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### Who Is Poor in the U.S. and Across Nations, How Poor, and What Are the Trends?

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# **Overview of Talk**

- Brief review of issues in measuring poverty, 3 measures used
- Level of poverty in US: by subgroup, level compared to other countries
- Composition of those below poverty.
- Depth of poverty
- Income sources of the poor.
- Poverty Dynamics
- Trends in poverty in US: by subgroup, trends compared to other countries
- Trends in composition of those below poverty.
- Conclusions



### **Poverty Measurement Essentials**

- **Resource measure** determines what sorts of resources are counted
- **Resource sharing unit** a collection of individuals that are presumed to share resources.
- Poverty threshold the level of resources below which members of a resource sharing are classified as being "poor"
- Equivalence scale defines how the threshold varies across resource sharing unit size and composition



# **Official Poverty Measure**

- Resource measure gross cash income
  - Ignores taxes and EITC
  - Ignores non-cash benefits (Food Stamps, housing assistance, etc.)
- Resource sharing unit
  - Family two or more related persons that live in the same dwelling
  - Unrelated individuals individuals living on their own or with other persons that they not related to (e.g., a cohabiting couple without children are classified as would be defined as two unrelated individual).
- Threshold 3 times economy food plan, updated for price change
  - Does not change with standard of living
  - No adjustments for the fact that food expenditures are a much smaller fraction of total family expenditures than they were when the thresholds were conceptualized.
  - Trends in poverty are sensitive to the price index used for updating the thresholds.
- Equivalence scale add hoc is the best way to describe it



### Supplemental Poverty Measure (SPM)

	Poverty Measure Concepts: Official and Supplemental		
	Official Poverty Measure	Supplemental Poverty Measure	
Measurement Units	Families and unrelated individuals	All related individuals who live at the same address, and any coresident unrelated children who are cared for by the family (such as foster children) and any cohabiters and their relatives	
Poverty Threshold	Three times the cost of a minimum food diet in 1963	The mean of the 30th to 36th percentile of expenditures on food, clothing, shelter, and utilities (FCSU) of consumer units with exactly two children multiplied by 1.2	
Threshold Adjustments	Vary by family size, composition, and age of householder	Geographic adjustments for differences in housing costs by tenure and a three-parameter equivalence scale for family size and composition	
Updating Thresholds	Consumer Price Index: all items	Five-year moving average of expenditures on FCSU	
Resource Measure	Gross before-tax cash income	Sum of cash income, plus noncash benefits that families can use to meet their FCSU needs, minus taxes (or plus tax credits), minus work expenses, minus out-of-pocket medical expenses and child support paid to another household	



# Pros and Cons of the SPM

#### • Pros

- Broader view of the resource sharing unit considers related individuals in the same dwelling as well as **cohabiters** and unrelated children to be part of the resource sharing unit
- Is directly affected by the policy levers that are currently used to assist low income populations
  - Non-cash benefits such as food stamps, housing assistance, school lunch programs, and energy assistance
  - Taxes and refundable tax credits
  - Out-of-pocket medical expenses and work expenses (including child care expenses)
- Cons
  - Not officially available before 2009
  - Does not facilitate comparisons over time
  - Does not facilitation comparisons across countries



Relative Measure: Threshold 50% of Median Household Income, Net Income Resources

- Resources Net cash and near-cash resources similar to SPM, but without deductions for expenses.
- Resource sharing unit Implicitly assumes resources are shared within HHs
- Threshold 50% of median equivalized household income
- Equivalence scale math based.



### 2013 Poverty Rates

Fall all persons

- 14.6% using the official measure
- 15.5% using the SPM



# 2013 Poverty Rates for Subgroups

- Age groups
  - Less than 18
  - 18 to 64
  - 65+
- Less than age 65
  - Race
  - Location (urban/rural, region)
  - Family unit type (head status, size)
  - Characteristics of the head (education level, worker status)



#### Poverty Rates in 2013: By Age group

Group	Official	SPM
Children	20.4%	16.5%
Adults ages 18 to 64	13.5%	15.4%
Adults ages 65 and older	9.5%	16.4%



## Poverty Rates in 2013: By Race

Group	Official	SPM
Whites (non Hispanic)	9.7%	10.7%
Blacks (non Hispanic)	27.0%	24.2%
Hispanic	23.7%	26.0%
Asian	12.8%	16.8%



# Poverty Rates in 2013: By Location

Group	Official	SPM
By region		
Northeast	12.8%	14.4%
Midwest	13.0%	12.4%
South	16.2%	15.8%
West	14.8%	18.7%
By urban status		
Principle city	19.3%	20.7%
Other metro	11.2%	13.7%
Rural	16.4%	13.4%
Unclassified	13.7%	13.5%



#### Poverty Rates in 2013: By Family Type

Group	Official	SPM
By family type		
Married couple	6.8%	9.6%
Cohabitating couple	Na	16.4%
Male headed family	17.8%	21.5%
Female headed family	33.3%	30.0%
Male nonfamily	21.7%	24.2%
Female nonfamily	25.8%	26.0%



#### Poverty Rates in 2013: By Family Size

Group	Official	SPM
One	23.8%	25.1%
Two	9.7%	12.1%
Three	11.6%	15.0%
Four	11.7%	12.4%
Five	15.2%	15.1%
Six or more	21.1%	20.0%



#### Poverty Rates in 2013: By Characteristics of the Head

Group	Official	SPM
By Education of Head		
Less than HS	33.2%	33.5%
HS, no college	16.7%	18.7%
Some college	14.0%	14.3%
4+ years of college	5.2%	7.0%
By Worker Status		
Not working	31.1%	28.4%
Worked, not FTFY	25.1%	21.7%
Worked FTFY	4.1%	5.8%



### Is Measurement Important in Determining Risk for Poverty?

Measurement matters in a few places

- Age group comparisons SPM rates are lower for children and higher for adults ages 18 to 64 and the elderly.
  - Non-cash benefits and tax credits are targeted at families with children
  - The elderly have high out of pocket medical expenses
- Comparisons across race higher SPM poverty rates for Hispanics and Asians
- Geographic comparisons SPM rates are higher for individuals in metro areas and in the West region and lower for individuals in rural areas and in Midwest and South regions



#### The Composition of the Poor in 2013

- By basic demographic characteristics (age group, race for those less than age 65)
- By family characteristics for those less than age 65 (family type, family size)
- By characteristics of the family head for those less than age 65 (education level, worker status)



#### The Composition of the Poor in 2013: By Age Group

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
Children	33.0%	1.4
Adults ages 18 to 64	57.7%	0.9
Adults ages 65 and older	9.3%	0.7



#### The Composition of the Poor in 2013: By Race

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
White (non Hispanic)	41.5%	0.7
Black (non Hispanic)	23.9%	1.8
Hispanic	28.1%	1.6
Asian	6.5%	0.9



#### The Composition of the Poor in 2013: By Location

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
By Region		
Northeast	15.6%	0.9
Midwest	19.0%	0.9
South	41.6%	1.1
West	23.9%	1.0
By Urban Status		
Principle city	36.4%	1.3
Other metro	33.4%	0.8
Rural	16.5%	1.1
Unclassified	13.8%	0.9



#### The Composition of the Poor in 2013: By Family Type

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
Married couple family	28.6%	0.5
Male headed family	6.4%	1.2
Female headed family	35.3%	2.3
Male nonfamily	13.2%	1.5
Female nonfamily	16.5%	1.8



#### The Composition of the Poor in 2013: By Family Size

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
One	43.7%	1.2
Тwo	35.5%	0.9
Three	35.7%	0.9
Four	37.9%	0.9
Five	33.3%	1.0
Six or more	35.1%	1.2



### The Composition of the Poor in 2013: By Characteristics of the Head

Group	Percent of Poor (official)	Disproportionality Index (poverty share)/(pop share)
By Education Level		
Less than HS	29.7%	2.3
HS, no college	32.8%	1.1
Some college	26.2%	1.0
4+ years of college	11.2%	0.4
By Worker Status		
Not working	54.3%	2.1
Working, not FTFY	29.6%	1.7
Working FTFY	16.1%	0.3



Is Measurement Important in Determining the Composition of the Poor?

#### Not really

- Measurement matters a little bit across age groups – by the SPM measure a lower share of the poor are children and a higher share are adults and (especially) elderly adults.
- Measurement also matters a little bit across locations - a higher share of the poor are in the West and other metro areas under the SPM



# The Depth of Poverty in 2013

- Deep poverty is typically defined as having resources less than 50% of the poverty threshold
- By the official measure about 46% of the nonelderly poor are in deep poverty, but the share of poor that is in deep poverty is higher among some subgroups
  - Non family individuals (both male and female)
  - Individuals in female headed families
  - Members of families in which the head is not working
- Measurement matters a in determining deep poverty status – Only 33% of nonelderly poor by the SPM measure are in deep poverty



### Income Sources of the Poor (SPM, Nonelderly Family Heads)

			Average if
	Average	Percent with	Positive
	Amount	Source	(or Negative
Net Family Resources	\$10,915	87.3	\$13,293
Total Cash Income	13,821	87.4	15,834
Total earnings	10,466	64.2	16,308
Own earnings	6,482	52.2	12,428
Others earnings	3,985	26.0	15,297
UI, welfare, and SSI	963	16.1	5,990
Social Security	1,222	11.8	10,356
Other cash transfers	1,168	33.7	3,691
Noncash Transfers	1,856	49.2	3,772
Total Tax liability	-22	38.4	-2,008
Federal income tax liability before credits	-229	23.2	-988
Federal tax credits	1,159	43.3	2,677
Payroll taxes	-870	63.3	-1,374
State taxes	-83	19.4	-596
Deductible expenses	-4,740	92.5	-5,123
Child support paid	-152	2.5	-6,000
Work expenses	-1,245	63.7	-1,956
Out-of-pocket medical expenses	-3,343	85.4	-3,915
Poverty Threshold	19,491		
Poverty Gap	8,565		

#### Income Sources of the Poor (SPM, Elderly Family Heads)

			Average if
	Average	Percent with	Positive
	Amount	Source	(or Negative)
Net Family Resources	\$8,332	88.7	\$8,865
Total Cash Income	12,600	93.1	15,533
Total earnings	1,709	14.5	11,799
Own earnings	704	7.5	9,401
Others earnings	1,005	8.5	11,787
UI, welfare, and SSI	595	9.6	6,206
Social Security	8,937	77.3	11,560
Other cash transfers	1,360	38.8	3,508
Noncash Transfers	732	29.0	2,523
Total Tax liability	-123	14.0	-1,234
Federal income tax liability before credits	-48	4.7	-1,019
Federal tax credits	85	5.3	1,624
Payroll taxes	-144	14.2	-1,015
State taxes	-16	5.0	-437
Deductible expenses	-4,878	94.6	-5,154
Child support paid	-9	0.2	-5,423
Work expenses	-221	14.2	-1,563
Out-of-pocket medical expenses	-4,648	93.9	-4,951
Poverty Threshold	14,692		
Poverty Gap	6,359		

# **Poverty Dynamics**

- The study of poverty dynamics is concerned with entry from poverty, exit from poverty, and the duration of poverty
- Entry into poverty
  - The likelihood of entry into poverty is related to demographics in the expected ways (race, female headship, education level, etc.)
  - The most common trigger events for entry are changes in labor supply and earnings, but changes in family structure (married to female family, birth of child) also play a role).
- Exit from poverty
  - The likelihood of exit from poverty is related to demographics in the expected ways (race, female headship, education level).
  - The most common trigger event for exit from poverty is changes in labor supply and earnings. The holds across all family types.



# Poverty Dynamics, Cont.

- Lifetime probability of poverty A surprisingly large fraction of the population will experience poverty at some point in their lives (Rank and Hirschl, 1999a, 1999b, 2001)
  - 27.1% will experience poverty by age 30
  - 41.8% will have experienced poverty by age 50
  - Over 50% will have experienced poverty by age 65
- In general we are more concerned about persistent (and deep) poverty because of its link to indicators of hardship (Bauman and Iceland, 2006)
- Conditional on being poor there are large differences in the expected duration of poverty (Stevens, 2006).
  - An estimated 89.5% black one-year-olds in families headed by a single female without a high school degree will be poor more than 5 out of the next 10 years (Stevens, 1999).
  - The corresponding figure for white one-year-olds in families headed males is 33% (Stevens, 1999).
  - Regardless of family type people entering poverty later in life have a much lower probability of being poor more than 5 out of the next 10 years. (Stevens, 1999)



#### Poverty Levels in Select Countries in 2000 (Net Income, Official Threshold, Smeeding (2006))





# Poverty Levels in 2000 in Select Countries (Net income, 50% of median, Smeeding (2006))





#### Trends In Poverty: Official Measure vs. SPM (1967-2012, Fox et al. (2015))



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# Elderly Poverty has Fallen Rapidly by both the Offical Measure and the SPM (Fox et al. 2015)



# Trends in Child Poverty: Official Measure vs. the SPM (1967-2012, Fox et al. (2015)



Note: Shaded bars are recessions as defined by NBER.

Comparative Trends in Poverty, ~85-~00 (from Smeeding (2006), relative poverty)

- US poverty rate down o.8 percentage points (second largest decline)
- UK, Belgium, Ireland, all up 3.0 percentage points or more
- Largest decline in Sweden, down 1.0 percentage points



#### Comparative Trends in Poverty (1995-2000, relative poverty, OECD (2012)





# Major Trends Poverty Composition (1968-2011)

There have been dramatic changes in the composition of poverty over this period, but most changes are driven by changes in the composition of the population

- Much larger fraction of the poor in 2011 were working age adults.
- The browning of poverty a much larger fraction of the poor in 2011 were non-white.
- The urbanization of poverty in 1968 nearly 50% of the poor lived in rural areas, compared with about 16.8% in 2011
- The feminization of poverty larger fraction of the poor in 2011 were living in a female headed family or are female non-family individuals.
- A smaller fraction of the poor in 2011 were living in family units.
- In 1968 poverty was much more concentrated among persons in families with less than a HS education or non-family individuals with less than a HS education.
- Reduced labor force attachment among the non-elderly poor.



## Summary

- **Measurement matters** especially for age group comparisons, assessments of deep poverty, and trends.
- There are substantial differences in poverty rates across subgroups
- The poor are diverse but non-whites, nonfamily individuals, persons in female-headed families, and those with less education make up a disproportionately share
- There have been major shifts in the composition of the poor in the nearly 40-years covered by our data, but these are mostly due to changes in the composition of the population.



# Conclusions, Cont.

- The United States track record on fighting poverty is mixed
  - On one hand SPM poverty has decreased over the 1967 to 2012 period in spite of the erosion of earnings for less skilled workers and the increased prevalence of female headed families and a growing share of the population that is nonwhite.
  - On the other hand:
    - Our official measure of poverty is unchanged from its 1967 level
    - The US still does poorly compared to other its counterparts and there are some demographic;
    - Some demographic shifts such as increasing educational attainment work in favor of poverty reduction.



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