# Well-being and Income Poverty

# Impacts of an unconditional cash transfer program using a subjective approach

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### Social Cash Transfers

- Cash transfers raise and smooth incomes with the objective of reducing poverty and vulnerability
- In sub-Saharan Africa, programs distribute unconditional payments
  - o Consistent, monthly or bi-monthly
  - o Typically around 20% of pre-program household consumption

#### Positive impacts include:

- Consumption (Kenya CT-OVC team, 2012; Devereux et al., 2007)
- Schooling (Baird et al., 2011; Akresh et al., 2013)
- Productivity (Blattman, 2013)

### Introduction

- Income is related to happiness (Stevenson & Wolfers, 2008; Easterlin et al., 2010), but there is not much evidence about whether social welfare programs increase happiness.
- Cash transfer programs in SSA tend to give unconditional cash so we need more knowledge about the mechanisms involved in behavior change.
- Positive life outlooks can lead to enhanced decision-making like seeking preventive care investing in human capital (Isen 2008; Lyubomirsky, King, & Diener, 2005)—giving the poor greater ability to rise out of poverty.

# Cash transfers and Subjective Well-being

#### Previous evidence:

- Rojas (2008)—Dissonance between subjective and objective well-being in Mexico from Opportunidades
- Hausofer et al. (2015)—GiveDirectly in Kenya has small, positive impact on SWB for recipients and a negative effect on surrounding community not receiving transfers but both are fleeting
- However, literature has not examined the impacts of a large-scale, unconditional program

### Malawi SCT and Subjective well-being

#### Contribution:

- We provide results from an experimental study of Malawi's national unconditional social cash transfer program.
- Results can help complement objective results and *help inform policy*

#### Findings:

- Strong SWB impacts of cash transfer within a year.
- Caregiver perceptions of quality of life and their future well-being increase

### Malawi's Social Cash Transfer Program

- Unconditional
- Recipients are:
  - **Ultra-poor**—unable to take care of members' most basic needs
  - Labor constrained households—have a large dependency ratio
- SCTP eligible individuals live on \$0.30 on average per day before the program
- Average transfer is around \$8 per month
- This comprises around 20 percent of pre-program consumption

# Experimental Study Design

Sep 2012

June 2013

Sep 2013

TA (4) random selection

Eligibility lists for all VCs

VCs (29) randomly selected Baseline Survey (3,531 hhlds) Random assignment to treatment-VC level Followup Survey (3,369 hhlds)

Sep 2012-June 2013

June-Sep 2013 Nov 2014-Feb 2015

### Data and Measures

#### Sample:

Caregiver responses on expectations and preferences module from two waves 2013 and 2015 (n=3,365 households)

#### Measures:

- Quality of life
- Relative welfare
- Future well-being

### Quality of Life

In most ways my life is close to ideal.

The conditions in my life are excellent.

I am satisfied with my life.

So far I have gotten the important things I want in life.

If I could live my life over, I would change almost nothing.

I feel positive about my future.

I generally feel happy.

I am satisfied with my health.

### Future Well-being

Do you think your life will be better in [...] from now?

1 Year

2 Years

3 Years

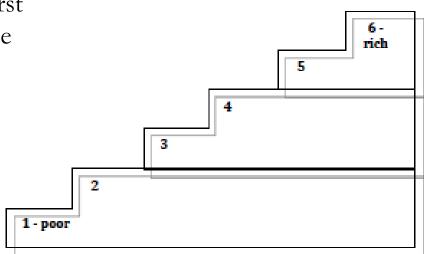
### Relative Well-being

'Imagine six steps. On the bottom, the first step, stand the poorest people, and on the highest step, the sixth, stand the rich.'

On which step are you today?

On which step are most of your neighbors today?

On which step are most of your friends today?



# Baseline Summary Statistics

	<u>Treatment</u>	<u>Control</u>
QOL scale score (8-40)	17.5 (6.6)	18.2 (6.9)
Future well-being (%)		
Better in a year	53	53
Better in 2 years	45	47
Better in 3 years	42	46
Relative well-being (%)		
Same or Better off than Neighbors	48	52
Same or Better off than Friends	43	49
Observations	1,678	1,853

# Empirical Approach

Differences in Differences (DD)

$$Y_i = \alpha + \beta_1 (T_i * P_t) + \beta_2 T_i + \beta_3 P_t + \beta_4 X_i + e_{it}$$

Fixed Effects (FE)

$$Y_i = \alpha_i + \beta_1 (T_i * P_t) + \beta_3 P_t + \beta_4 X_i + e_{it}$$

 $Y_{it} = SWB$  outcome

 $T_i^*P_t = DD impact$ 

T<sub>i</sub>= treatment dummy

P<sub>t</sub>= time dummy

X<sub>it</sub>=set of individual and household controls

### Effect of SCTP on SWB

	Quality of Life		Life will be better in 2 years		Same or better off than neighbors	
	(DD)	(FE)	(DD)	(FE)	(DD)	(FE)
Program Impact	3.42 (0.94)***	3.45 (0.92)***	0.22 (0.07)***	0.21 (0.07)***	0.12 (0.08)	0.13 (0.08)
Constant	21.95 (1.28)***	32.17 (5.37)***	0.58 (0.15)***	0.67 (0.46)	0.61 (0.15)***	0.73 (0.34)***
N	5,838	5,838	5,374	5,374	5,826	5,826

Controls: Individual characteristics: female, age, age squared, ever attended school, chronic illness, married; Household baseline characteristics: household size, age groups, log per capita expenditure

<sup>\*</sup> pvalue<.10 \*\* pvalue<.05 \*\*\*pvalue<.01

# Sensitivity Analysis: Negative Shocks on QOL Scale

		shocks in last onths		sehold in last onths		l have future ocks
	(1)	(2)	(1)	(2)	(1)	(2)
Effect of shock	-0.86 (0.18)***	-0.86 (0.19)***	-1.41** (0.67)	-1.11 (0.73)	-2.33 (0.47)***	-2.13 (0.41)***
Program Impact		3.46 (0.82)***		3.43 (0.93)***		3.20 (0.92)***
Time	2.55 (0.60)***	0.83 (0.58)	3.18 (0.61)***	1.47 (0.64)**	2.86 (0.58)***	1.30 (0.64)*
Constant	34.95 (5.95)***	34.80 (5.25)***	32.57 (6.04)***	32.37 (5.36)***	32.15 (5.80)***	32.03 (5.21)***
N	5,838	5,838	5,838	5,838	5,838	5,838

<sup>\*</sup> pvalue<.10 \*\* pvalue<.05 \*\*\*pvalue<.01

Controls: Individual characteristics: female, age, age squared, ever attended school, chronic illness, married; Household baseline characteristics: household size, age groups, log per capita expenditure

# SCTP is helping households meet their needs Quantitative and Qualitative evidence

#### Follow-up

#### • Basic needs are met:

- More food-secure
- Can afford soap for washing;
- Children wearing better clothes

#### • Livelihood improves:

- Start small enterprises
- Growing crops using fertilizer
- Can buy livestock like chickens

#### Schooling for child:

 Can pay fees, and purchase uniform and notebooks "As I have said am a happy person now, I no longer have stress and am not worried because I know that when the time comes to receive the money, I will be able to buy things the household lacks now."



### Conclusion and Policy Implications

- Strong SWB impacts of cash transfer within a year
- Metrics appear to measure what we expect
- Including self-reports in evaluation of policy can give us a broader understanding of individual well-being and complements objective measures

#### Further Research Goals:

- Linking SWB to behaviors that underlie poverty
- Testing whether people adapt to increased income—does happiness returns to baseline levels?

# Acknowledgments





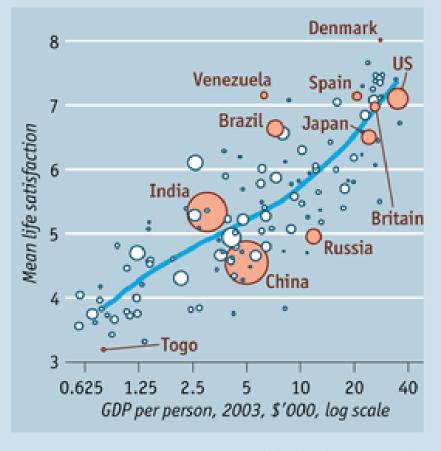




#### Life satisfaction and GDP per person at PPP\*

Circle size is proportional to population size





Sources: Penn World Table 6.2; Gallup World Poll, Angus Deaton

\*Purchasing-power parity

Source: The Economist

### Transfer size

Transfer Amounts by Household Size and Number of Children in School				
Household Size	Monthly Cash Benefit	Residents age ≤ 21 in Primary School	Residents age ≤30 in Secondary School	
1 Member	Mk 1,000 ~\$3	3		
2 Members	Mk 1,500	No. of Children x	No. of Children x MWK 600	
3 Members	Mk 1,950	MWK 300		
≥ 4 Members	Mk 2,400 <b>~\$</b>			

Source: Social Cash Transfer Inception Report, Ayala Consulting. July 2012.

# Randomization

**Table 1. Key Indicators of Interest at Baseline by Treatment Status** 

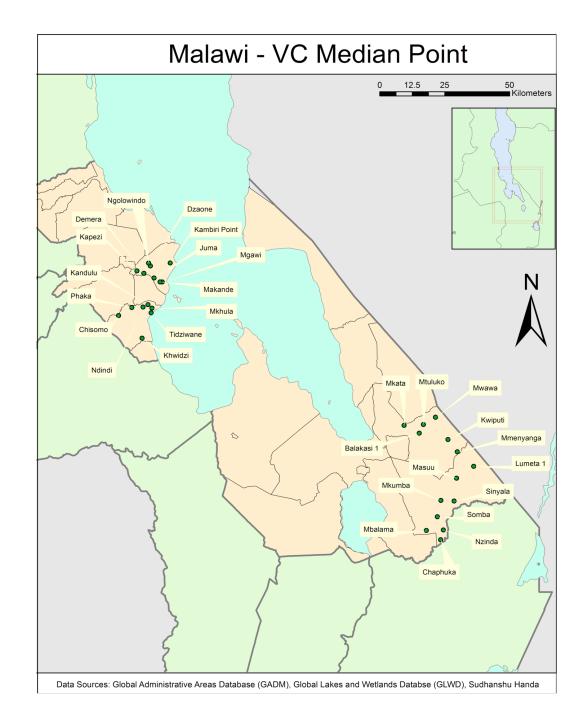
	Full Sample (%)	Treatment (%)	Control (%)
Poverty and Food Security			
Per Capita Consumption (annual MWK)	41,522	42,652	40,503
Poverty rate, individuals	85.2	83.8	86.5
Eat only one meal per day	19.3	21.3	19.4
<b>Adolescent Development</b>			
Secondary school enrollment (14-17)	4.2	4.2	4.3
Has blanket, shoes & change of clothes (age 5-18)	12.6	12.8	12.4
Ever had sex (age 13-19)	32.4	34.3	30.5
Depressive symptoms (age 13-19)	46.8	43.7	50.0
Young Child Health, Nutrition & Development			
Stunted (age 0-5)	47.9	49.8	45.5
Wasted (age 0-5)	3.9	4.3	3.5
Underweight (age 0-5)	17.6	18.0	17.3
Adult Health (age 50+)			
Chronic illness	54.1	56.0	52.2
Morbidity	53.2	56.0	50.2
Any disability	58.6	60.8	56.3
<b>Economic Activity &amp; Productive Assets (households)</b>			
Engaged in wage employment	5.5	4.8	6.2
Own any land	89.8	90.0	89.6
Selling any crops	22.7	21.4	24.0

### **Attrition**

#### Iousehold Response Rates by T -C and District - Midline

		Response Rate (Per Cent)	N
•	•	95.4	3,531
roup		95.8	1,678
ър		95.0	1,853
	Status		
	Treatment	96.2	800
	Control	94.9	975
	Treatment	95.4	878
	Control	95.2	878

# Impact Evaluation Study Sites



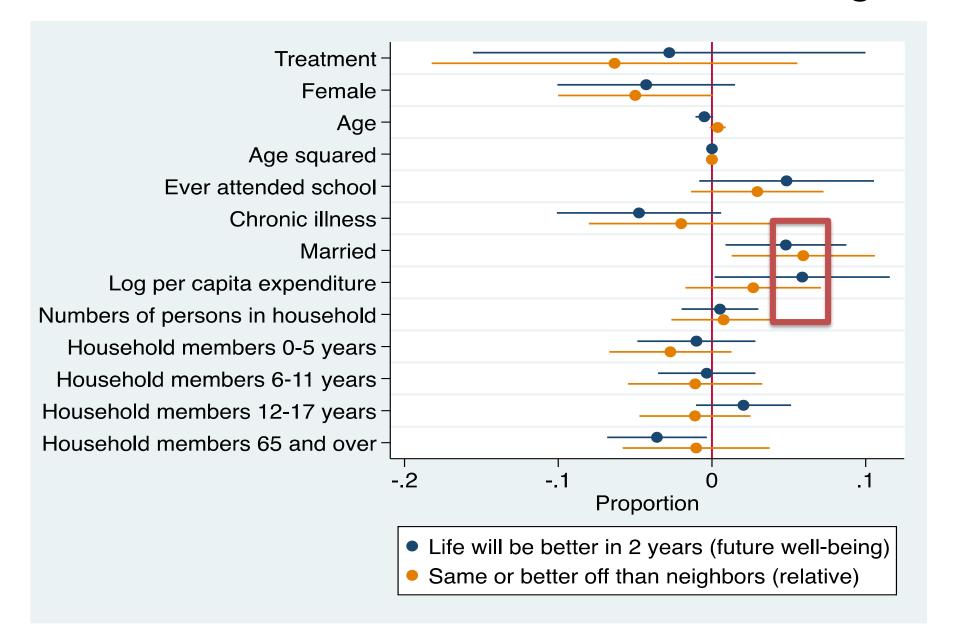
#### Baseline relationship between consumption and QOL



# Caregiver Summary Statistics

	Wave 1	Wave 2
	Mean (SD)	Mean (SD)
Female (%)	84.0	86.3
Age	57.7 (19.8)	57.6 (19.1)
Ever attended school (%)	29.1	29.0
Chronic illness (%)	43.8	44.7
Married (%)	29.5	31.2
Per capita yearly expenditure	42,606 (28,598)	34,016 (16,507)
Number of household members	4.5 (2.3)	4.5 (2.3)
Death in past 12 months (%)	3.5	3.3
Number of shocks in past 12 months	2.5 (1.3)	1.8 (1.3)
Believes will have future shock (need food or financial assistance) (%)	53.4	39.4

### Baseline determinants of well-being



### Limitations

- Reliability of SWB metrics
  - Habituation and reference points
  - Ability to measure true well-being

Adaptation to positive income shock