
- ≤ 4.9 Low
- No data
- Industrialized country

Note: For the 2013 GHI, data on the proportion of undernourished are for 2010–2012, data on child underweight are for the latest year in the period 2008–2012 for which data are available, and data on child mortality are for 2011. GHI scores were not calculated for countries for which data were not available and for certain countries with very small populations. The 2013 GHI score could only be calculated for former Sudan, because separate undernourishment estimates for 2010–2012 were not available for Sudan and South Sudan, which became independent in 2011.

Source: von Grebmer, K., D. Headey, C. Béné, L. Haddad, T. Olofinbiyi, D. Wiesmann, H. Fritschel, S. Yin, Y. Yohannes, C. Foley, C. von Oppeln, and B. Iseli. 2013. 2013 Global Hunger Index: The Challenge of Hunger: Building Resilience to Achieve Food and Nutrition Security. Bonn, Washington, DC, and Dublin: Welthungerhilfe, International Food Policy Research Institute, and Concern Worldwide.

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CONCERN worldwide

Poverty dynamics

- Most of the earlier studies have been 'static' in nature
    - Analyzing poverty at point in time

- There is a lot of dynamics in household welfare

    - Households have successfully climbed out of poverty
    - Other that were once well above the poverty line have now descended into poverty

- If factors causing these dynamics were known, it might be possible to replicate these factors more broadly through poverty reduction strategies

How resilient are the escapes?

- We know little about what happens to individuals and households after they escape extreme poverty.

    - Do they continue on an upwards trajectory, improving their situation?

    - Or, do their living conditions stagnate at a level just above the extreme poverty line?

    - Alternatively, after a period out of poverty do these individuals and households return to living in their former situation?

How resilient are the escapes?
Policy implications

- These questions about poverty dynamics have policy implications both for targeting and more broadly for poverty reduction strategies.

  – Effective poverty reduction strategies involve both promoting the poorest people out of extreme poverty,

  – As well as preventing people who are currently not living in extreme poverty from falling into it.

Study objectives

- The purpose of this paper is to investigate the factors which enable households not just to escape poverty; but to escape poverty, remain out of it and ideally to continue on a trajectory of improvement.

- Panel data with three waves is increasingly available, providing an opportunity to investigate a household wealth trajectory after escaping poverty, which can help to inform the sustainability of poverty escapes.

Data sources

- Ethiopian Rural Household Survey (ERHS)

- Uganda National Panel Survey (UNPS)

- Kagera Health and Development Survey (KHDS)

- Kenya: Tegemeo Agricultural Panel data

- KwaZulu-Natal Income Dynamics Study (KIDS; South Africa)

- South Africa's National Income Dynamics Study (NIDS)

- Viet Nam Household Living Standards Survey (VHLSS)

- Indonesia Family Life Survey (IFLS)

- Philippines Family Income and Expenditure Survey (FIES)

Measure of welfare and poverty lines

- Welfare measure

  – Per capita household expenditure data and using national poverty lines

  – Household income per capita

- National poverty lines

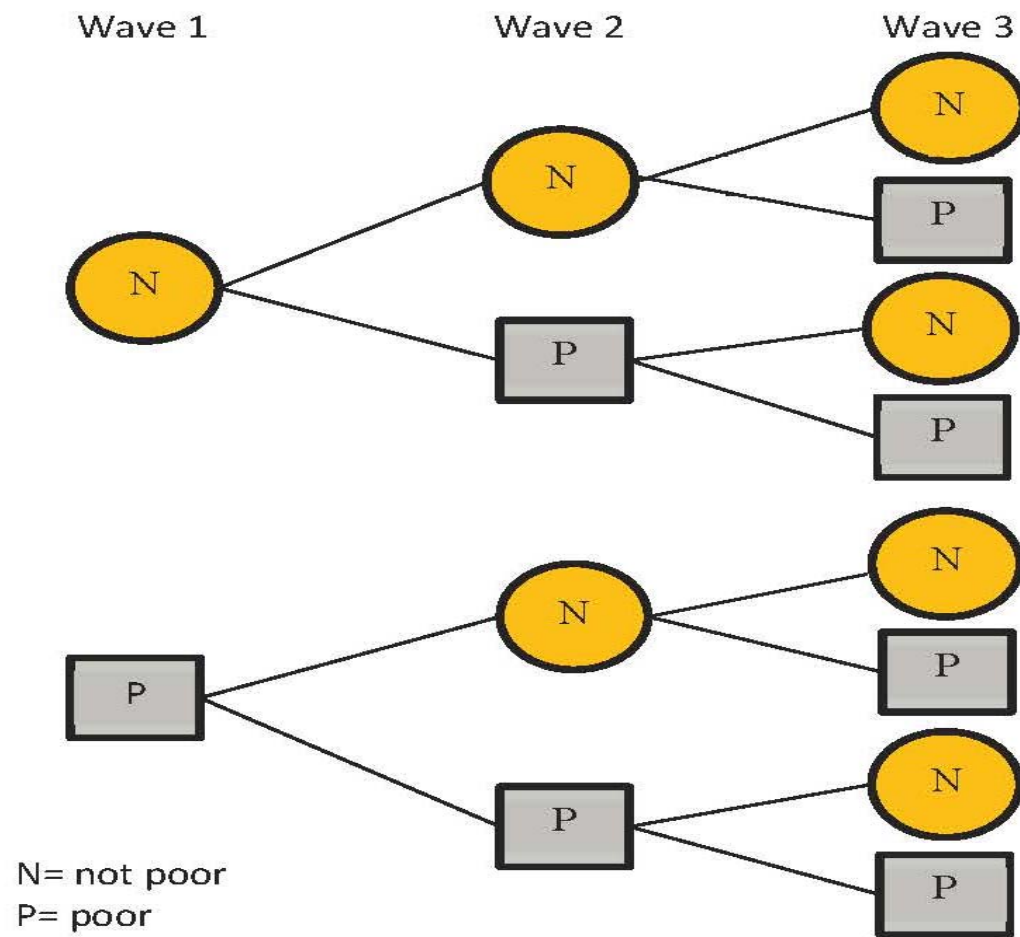# Figure 1: Possible poverty trajectories across three waves of panel data

Wave 1   Wave 2   Wave 3

N = not poor
P = poor

Table 1: Household poverty trajectories from selected recent three-wave panels

	Ethiopian Rural Household Survey (ERHS)	Uganda National Panel Survey (UNPS)	Kagera Health and Development Survey (KHDS)	Tegemeo Agricultural Survey*	KwaZulu-Natal Income Dynamics Study (KIDS; South Africa)	South Africa's National Income Dynamics Study (NIDS)	Viet Nam Household Living Standards Survey (VHLSS)	Indonesia Family Life Survey (IFLS)	Philippines Family Income and Expenditure Survey (FIES)
Years of survey waves	1999 2004 2009	2005/06 2009/10 2010/11	1991 2004 2010	2004 2007 2010	1993 1998 2004	2008 2010 2012	2002 2004 2006	1993/94 1997/98 2000	2003 2006 2009
Years spanned by survey	10	6	19	6	11	4	4	7	6
%									
NNN	27.1	46.1	26.0	41.8	27.9	26.8	65.2	65.7	62.0
NNP	18.4	11.4	1.8	8.3	12.5	3.0	2.2	5.2	5.6
NPN	7.5	5.0	6.3	7.0	4.3	6.5	2.8	4.0	4.6
NPP	10.0	8.4	7.9	7.0	6.9	3.4	1.4	2.0	4.6
PNN	6.7	7.6	9.7	7.0	10.3	13.4	11.2	10.9	5.4
PNP	11.1	7.5	1.7	5.4	6.6	5.7	2.7	3.6	2.1
PPN	5.0	2.5	26.5	6.9	5.0	18.0	5.4	4.3	4.4
PPP	14.3	11.7	20.2	16.7	26.6	23.2	9.2	4.2	11.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	943	1416	654	1309	865	6508	1844	6403	6519

Based on per capita household expenditure data and using national poverty lines
*Uses income data

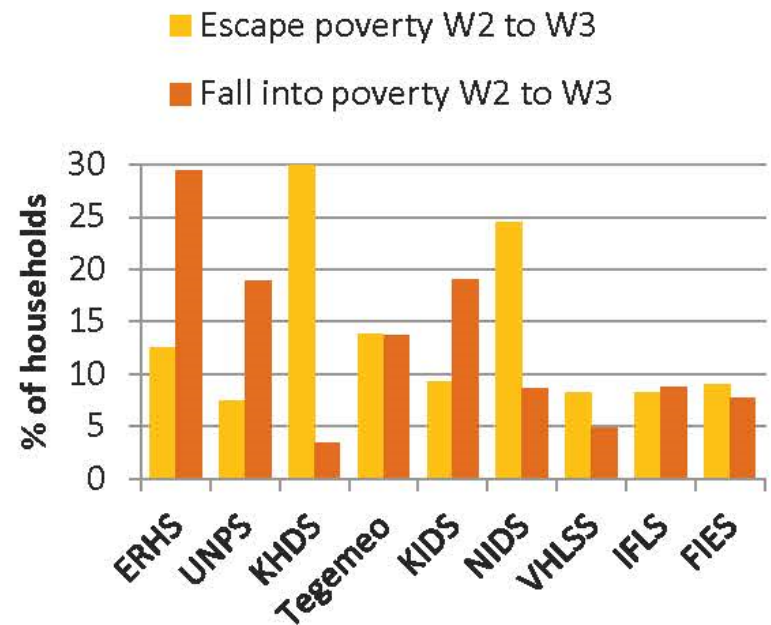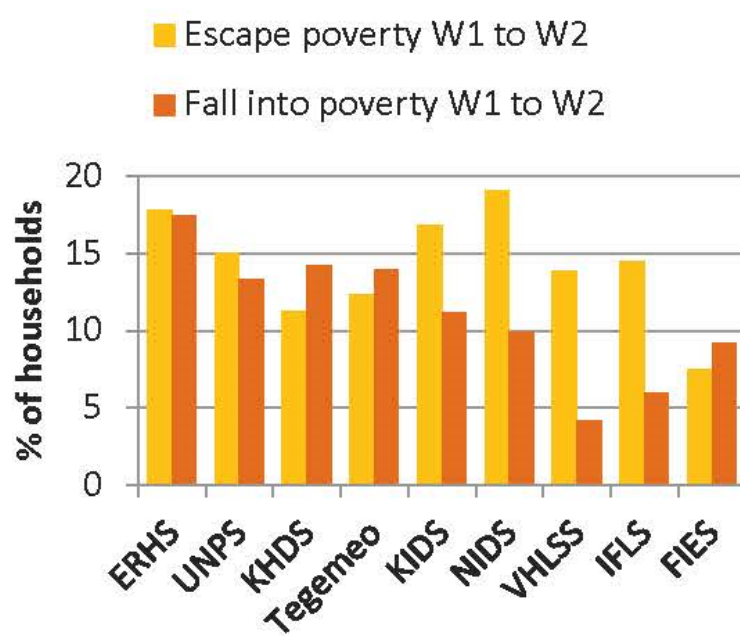# Figure 2: Poverty Escapes and Descents across three Survey Waves

Figure 3: The subsequent fortune of households that escaped poverty between wave 1 and wave 2
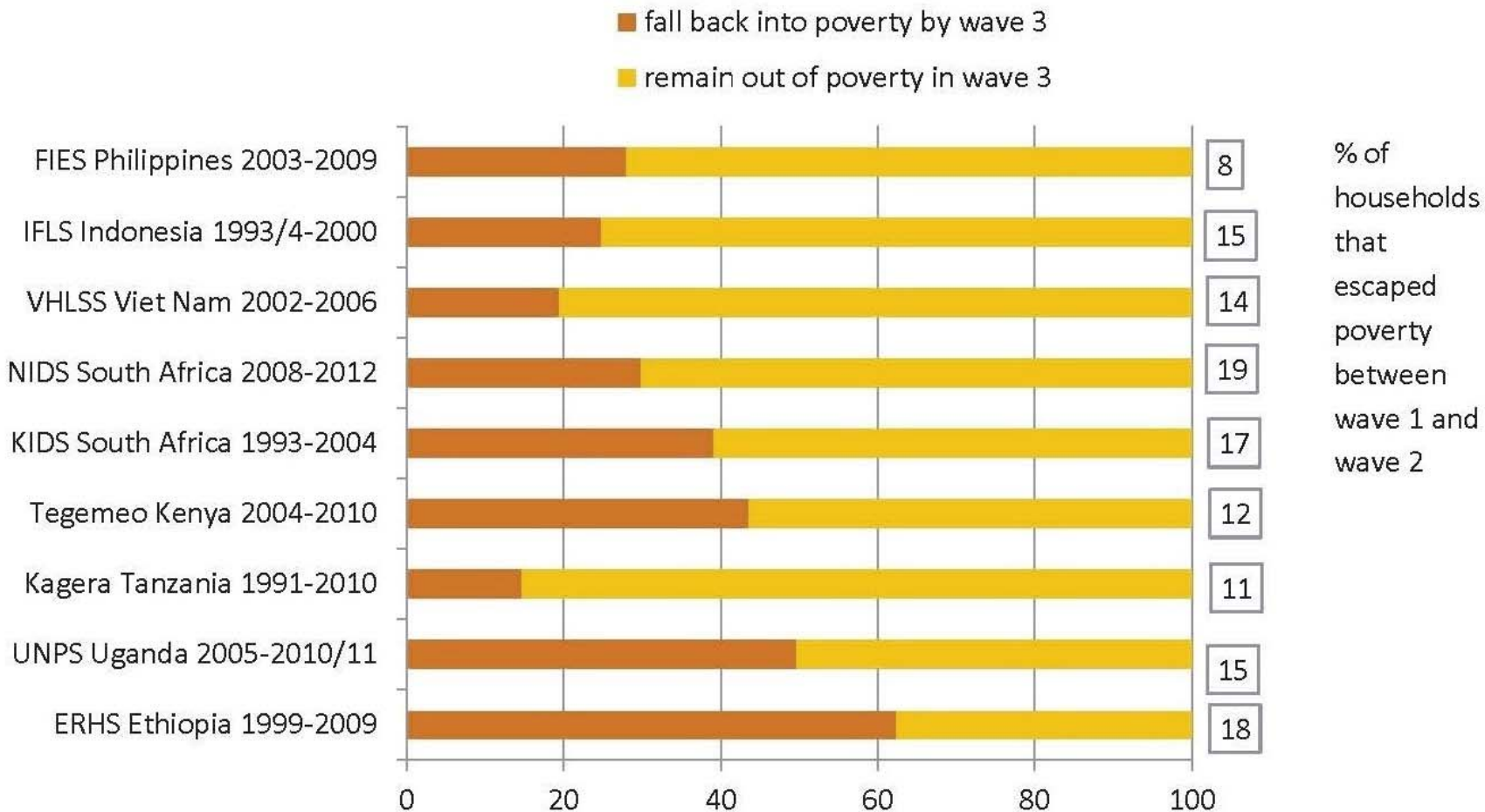

Legend:
- fall back into poverty by wave 3
- remain out of poverty in wave 3

Study	% of households that escaped poverty between wave 1 and wave 2
FIES Philippines 2003-2009	8
IFLS Indonesia 1993/4-2000	15
VHLSS Viet Nam 2002-2006	14
NIDS South Africa 2008-2012	19
KIDS South Africa 1993-2004	17
Tegemeo Kenya 2004-2010	12
Kagera Tanzania 1991-2010	11
UNPS Uganda 2005-2010/11	15
ERHS Ethiopia 1999-2009	18

Table 2: Factors significantly associated with escaping poverty or remaining out of poverty at the third transition- 1

- Demographic characteristics

  - Share elderly (+)

  - Share of children (-)(+)

  - Education attainment (-)

  - Household head male (-)

  - Age head (+) (-)

  - Household size (-)

  - Remittances (-)

- Assets

  - Value of cattle (+)(-)

  - Access to farming land (-)

  - Landholding (-)

  - Value agriculture equip (-)

Table 2: Factors significantly associated with escaping poverty or remaining out of poverty at the third transition- II

- Shocks

  – Drought/ irregular rain (+)

  – Injury/ illness (+)

  – Deaths (+)

- Community level

  – Rainfall received (-)

  – Electricity (-)

  – Piped water (-)

  – Motorable road (-)

  – Distance to town (-)

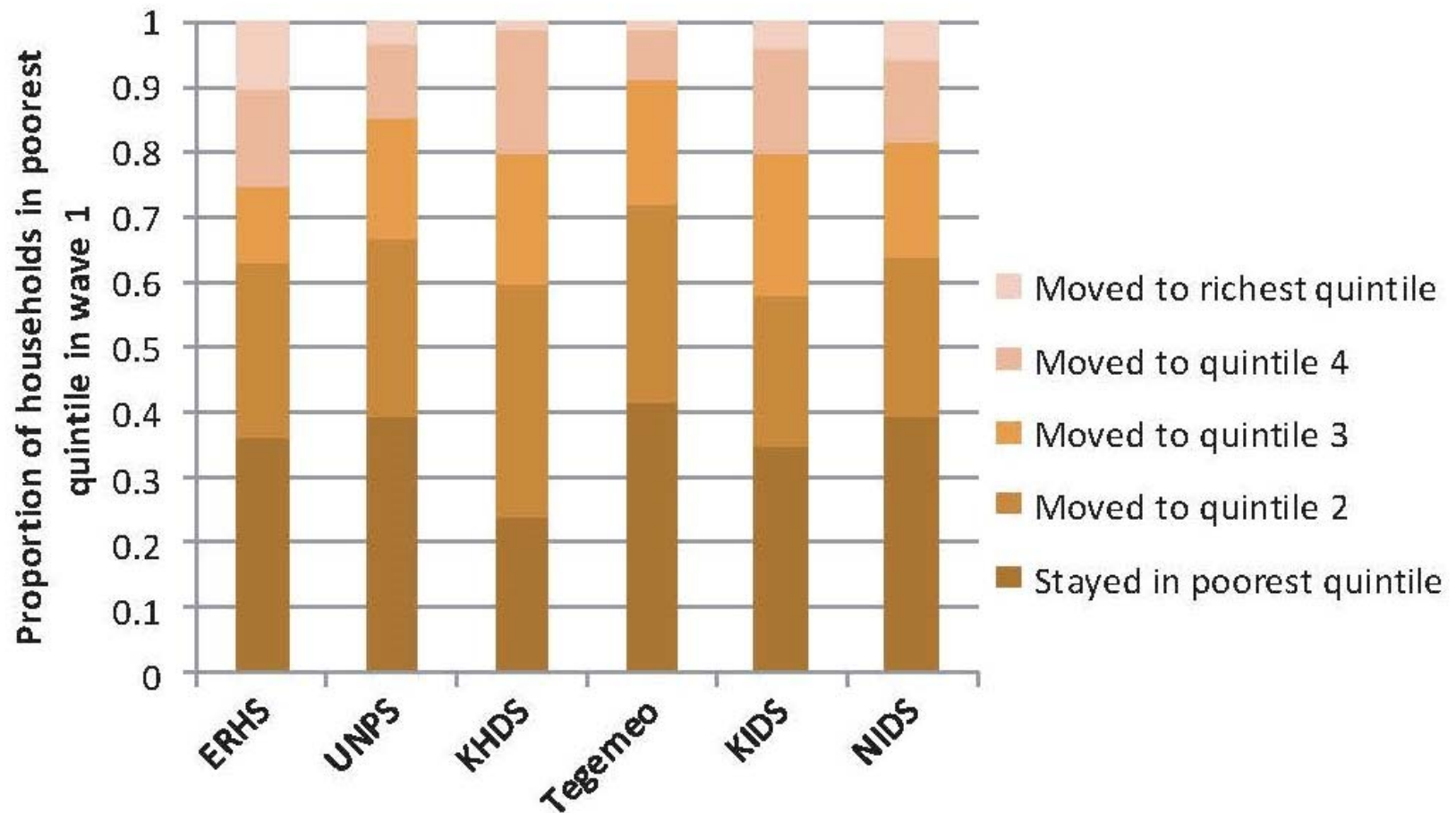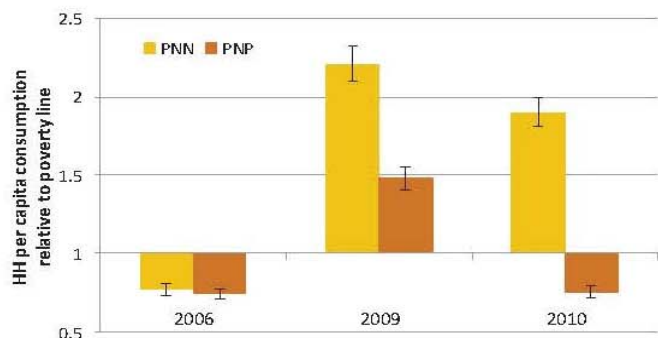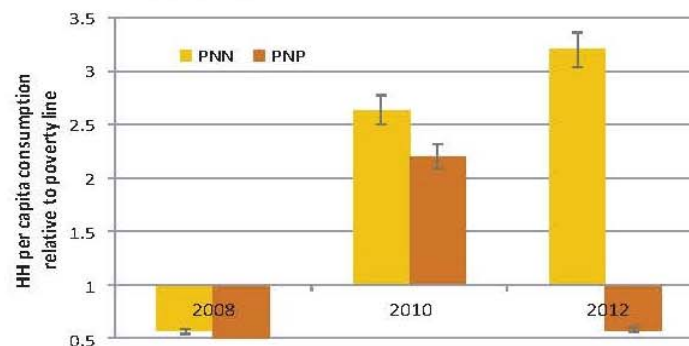# Figure 6: Movement across the consumption quintiles between wave 1 and wave 3 by the poorest

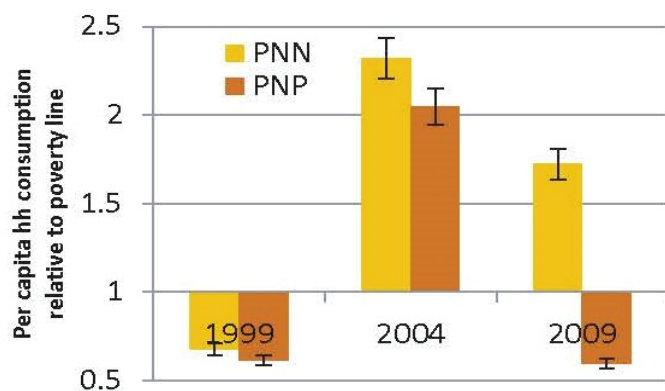# Figure 7: Household per capita consumption relative to the poverty line

Uganda
Source: Uganda National Panel Survey
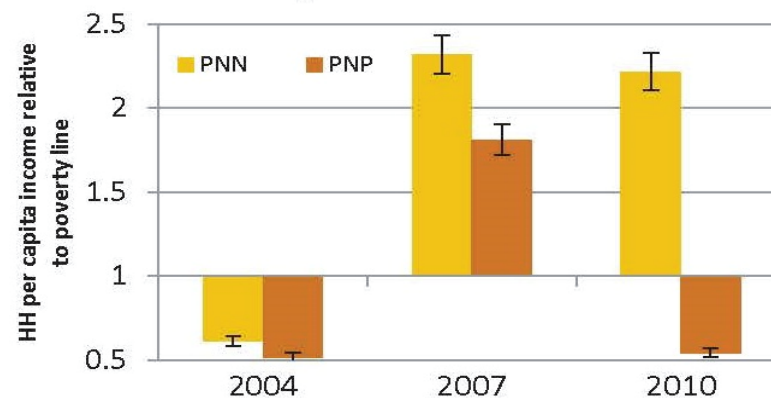
South Africa
Source: National Income Dynamics Study
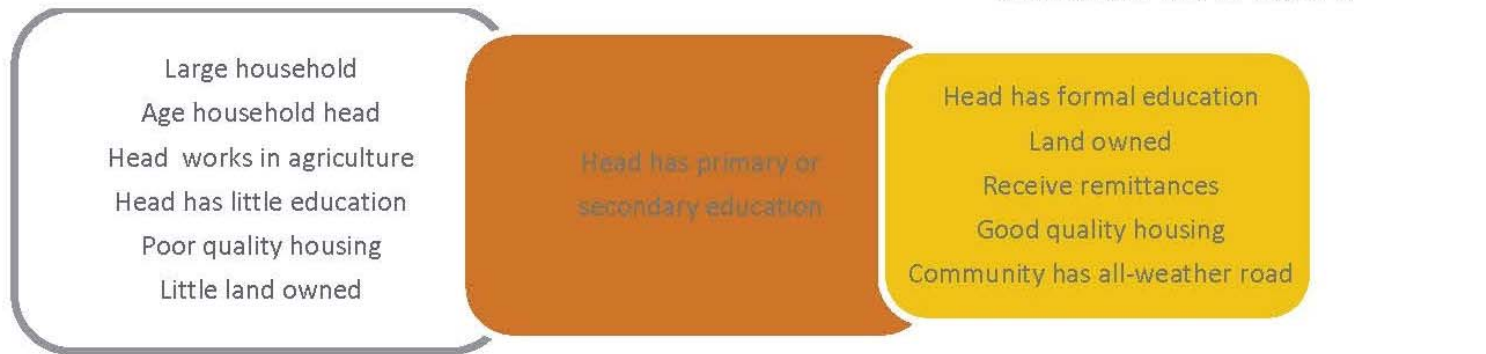
Rural Ethiopia
Source: Ethiopian Rural Household Survey

Rural Kenya
Source: Tegemeo Agricultural Survey

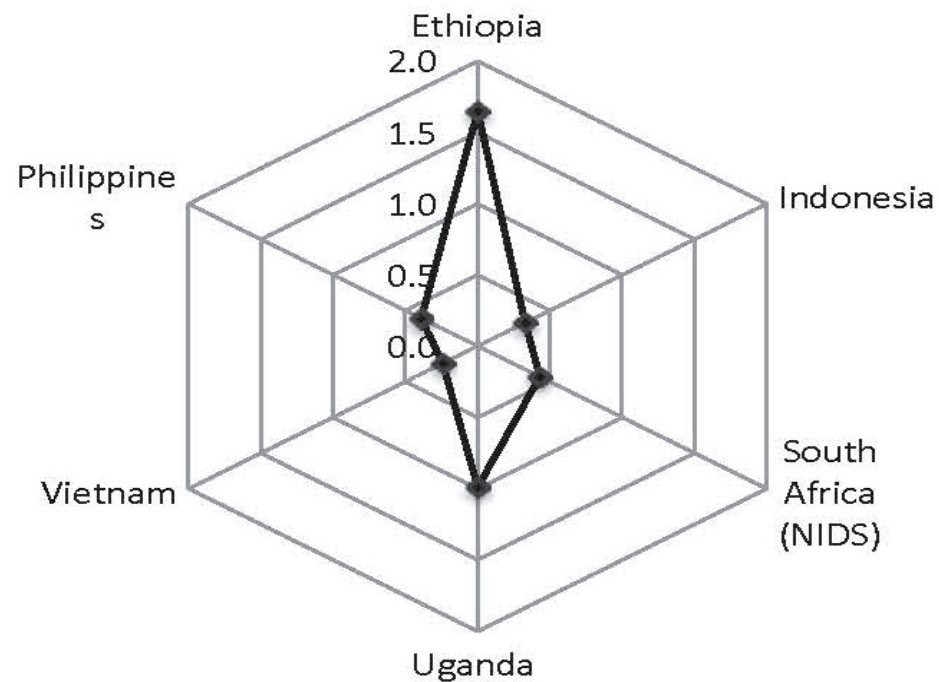# Figure 8: The factors associated with living in poverty, escaping poverty and sustained poverty escape (PNN)

South Africa (KIDS and NIDS)

Large household
Female household head
Head works in agriculture
Head has little education
Poor quality housing
No electricity

Small household
Older househol dhead
Head has more than 3 years of primary education
WATSAN
Community has all-weather road

Head has more than 3 years of primary education
Cultivable land

Live in poverty in wave 1

Escape poverty in wave 2

Escape poverty in wave 2 and remain out in wave 3

Large household
Age household head
Head works in agriculture
Head has little education
Poor quality housing
Little land owned

Head has primary or secondary education

Head has formal education
Land owned
Receive remittances
Good quality housing
Community has all-weather road

Rural Ethiopia and Uganda (ERHS and UNPS)

Sustained poverty escapes and the national context
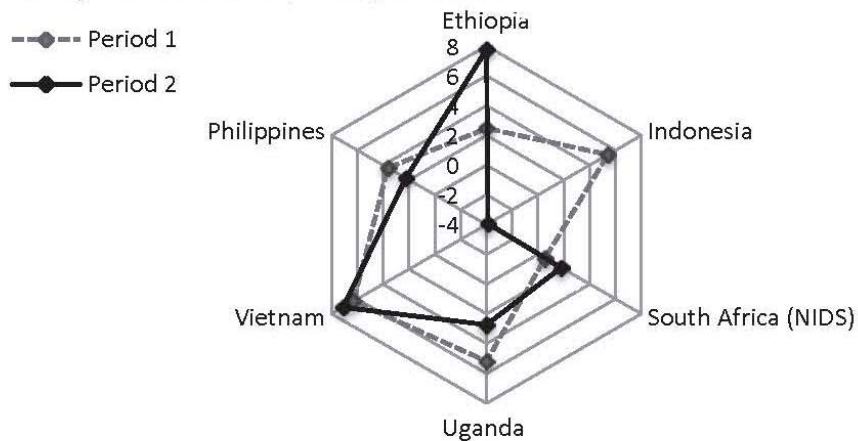
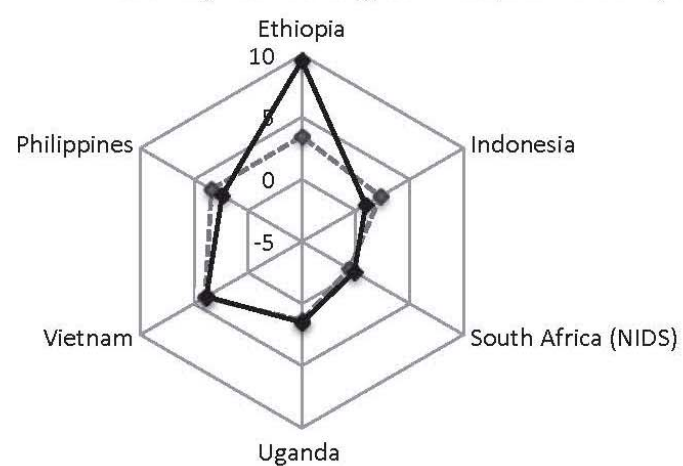## Figure 4: PNP (poor-non poor-poor): PNN (poor-non poor-non poor) ratio

PNN Normalised to 1
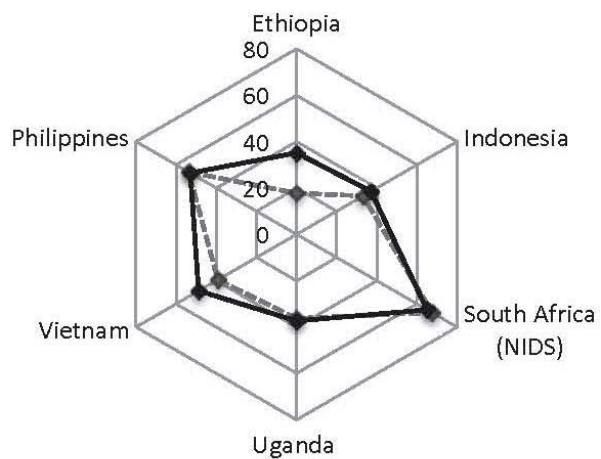
Sustained poverty escapes and the national context [I]

Average Annual GDP per Capita Growth
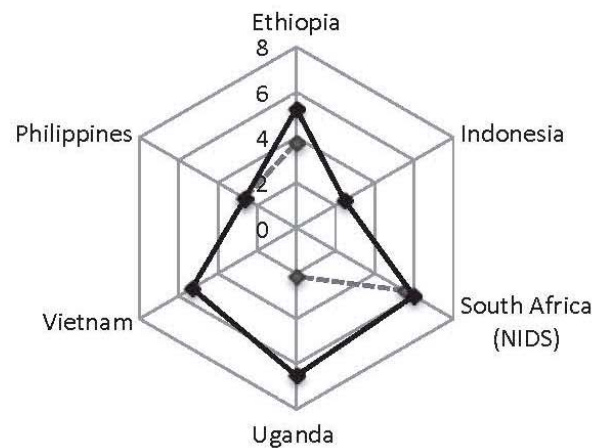
- - ◆ - - Period 1
—— ◆ —— Period 2

Average Annual Agriculture (value added) Growth

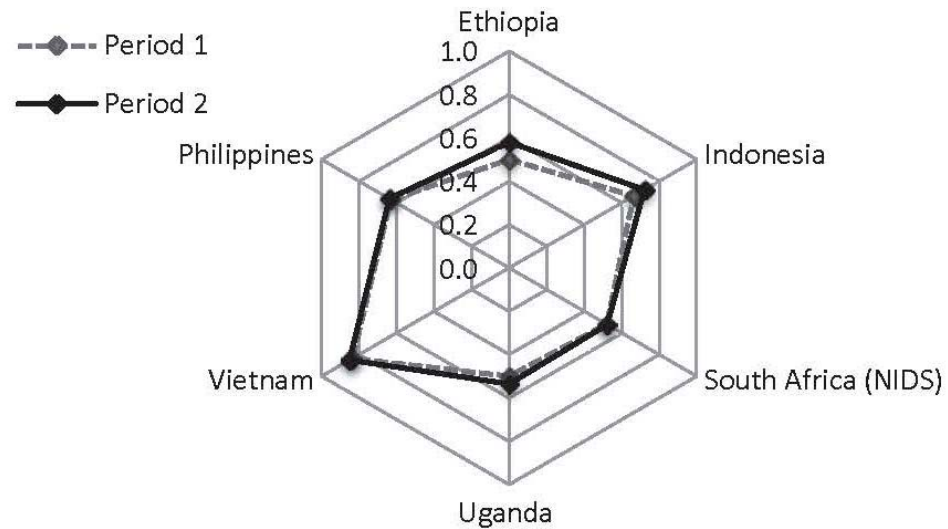Average Government Effectiveness Percentile Rank

Average Public Expenditure on Education as % of GDP

Sustained poverty escapes and the national context [II]

Average Human Development Index (HDI) Value

Policy Implications: Investigating further the factors associated with resilient poverty escape

- Land access
  - Ownership of cultivable land, or the right to use it, is significantly associated sustained poverty escapes
  - Ability to cultivate land effectively (labor and farm inputs)
- Education
  - Education is important for poverty escapes because it is associated with working outside agriculture and also obtaining skilled work
  - Improving quality of education
- Regional development
  - Being in an economically dynamic region provides opportunities to escapees which are not available in less dynamic regions
  - Importance of migration

Conclusions: Sustaining poverty escapes

- It is far from inevitable that a household, after it has escaped poverty, will continue either to live out of poverty, or on a trajectory of upwards improvement

- Analysis of three-wave panel data shows how, across a range of contexts, at least 15% of households that escaped poverty between wave 1 and wave 2 had returned to living in poverty in wave 3

- Even if a household remains living out of poverty there is again no guarantee that their situation will continue to improve

- A combination of policies is likely to be needed to achieve *sustained* escapes from poverty

- Events that contribute to poverty escape and sustained escape are context specific - meaning a range of different policy responses are needed