

# Adjustment of benefit

Size and composition of transfer in  
Kenya's CT-OVC program



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# How do Benefit Levels work?

- Maximize expected impact on program's target variables (poverty, school enrollment, nutritional status) given fiscal budget, administrative and political constraints
- Minimize the amount of money necessary for impact. Empirically roughly 5-17% of target population's pre-transfer income.

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# How do Benefit Levels work?

- Factors to keep in mind in designing a transfer scheme:
  - Opportunity cost of child labor (higher amounts for older children)
  - Work disincentives
  - Administrative costs
  - Leakage/corruption
  - Household characteristics (size, composition, poverty level) according to impact objectives
  - Regional adjustments to reflect cost-of-living differences
- What are the options:
  - Fixed amount per household
  - Direct and indirect beneficiaries in Mozambique
  - Amount per child
  - A mix of the above

# CT-OVC in a nutshell (1/3)

- **Background:** started in 2004 as a response to an Orphan and Vulnerable Children (OVC) crisis caused by HIV-AIDS. By 2010, consolidated into a nation-wide scheme that will cover 122,000 households by end of 2010
- **Transfer Design:** Flat transfer of 1,500 Ksh/household/month
- **Targeting:** Poor households with OVCs
- **Objectives:** to encourage fostering and retention of OVCs within their families and communities, and promote OVCs' human capital development

# CT-OVC in a nutshell (2/3)

- **Is the program working?** Impact evaluation conducted by OPM (Oxford Policy Management) in 2007-9 showed:
  - ❖ poverty reduction
  - ❖ increase in dietary diversity
  - ❖ increase in better dwelling conditions
  - ❖ increase in child birth registration
  - ❖ reduction in some forms of child labor (lower participation and fewer hours worked)
  - ❖ increase in enrollment rates (>primary)

*however...*

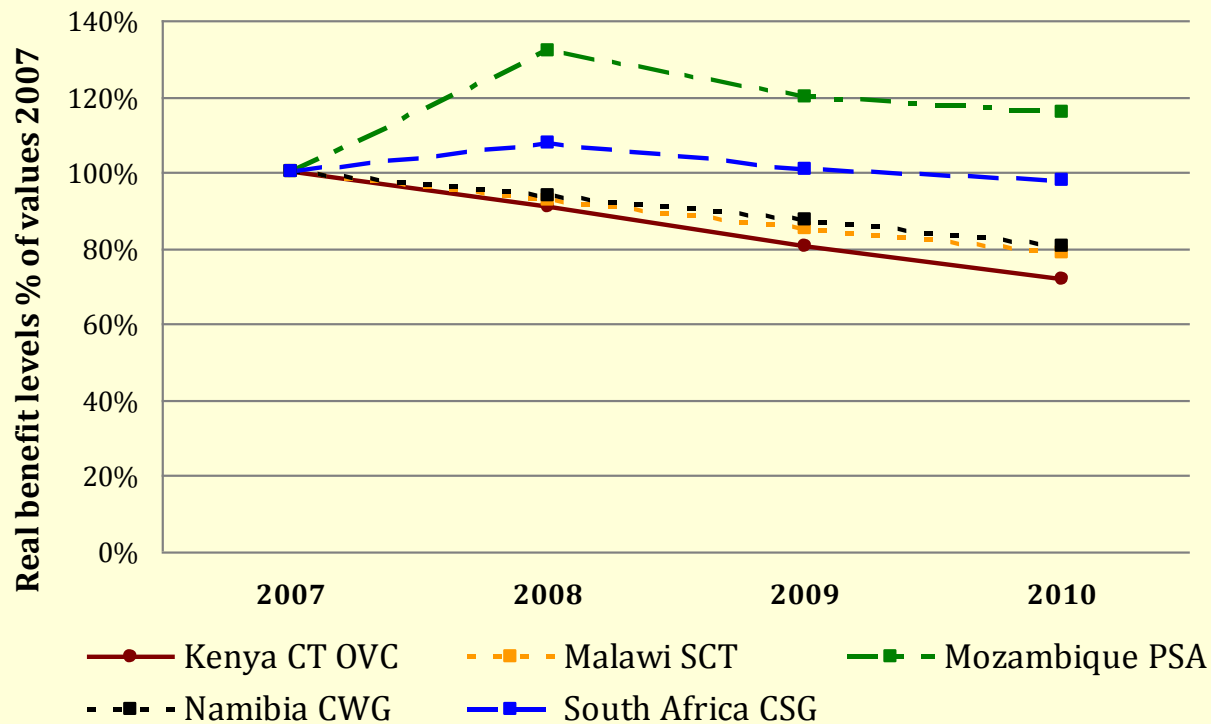
# CT-OVC in a nutshell (3/3)

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- Effects may not be durable: Loss of benefit level
- Unequal impacts of transfer across household size

# Impact of inflation on real transfer level

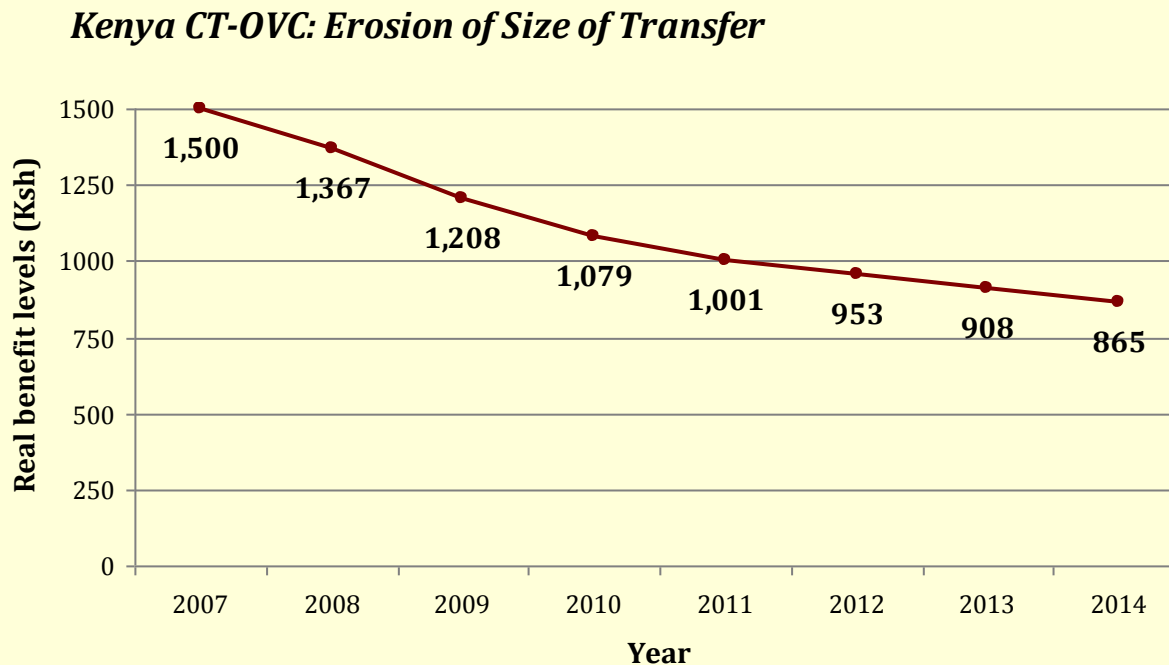
Although many African countries suffer from high inflation, few programs adjust the size of transfers.



Exceptions are South Africa CSG (constant) and Mozambique (2008)

# Non-adjustment for inflation reduces real benefit level

Transfer lost 30% of its real value from 2007 to 2010, as its nominal value remained constant at 1,500Ksh/month



Analysis in Ethiopia in 2008 has shown that this loss matters for beneficiaries' livelihood impacts



# Non-adjustment reduces impact

Inflation eroded benefit impact on total expenditure by 33%

## CT-OVC Program 2007-2009: Inflation Loss

<i>Indicator</i>	<i>Means</i>			<i>D in D</i>		<i>Inflation Loss</i>
	Beneficiaries at Baseline (2007)	Real Impact (2009)	Nominal Impact (2009)	Real Impact (2009)	Nominal Impact (2009)	
Monthly consumption per adult equivalent (Ksh)	1,565	1,841	1,977	275	412	-33%
Monthly food expenditures per adult equivalent (Ksh)	998	1,225	1,331	227	333	-32%
Monthly health expenditures per capita (Ksh)	35	51	54	15	19	-17%
Monthly education expenditures per child (Ksh)	146	187	208	41	62	-35%

Data source: CT-OVC Evaluation Household Survey 2007& 2009.

Moving ahead...

# Unequal impacts across households

Significantly larger impact on expenditures for households with 1-4 members.

However, we know poorest households tend to be the largest

## Impact in Expenditures: FAO Results

<i>Indicator</i>	<i>Household Size</i>			
	Overall	1-4	5-7	8+
	D in D	D in D	D in D	D in D
Monthly consumption per adult equivalent (Ksh)	275 ***	431 ***	150 ***	72 ***
Monthly food expenditures per adult equivalent (Ksh)	227 ***	268 ***	178 ***	91 ***
Monthly health expenditures per capita (Ksh)	15 ***	27 ***	9 ***	3 ***
Monthly education expenditures per child (Ksh)	41 ***	52 ***	76 ***	-17 ***

P-values for mean-difference test, significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%; "ns" not significant.

Data source: CT-OVC Evaluation Household Survey 2007& 2009. Matching uses 5 nearest neighbors.

## Impact in Expenditures: OPM Results

<i>Indicator</i>	<i>Household Size</i>			
	Overall	1-4	5-7	8+
	D in D	D in D	D in D	D in D
Monthly consumption per adult equivalent (Ksh)	274 **	548 ***	123 ns	31 ns
Monthly food expenditures per adult equivalent (Ksh)	153 **	314 **	81 ns	-15 ns
Monthly health expenditures per capita (Ksh)	17 ***	18 **	15 ns	6 ns
Monthly education expenditures per child (Ksh)	27 ns	32 ns	7 ns	14 ns

P-values for mean-difference test, significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%; "ns" not significant.

# Is there room for improvement?

- Indexing benefit levels to inflation
- Designing a different transfer scheme: a fixed amount per household + a variable amount per child
- A mix of the two!

# Indexing benefit levels to inflation

Reasons to consider adjustment:

- Food price crisis continues in Kenya
- The poor are net buyers of food, thus are more affected by increase in food prices
- CPI has risen disproportionately since 2008 driven by election-related violence and drought
- If *status quo* continues, transfer will lose half of its size in 2014 if projections are correct

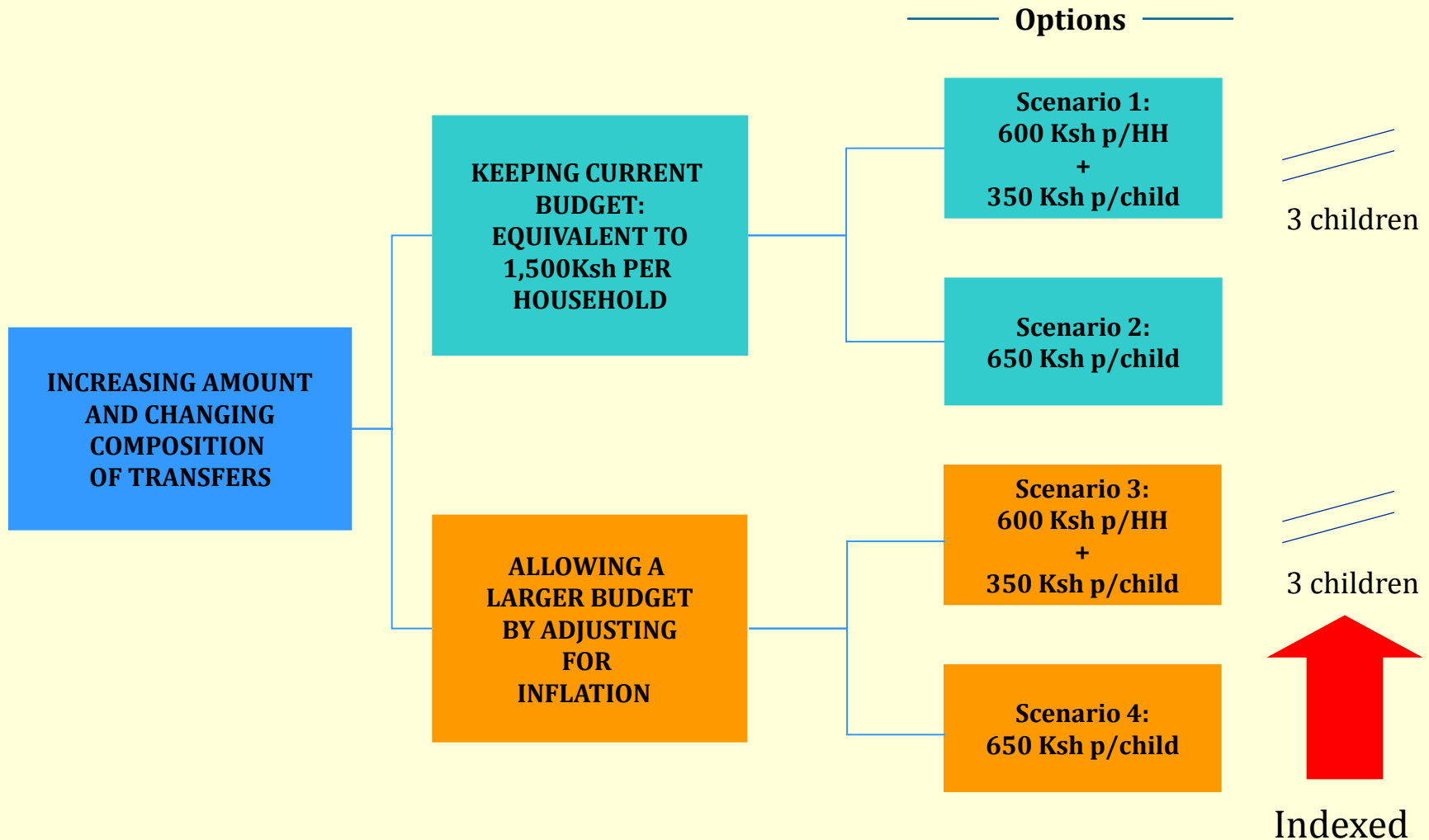
*However:*

- Fiscal space is limited, so we need to explore alternative options to maximize transfer impact

# Designing a different transfer scheme

- What is *the optimal allocation* of the CT-OVC transfer in order to maximize the impact on poverty reduction among beneficiary households, given a fixed total budget constraint (1,500 Ksh/household/month)?
- What is the impact of different allocation of the CT-OVC transfer on poverty reduction among beneficiary households, *taking inflation into account* (indexing 1,500 Ksh/household/month)?

# A mix of the two!

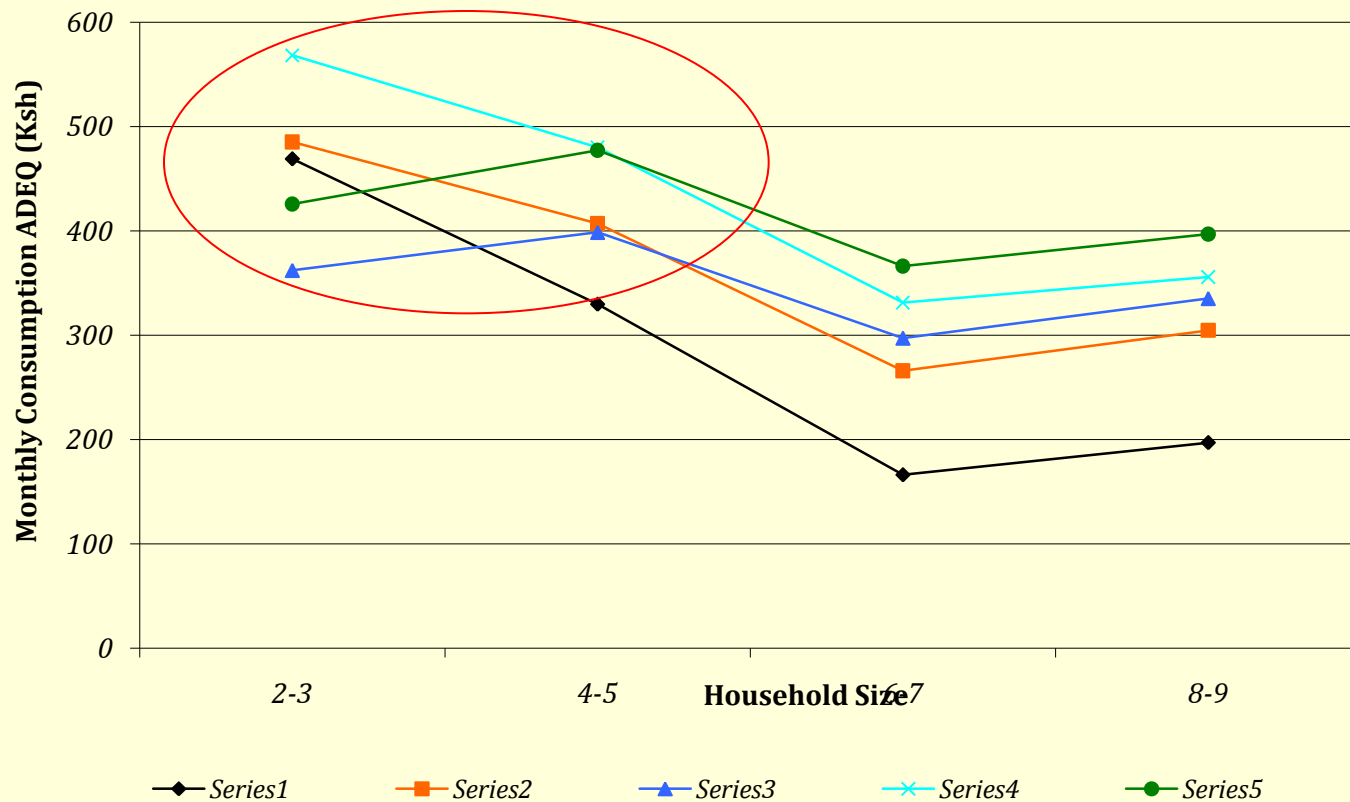


# Transfer size over time

	2010	2011	2012	2013
	Nominal Prices	5% Inflation	5% Inflation	5% Inflation
SCENARIO 1				
600 x HH + 350 x CH		600 x HH + 350 x CH	600 x HH + 350 x CH	600 x HH + 350 x CH
SCENARIO 2				
650 x CH		650 x CH	650 x CH	650 x CH
SCENARIO 3				
600 x HH + 350 x CH		630 x HH + 368 x CH	662 x HH + 386 x CH	695 x HH + 340 x CH
SCENARIO 4				
650 x CH		683 x CH	717 x CH	752 x CH

# Preliminary results: impact on total household consumption (ADEQ)

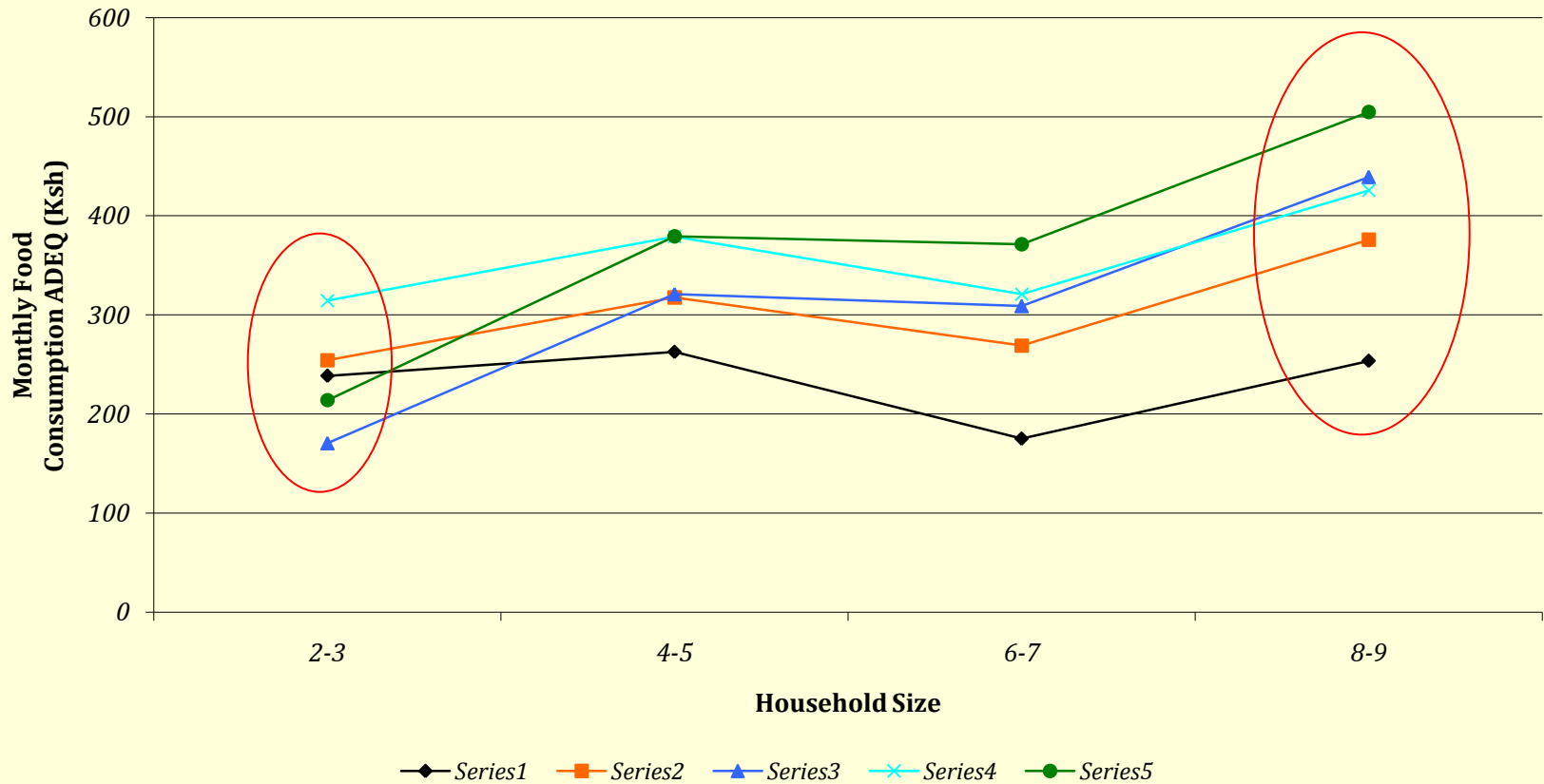
*Impact of Different Scenarios of Alternative Transfer Allocation*





# Preliminary results: impact on food consumption

*Impact of Different Scenarios of Alternative Transfer Allocation*



# Conclusions (1/2)

## **Indexing**

- Adjusting for inflation is essential to maintain adequate program impacts: households adapt and may not need full compensation for inflation, although they end up losing

## **Transfer composition**

- Better transfer allocation reduces impact inequality across households with different size
- Larger impacts observed when transfer has two components: one fixed per household and one according to number of children
- Important if child poverty (and other child outcomes) is considered

# Conclusions (2/2)

## **Transfer composition (con't)**

- May enable the program to maximize impacts across different objectives: poverty reduction, human capital investments (school attendance), nutrition, birth registration

## **Implications**

- Administratively and politically more complicated
- Fertility and household composition impacts (e.g. rural pensions in South Africa)

# Steps ahead

- Look at behavioral models (i.e. Bourgignon-Ferreira-Leite Model) and others arithmetical methods
- Consider potential incentives:
  - fertility
  - child grabbing
- Program's adjusting and expanding limitations

# Thank you!

## Questions/suggestions?

“From Protection to Production” Project

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