Food assistance as a safety net
Programs, choices and evidence

Social Safety Nets Core Course 2014

Ugo Gentilini
World Bank, GSPDR
• Concepts and definitions (what is ‘food assistance’)

• Food assistance programs (what forms does it take)

• Making choices (comparing impacts and costs; issues to consider)

• Wrap-up
• Concepts and definitions
• Food assistance programs
• Making choices
• Wrap-up
Food as a critical part of a broader equation. A few numbers...

72% of income spent on food by the poorest households (upper bound)

Food insecurity

805 million people are undernourished (minimum dietary energy requirement)

(Mal)nutrition

165 million children under-5 are chronically malnourished or stunted (low height-for-age)

45% of child mortality caused by malnutrition (3.1 M/year)

Mortality

46% higher hourly wages among Guatemalan adults due to better nutrition in childhood

Economic investment

Source: De Onis et al. (2014); FAO (2014, 2011); Hoddinott et al. (2008)
Unbundling ‘food assistance’

• What it includes
  – Measures that “... improve access to, and consumption of, adequate, safe and nutritious food”
  – Cash transfers, vouchers, food transfers (if with external assistance = ‘food aid’)
  – Design devised accordingly (e.g., transfer size, M&E)
    • (Hint: we do not here consider large cash lump grants or similar, but transfers for an amount to access a basic food basket + little top-up)

• Programs
  – Unconditional, conditional, public works
  – Formally provided by governments
  – Fully or partially subsidized
Food Procurement → Transport → Storage, handling → Distribution → Beneficiary

Vouchers

Provision of vouchers → Contract with shops → Beneficiaries

Cash

Provision of cash → Beneficiaries
• Concepts and definitions

• Food assistance programs

• Making choices

• Wrap-up
Unconditional food programs

• Bulk of response in early phases of natural disasters and conflict
  – Emergency programs now 70% of international food aid (tot: 4.7 M tons; 0.2% of global production)
  – ‘General food distribution’: reaching 43.7 million people in 2012
  – Some 14.5 million people received ‘nutritional supplementation’
  – Currently: 6M Syrian displaced; 1.5M for ebola crisis; 2.5M in South Sudan; 500,000 people in C.A.R

Source: WFP-FAIS (2014)
A food transfer consists of commodities of various quantity and quality:
- Traditional cereals, pulses, and oil
- ‘Ready to Use Therapeutic Foods’, lipid-based products for treatment of severe acute malnutrition
- Costs higher for high-quality products (R&D, imported, shelf life, etc.)

### Lipid-based Nutrient Supplement (LNS) Medium Quantity (20-50g)

<table>
<thead>
<tr>
<th>Product</th>
<th>Medium Quantity</th>
<th>Fortified Blended Food (FBF)</th>
<th>LNS Small Quantity</th>
<th>Micronutrient Powders (1g)</th>
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<tbody>
<tr>
<td>Plumpydoz®</td>
<td>20-50g</td>
<td>Super Cereal Plus</td>
<td>Nutributter®</td>
<td>Micronutrient Powders</td>
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<tr>
<td>(Peanut-based)</td>
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<td>Super Cereal</td>
<td>(Peanut-based)</td>
<td>(MNP)</td>
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<td>eeZeeCup™</td>
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<td>(Peanut-based)</td>
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<td>Wawa Mum</td>
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<tr>
<td>(Chickpea-based)</td>
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</table>

### Key Ingredients
- Vegetable fat, peanut, sugar, milk powder, whey, V&M, cocoa
- Vegetable fat, peanut, sugar, skimmed milk powder, V&M
- Chickpeas, vegetable oil, milk powder, sugar, V&M
- Corn/wheat/rice soya, milk powder, sugar, oil, V&M
- Peanuts, vegetable fat, sugar, skim milk powder, whey, V&M
- Vitamins and minerals (V&M)

### Daily Ration
- 46g portion (1/7 portion of a pot)
- 46g portion (1/7 portion of a pot)
- 50g sachet
- 100-200g (200g includes provision for sharing)
- 100-200g (200g includes provision for sharing)
- 20g sachet
- 1g sachet every second day

### Nutrient Profile
- 247 kcal, 5.9g protein (10%), 16g fat (58%). Contains EFA, meets RNI and PDCAAS
- 253 kcal, 6.0g protein (10%), 15g fat (56%). Contains EFA, meets RNI and PDCAAS
- 260 kcal, 6.5g protein (10%), 14.5g fat (50%). Contains EFA, meets RNI and PDCAAS
- 394-787 kcal, 16-33g protein (17%), 10-20g fat (23%). Contains EFA, meets RNI and PDCAAS
- 376-752 kcal, 15-31g protein (16%), 8-16g fat (19%). Meets RNI and PDCAAS
- 108 kcal, 2.6g protein (10%), 7g fat (59%). Contains EFA, meets RNI and PDCAAS
- (No energy, fat or protein content)

### Duration of Intervention
- Duration will be aligned with national guidelines and will vary with different situations, contexts, and objectives (e.g., prevention of acute vs. prevention of stunting) as well as target group.
- Please refer to programme design guidance for more information.

### Shelf Life
- 24 months
- 18 months
- 24 months
- 18 months
- 12 months
- 24 months
- 24 months

### Packaging Details
- Primary packaging: 325g pots. Carton: 12.7kg (gross) and 11.7kg (net) has 36 pots
- Primary packaging: 325g pots. Carton: 12.7kg (gross) and 11.7kg (net) has 36 pots
- Carton: 10.5kg (net) has 210 sachets
- Primary: 1.5kg (net) bag; Secondary: 15kg (net) carton has 10 bags; or 18kg sack has 12 bags
- Carton: 25kg (net) bags
- Carton: 11.95kg (gross) and 10.92kg (net) has 546 sachets
- Carton: 14kg (gross) has 240 boxes; 30 sachet in each box.

*Packaging varies with supplier*
• Domestic, institutionalized programs
  – Specific risks in lifecycle, e.g. Chile’s PNAC (2kgs of powdered milk per month from birth to two years of age, i.e. 8.9 M children) and PACAM (4.7 M senior, +60-70)

• Various models of ‘public distribution systems’
  – Evolved from price stabilization functions to safety net programs
  – Often as partially subsidized commodities
  – Substantial scale: at least 850 million individuals; ~$18 billion

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Beneficiaries (M)</th>
<th>Cost ($ Bill)</th>
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<td>TDPS</td>
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<td>0.67*</td>
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<td>Egypt</td>
<td>Baladi</td>
<td>70</td>
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<td>Indonesia</td>
<td>Raskin</td>
<td>18.5*</td>
<td>1.4</td>
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*households. Source: internal work in progress, LAC SP database, ASPIRE
• Lots of ongoing innovations
  – E.g., India’s Chhattisgarh state...
Targeted Public Distribution System in Chhattisgarh state
(more in BBL next week!)

• From pre-assigned ‘fair price shops’…
  – ‘Leakages’ at various points; multiple visits to the shop, possible mistreatment of beneficiaries, overcharges, long waiting hours (i.e., 4-5h)

• ... to competition and reform
  – Increase in the number of shops
  – Decentralized procurement schemes
  – Portability: choosing shops, COREPDS
  – Per capita access increased 5-fold, from 600 grams/month in 2004-5 to 3.2 kg per month in 2007-8. Calories soared by 880%
Conditional food transfers: school feeding

- Provision of food to children conditional to attendance
- Two basic modalities
  - On-site meals and take-home rations (and snacks)
- Coverage of 368 million children worldwide, $75 billion/year (2011)
- Admin costs: 10-20% depending by model
  - Could peak to 42% in less-mature programs

Source: WFP (2013)
School feeding models

- **Fully centralised model (e.g. Botswana)**: Government centrally buying and distributing food to schools
- **Decentralised Third-party model (e.g. Ghana)**: Caterers responsible for procurement and preparation
- **Partially decentralised model (e.g. Mali)**: Traders → Schools
- **Integrated farm to school model (e.g. Cote d’Ivoire)**: Women’s groups receive supply side package and provide schools with food supply and support preparation and distribution

Source: Gelli et al. (2012)
Impacts on nutrition

• Highly debated issue
  – Missing critical age window of 0-24m
  – Possible indirect effect through THRs (e.g. Burkina Faso: weight for age increased by 0.38 sd for children 12-60 m whose sisters were eligible for THR, Kazianga et al. 2009)

• Micronutrient status
  – Biscuits fortified with iron and iodine reduced absenteeism and some dimensions of cognitive function (Alderman and Bundy 2011)
  – When locally-procured, role for fortification using prepackaged mixes

• Anemia (e.g. Uganda)

• Deworming (common to include in planning)
Impacts on education and income

• Considerably effective in enrolment
  – Uganda: 9% increase in children aged 6–13 who started school (Alderman et al. 2010)
  – Bangladesh: 14% difference (in communities with and without SF (Ahmed 2004)
  – Burkina Faso: new enrollment of girls by about 5-6% (Kazianga et al. 2009)
  – Kenya: 30% increase (pre-school) (Vermeersch and Kremer 2005)

• Cognitive skills
  – Mixed evidence on learning (supply-side, quality of education as key, e.g. Pritchett 2013…)
  – E.g. Uganda impact on math test scores (children aged 11-14), but not test of literacy

• Targeting
  – School-targeted as generally progressive (Lindert et al. 2010)
  – THR as gender-targeted (double in transfer size, e.g. Gelli et al. 2009)
  – Expanded in crises, but where existed (e.g., Burundi, CAR, Ghana, Liberia, Togo, and Philippines)
Food for work

• In a nutshell, provision of food commodities for labor-intensive activities

• Reaching about 15.1 million people in 2013
  – Sudan about 1M people, Kenya 158,000

• Various design issues
  – Wage setting, self-targeting, etc. (more from Subba tomorrow)
  – Non-food costs: 30-40% when ‘safety net oriented’
Food for work

• Different models, e.g. Ethiopia
  – Long history for FFW before PSNP (EGS)
  – PSNP and MERET

• Changing composition in early-recovery
  – E.g. Sudan

Source: WFP, based on Zeleke (2013)
## Vouchers

- Usually unconditional; can be quantity or value-based
- Different ways of provision/payment...

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<tr>
<th>Type</th>
<th>Countries</th>
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<td><strong>Paper-based</strong></td>
<td>Pakistan (1990s)</td>
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<td><strong>Semi-paper</strong></td>
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<td><strong>Phone-based</strong></td>
<td>Syria</td>
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<td><strong>Swipe-cards</strong></td>
<td>Palestine</td>
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Integration and multipliers

• Gaza
  – Crisis in 2014, voucher platform used to channel humanitarian assistance (300,000 people)
    • Cards uploaded to serve 84,000 people with water and sanitation items, and 14,000 children received school uniforms

• Lebanon
  – Coverage 882,850 people in October 2014 alone (75% of refugees)
  – US$30 per person, US$345M in 2014 (expected to generate US$517 M in the economy)
  – 416 shops; +1,300 jobs and US$3M in capital investments (space and storage)
  – Vouchers delivered with Mastercard®; online monitoring; payment of merchants within 48h
  – Informing the Emergency National Poverty Targeting Programme (E-NPTP) in Lebanon
Ms Mabel McFiggin of Rochester, New York
First printing of SNAP (food stamps), Washington D.C., April 20, 1939
Introduced in waves ...

Pilot 1939-43...

... then stopped. No program between 1943-61...

... then pilot again (1961) and eventually enshrined into law (1964)
Participation Growth after Act of 1964

1965: 561,261  
1966: >1,000,000  
1977: 2,000,000  
1971: 10,000,000  
1974: 15,000,000

Food stamp act of 1977 (S. 275)

- Most importantly, eliminated purchase requirement (like food stamps today)
- Got rid of categorical eligibility, requirement that houses have cooking facilities
- Established eligibility at the poverty line
- Reduced the amount of deductions included in computing net income
- Raised the limit to $1,750/household
- Penalized families whose head quit job
- Restricted eligibility for students & aliens
- Fraud Disqualification
- Also created many new and effective ways to manage and apply for the program

Early 1980’s

Under President Reagan, major cuts were made via these changes:
- More penalties for those who quit their jobs
- State option to require recipients to search for jobs
- Counting retirement accounts as resources
- Looking at gross income rather than just net income
- More adjustment periods

1984- EBT starts (Electronic Benefits Transfer)

1990’s

Due to the increasing amount of hungry Americans, a large amount of funding was reinstated.

- Elimination of Shelter Deduction Cap
- Establishing deductions for those who owe legally required child support
- Raising the amount of money allotted per child
- Expansion of EBT
Growing coverage...

Means-tested, below poverty line ($1,628/month for a 3-person family in 2014)
- Monthly transfer of $148 - $563 (pending on HHs size)
- Admin cost: 8%
- 246,000 retailers; generated $1.7 in economic activity for $1 injected (Moody’s Analytics)

... and funding

Source: Oliveira (2014)

Source: Center on Budget and Policy Priorities
Quasi-formal food assistance: food banks

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of beneficiaries</th>
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</thead>
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<td>United States</td>
<td>37,000,000</td>
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<tr>
<td>France</td>
<td>3,642,991</td>
</tr>
<tr>
<td>Italy</td>
<td>3,380,000</td>
</tr>
<tr>
<td>Poland</td>
<td>3,200,000</td>
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<tr>
<td>Spain</td>
<td>1,667,770</td>
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<table>
<thead>
<tr>
<th>Country</th>
<th>Beneficiaries as share in total population (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>14.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>13.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>12.5</td>
</tr>
<tr>
<td>United States</td>
<td>11.9</td>
</tr>
<tr>
<td>Romania</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Source: Gentilini (2013)
Range of other models: e.g., Brazil’s *restaurante popular*
• Concepts and definitions

• Food assistance programs

• Making choices

• Wrap-up
What do we know about cash versus food?

- Can be ideological and polarizing...

  “[T]he big reason poor people are poor is because they don’t have enough money. (...) So let’s abandon [vouchers and in-kind transfers] and just give money to those we should help out.” (C. Kenny, CGD)

  “The economist’s traditional, normative dictum on benefits in-kind may be analytically elegant (...) but practically dead wrong.” (U. Reinhardt, Princeton University)

- Political economy can play an important role
  - Constituencies
  - Perceptions
  - Paternalism vs fungibility
What do we know about cash versus food?

- Lots of evidence on *individual* cash, food and voucher programs
  - Comparisons somewhat ‘by inference’

- But little about about *relative* performance? In other words, deliberate comparisons...
  - Same context
  - Equal objectives
  - Consistent design (transfer size, frequency)
  - ... and using RCTs/quasi-experiments
SNAP evidence

• “... virtually every study finds food stamps increase household nutrient availability at 2 to 10 times the rate of a like value of cash income” (Barrett 2002)

• Explaining the “cash out puzzle”
  – ‘Labeling’ effect inducing a sense of moral obligation to use in-kind transfers for their intended food consumption purpose (Senauer and Young 1986)
  – Gender and decision-making behaviors in multi-adult households (Breunig and Dasgupta 2005)
  – Alterations in household budgeting and planning of monthly purchases (Wilde and Ranney 1996)
  – Others...
New generation of comparative evaluations

<table>
<thead>
<tr>
<th>Program</th>
<th>Country</th>
<th>Program type</th>
<th>Modality</th>
<th>Cash ($)</th>
<th>Food (n)</th>
<th>Size as % of pre-program HH exp.</th>
<th>Transfer frequency</th>
<th>Exposure</th>
<th>Delivery mechanism</th>
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<tbody>
<tr>
<td>PAL</td>
<td>Mexico</td>
<td>CT, UT</td>
<td>Cash, Food</td>
<td>13</td>
<td>7</td>
<td>11.5</td>
<td>Monthly (cash), bi-monthly</td>
<td>trial 1 year</td>
<td>Biometric debit cards</td>
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<td>Zinder project</td>
<td>Niger</td>
<td>PW, UT</td>
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<td>50</td>
<td>5</td>
<td>11.5</td>
<td>Bi-weekly</td>
<td>6 months</td>
<td>Mobile ATMs, smart cards</td>
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<td>6 months per year</td>
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<td>CT</td>
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<td>3</td>
<td>12.7</td>
<td>6-8 week cycle</td>
<td>12 months</td>
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<td>V=9 F=4</td>
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<td>IDPs project</td>
<td>Democratic Republic of Congo</td>
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<td>Cash, Vouchers</td>
<td>18.5</td>
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<td>18.96</td>
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<td>2-4 years</td>
<td>Public banks</td>
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- **What do they tell us?**
  - Impacts
  - Other related findings
  - Costs
Impacts
<table>
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<tr>
<th>Metric</th>
<th>Mexico</th>
<th>Niger</th>
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<td>Anemia</td>
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<td>School dropout rates</td>
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<td>Cognitive development</td>
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<td></td>
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<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Emerging insight: cash used for food of higher value...

Difference in impact between food and cash transfers on food consumption
(food impact minus cash impact, percentage points)


Percentage points:
-12.00 | -13.40 | -13.62

Positive values = food more effective
Negative values = cash more effective
Emerging insight: food augments calories intake...

Difference in impact between food and cash transfers on per capita calorie intake
(food impact minus cash impact, percentage points)
Emerging insight: mixed impacts on diversity (i)...

Difference in impact between food and cash transfers on Food Consumption Scores
(food impact minus cash impact, indicator values)
Emerging insight: mixed impacts on diversity (ii)...

Difference in impact between food and cash transfers on the Dietary Diversity Index
(food impact minus cash impact, indicator values)

Ecuador (food-cash)  -0.41
Ecuador (food-vouc.) -0.91
Niger (food-cash, Oct.) 0.38
Niger (food-cash, July) 0.56
Yemen (food-cash) -0.63
Emerging insight: mixed impacts on diversity (iii)...

Difference in impact between vouchers and cash transfers on Household Dietary Diversity Scores (vouchers impact minus cash impact, indicator values)

- Ecuador (vouc.-cash): 0.11
Some other findings and implications
Markets and implementation capacity

• Approaches to markets can vary
  – A working markets as prerequisite
  – ... or a working market as an outcome, i.e. transfers attracting markets (e.g. fairs)

• General consensus to use in-kind food programs when/where markets are not ‘functioning’
  – Integration, competition, availability
  – Different actors in the supply chain
  – Assessment tools (MIFIRA, EMMA...)

• Price dynamics can alter program performance and people’s preferences
  – Two scenarios....
Price dynamics (unpredictable shocks)

- **Ebola in West Africa**
  - Monrovia: in 2 weeks (August), cassava prices increased by 30%
  - Sierra Leone: in 6 months prices for local rice ranged from -20% to +42%

- **PSNP in Ethiopia**
  - High food prices in 2008 increased market value of food transfers was between 1.4 - 3 times the value of cash transfers

Source: Sabates-Wheeler and Devereux (2010)
Price dynamics
(seasonal/predictable)

Mean seasonal price change in the Malawi maize market, 1989-2009

The PSNP payment rate was set at 6 Birr per day in 2005-06 to purchase 3 kg of cereals
- 2.5 kg (in Tigray) to as much as 5.9 kg (in SNNPR)

Source: Ellis and Manda (2012)

Source: Sabates-Wheeler and Devereux (2010)
What to do about it?

• Switch from cash to food transfers
  – At what point? Identifying benchmarks (e.g., Malawi 2008-09, MKW63/kg)
  – Contingency plans established and triggered rapidly

• Extend the duration of transfers when food prices rise
  – For how long? 3 months in Ethiopia 2011

• Index-link cash transfers to the cost of a basic food basket
  – E.g., FACT and DECT
  – Which commodities?
  – Price observed at measurement stations vs periphery (basis risk?)
  – Relatively easy to increase transfer size; less so to reduce it?

• Provide a combination of cash plus food
  – Simultaneous provision, e.g., Swaziland’s ‘Emergency Drought Relief’ programme.
    Operationally challenging
  – Seasonal planning when possible
Snapshot of cash-food seasonal planning in Mozambique
What to do about it?

• Provide transfers in the form of commodity-denominated vouchers
  – Transfer risk to retailers; their interest to participate may vary

• Each options suggests that... **operational capacity is key**
  – Availability of pre-existing systems
  – Logistics, partnerships, coordination, delivery building blocks
  – And takes time to build and enhance...

Source: Wiseman et al. (2010)
Pragmatic preferences in India

Source: Kheera (2011)
Costs
In general, costs lower for cash (and vouchers) than food
- At least about 2 times lower
- Less logistics (transport, storage, etc.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Food</th>
<th>Cash</th>
<th>Vouchers</th>
<th>Food-cash ratio</th>
<th>Food-vouchers ratio</th>
<th>Vouchers-cash ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dem. Rep. of Congo</td>
<td>-</td>
<td>11.34</td>
<td>14.35</td>
<td>-</td>
<td>-</td>
<td>1.2</td>
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<tr>
<td>Ecuador</td>
<td>11.46</td>
<td>2.99</td>
<td>3.27</td>
<td>3.8</td>
<td>3.5</td>
<td>1.09</td>
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<tr>
<td>Mexico</td>
<td>2.29</td>
<td>0.31</td>
<td>-</td>
<td>7.3</td>
<td>-</td>
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<tr>
<td>Niger</td>
<td>10.27</td>
<td>2.89</td>
<td>-</td>
<td>3.5</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Uganda</td>
<td>6.41</td>
<td>3.24</td>
<td>-</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yemen</td>
<td>9.84</td>
<td>2.65</td>
<td>-</td>
<td>3.7</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


BUT....
• Diverse analyses methods, breadth and depth

• Often they may not disaggregate by...
  – Set-up (fixed) vs. running (variable) costs
  – Planned (design) vs. actual implementation costs (e.g., Zambia)
  – Emerging of more nuanced tools (VFM, Ryckembusch et al., Gelli et al., etc.)

• Consider beneficiary transaction costs (time and money)

• Beyond delivery cost: account for cost of food basket
  – Cost of food often assumed to be = local market value of food, not procurement cost
  – Procurement cost can be higher/equal/lower than local market value, altering results

... let’s look at some of these, with an application to Yemen
Example: Yemen

- Cost for the agency: food 4 times higher (food $9.84; cash $2.65)
- Cost for people: cash 4 times higher

Why? Location of distribution points matter:
- Food trucked into the villages: high cost for agency, little for beneficiaries
- Cash through (limited) local post offices: low cost for agency, high for beneficiaries

<table>
<thead>
<tr>
<th>Cost</th>
<th>Ecuador</th>
<th>Niger</th>
<th>Uganda</th>
<th>Yemen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>2.2</td>
<td>1.8</td>
<td>2.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Cash</td>
<td>1.2</td>
<td>1</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Vouchers</td>
<td>1.8</td>
<td>1</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Time for travel and waiting (hours)</td>
<td>1</td>
<td>1</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Transport costs (% of transfer value)</td>
<td>5.3</td>
<td>4.1</td>
<td>0</td>
<td>2</td>
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</tbody>
</table>

Source: Margolies and Hoddinott (2014)
Economies of scale in food procurement *may* offset savings from less logistics for vouchers (and cash)
Example: Yemen

- Cost for the agency: food 4 times higher (food $9.84; cash $2.65)
- Difference = $7.19 (cash more efficient)

What if we include cost of food?
- Procurement cost: $39.01; local market value: $49
- So total cost for cash: $51.65 ($49+$2.65); for food: $48.85 ($39.01+$9.84)
- Difference = - $2.8 (food more efficient)

Source: Margolies and Hoddinott (2014)
• Averting (dis)economies of scale: large procurement and logistics space demands investment in adequate accountability and transparency
  - Avoiding ‘leakages’, or diversion and losses of food at various points in supply chains, hence not reaching intended beneficiaries
  - E.g., TPDS in India: around 58% of grains ‘leaked’ in early 2000s (Planning Commission)
  - May need to consider possible leakages in efficiency analysis

Source: World Bank (2011)
• Concepts and definitions

• Food assistance programs

• Making choices

• Wrap-up
Take-aways

• Taken individually, both food and cash transfers work
  – Plenty of supportive evidence on each
  – What about *relative* performance?

• Good news: less ideology, more comparative evidence
  – Deliberate evaluations based on counterfactuals
  – Gradual building of evidence base to inform future choices (but lab-type evaluations...)

• Be specific about objectives and their measurement
  – ‘Food security’ objectives as too generic
  – Food consumption, calories, dietary diversity...

• Understand and tailor program to context
  – Assessing markets and operational capacities
Take-aways

• Impacts not stemming from inherent merits of cash or food. How they are designed matters greatly
  – Target group, transfer size (and how it is used), frequency, food basket composition, etc.

• High standards for impact evaluations; now raising the bar for costs
  – Big agenda for standardization of practices (evaluations and institutions)
  – Cost-effectiveness as ideal comparative metric, “... $ to achieve objective X in context Y”
  – Dilemma? High-efficiency & low-effectiveness; high effectiveness & low-efficiency...

• Beginning of an agenda, not the end of it
  – Results revolving on food security, little on other dimensions
  – Not much on longer-term effects (e.g., chronic malnutrition, morbidity, cognitive dev.)
  – More on challenging contexts (e.g., first phase of a disaster)
  – Combinations? (Langendorf et al. 2014 somewhat on all of the above...)
  – Urban areas?
  – Vouchers as underexplored?
  – Intra-community effects and social relations?
  – Others?
Thanks!

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Initial conditions matter

Impacts decline by 2 percentage points very 100 kcal – i.e. more effective when initial calories are low

*Source: Hidrobo et al. (2014)*
Across the board for implementation processes

Iris scan (India)

Digital thumbprints (Malawi)

Online, real-time monitoring (Zambia)
International food assistance (food aid)

• Less volume
  – Decline by 66%; 0.2% global trade

• Local procurement
  – From 1% to 19.4% of total programs

Source: WFP-FAIS (2014)
Source: Lentz and Barrett (2013)
368 million children receive school meals with up to US$75 billion invested each year.

Source: WFP global school feeding survey, case studies, publications and other sources. N=185 countries.
Stages in program practice

Source: Bundy et al. (2009)
• SF models and cost structures

Source: PCD (work in progress)
Social relations (intra-community-level)

ZECT in Zimbabwe

<table>
<thead>
<tr>
<th>Respondent type</th>
<th>Scores out of 10</th>
<th>Food</th>
<th>Cash+food</th>
<th>Cash</th>
<th>Importance weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipients (standing from sharing)</td>
<td>7.3</td>
<td>6.8</td>
<td>2.6</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Non-recipients (amount received from sharing)</td>
<td>8.5</td>
<td>5.1</td>
<td>0.6</td>
<td>9.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: MacAuslan and Riemenschneider (2011); Kardan et al. (2010)
Nutrition as an economic investment

- Direct channels: early child nutrition, cognitive skills, education attainment, labor productivity
  - E.g. Guatemala: +46% in average wages (Hoddinott et al. 2008)

- Savings in GDP

---

The Challenge of Hunger and Malnutrition

Jere R. Behrman, Harold Alderman and John Hoddinott
Measuring food security

FAO undersnourishment
Caloric intake/Food quantities
Food expenditures
Dietary Diversity/Food Consumption Score
HFIAS/Hunger Scale
Coping Strategy Index
Qualitative, e.g. food adequacy
Anthropometrics
SNAP Households with Working-Age Non-Disabled Adults Have High Work Rates

Work participation during the previous and following year for households that received SNAP in a typical month.

- **All SNAP households**
  - Employed in month of SNAP receipt: 58%
  - Employed within a year: 82%

- **Families with children**
  - Employed in month of SNAP receipt: 62%
  - Employed within a year: 87%

Source: CBPP calculations based on 2004 SIPP Panel data.

SNAP Error Rates Are at an All-Time Low

(Fiscal years 1990-2012)

- Overpayment Rate
- Underpayment Rate

Source: Quality Control Branch, U.S. Food and Nutrition Service
Food assistance as an important factor in food security and nutrition

Source: adapted from Black et al. (2013)