

# Income Instability Data Training Webinar



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#### Disclaimer



The views expressed in this presentation do not necessarily reflect the views or policies of the Office of Planning, Research and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.



## Overview

- Brief overview of the National Research Center on Hispanic Children & Families
- Measures of income instability
- Subjective reality of income instability among Hispanic families
- Response to comments/moving the field forward
- Q&A



# Center Mission and Objectives

**Mission:** A hub for research to help programs and policy better serve low-income Hispanics across three priority areas:

- Poverty reduction and economic self-sufficiency
- Healthy marriage and responsible fatherhood
- Early care and education

#### **Primary Objectives:**

- 1. Conduct Research
- 2. Build Capacity
- 3. Communication and Dissemination

www.hispanicresearchcenter.org







# Lisa Gennetian NYU

# Measures of Income Instability

#### **Acknowledgements:**

Co-authors: Heather Hill, Pamela Morris, Chris Rodrigues, Sharon Wolf, National Research Center Directors Lina Guzman and Michael Lopez; and, investigators

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### Roadmap

- Research on income instability on the rise
- Snapshot of new findings released from the Center
- Behind the scenes
  - constructs
  - data
  - measurement
  - statistical properties
- Trade-offs between different data collection strategies
- Open questions & opportunities



### Why income stability?

- Differences in income instability between rich and poor families increased **five**-fold since 1984; mirroring trends in income-level inequality
- Employment is precarious as is social assistance; these are two main sources of income for poor families

#### Contributions:

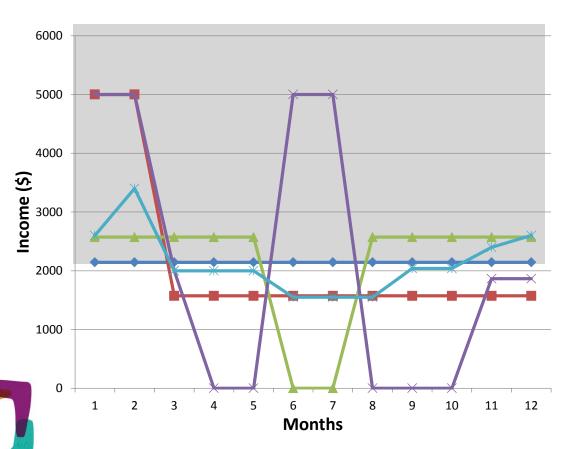
- Lens of child (vs. econ literature)
- Intra vs. inter-year analyses
- Macro vs. micro (Murdoch & financial diaries, qual work)



Discussions of poverty must consider income stability

# Monthly income instability matters for policy: Scenarios for family of 3 eligible for SNAP (\$25,728/yr)

In practice: --ineligible----recertify ineligible----reapply eligible



- A. Stable low income
- B. Permanent loss (e.g. divorce)
- C. Temporary loss (e.g. job loss)
- D. Highly volatile
- E. Moderately volatile

## Studying income dynamics: A demanding topic

• Precedence in economics literature (mostly yearly/annual trends in earnings, more recently households)

#### From a child lens:

- Need for theoretical framework drawing from child development, economics & psychology
- Establishing metrics: direction of change, size of change, what can be interpreted as "good" or "bad"?
- High data demands: frequent income measurement at granular level & decent quality measures of children's development outcomes and environments
- Design and identification: uncoupling income volatility from income level, triggers and causes of volatility

### Recently released research briefs from the Center

- Income Instability in the Lives of Hispanic Children
- Low and Stable Income: Comparisons Among Hispanic Children from 2004 to the period following the Great Recession
- > See blog series & twitter chats (join @NCRHispanic)



# The income gap between rich and poor is much larger among children in Hispanic HHs vs. children in non-Hispanic HHs

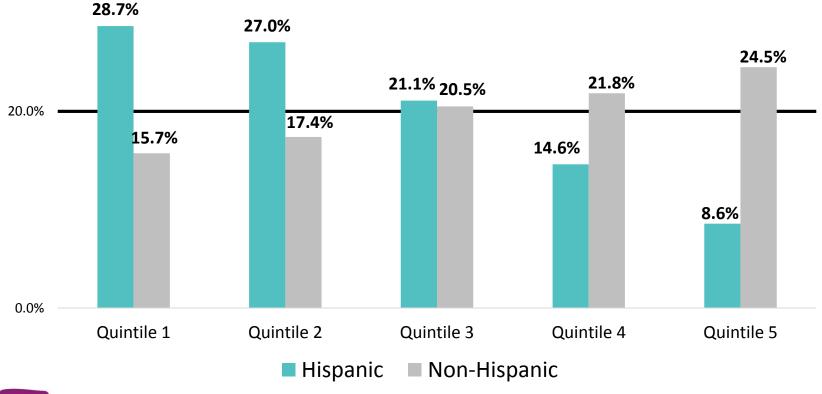




Figure 1. Household Income Quintile Distribution of Children, SIPP 2004, by Hispanic Ethnicity

Income instability is higher among all low-income HHs vs. high income. But, Hispanic low-income HHs are more income stable than other low-income HHs

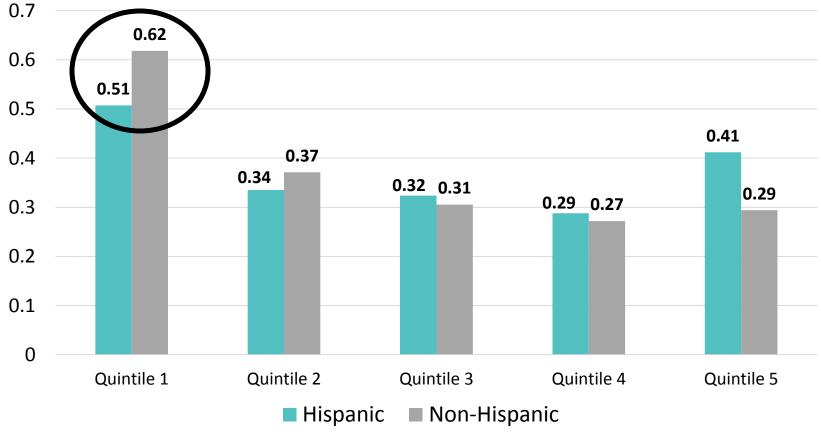
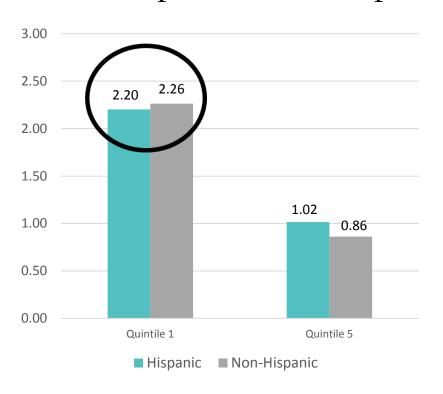




Figure 2. CV of households with Children, SIPP 2004, by Hispanic Ethnicity and Income Quintile

Children in low-income HHs: More income shocks than high income HHs; More positive income shocks than negative. Low-income Hispanic children experience fewer income shocks.



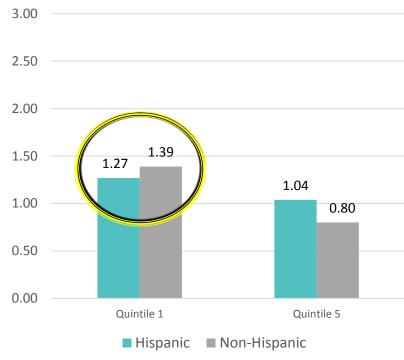




Figure 3. Number of positive shocks in households with children, SIPP 2004, by Hispanic Ethnicity and Income Quintile

Figure 4. Number of negative shocks in households with Children, SIPP 2004, by Hispanic Ethnicity and Income Quintile

# Empirical decisions underlying these analyses of income dynamics

- Real income, including cash assistance but excluding other forms of post-transfer income
- Quintile assignment based on wave 1 income

#### **Income stability:**

- Total income shocks (frequency, of certain magnitude)
- CV, sensitivity tests to APC (overall)
- Positive vs. negative income shocks (direction)
- Translation to lay audience



# Conducting research on Hispanic families: Challenges & assumptions

- Inconsistencies. Self-reporting of Hispanic identity varies over time, by country of origin.
- Assign children according to adult HH Hispanic self report (not sensitive to child assignment be incidence of mixed racial/ethnic HHs is small).
- Nativity/citizenship status does not line up. Citizenship does not vary much; nativity status sometimes does!
- Comparisons by race by paternal or maternal status confounded with residential status (e.g. black fathers).



#### Behind the scenes: Data and analysis

#### Survey of Income and Program Participation

- U.S. Census Bureau, started in 1984, most recent cohort panel is 2012
- Monthly income from 9 waves within panel, detailed by source AND selective info on children's outcomes
- Large, nationally representative sample, *across the income spectrum*
- February 2004 to September 2006, relative calm pre- Great Recession & large sample of Hispanic households
- Decent info on U.S. nativity, citizenship, language, country
   of origin

## Survey of Income and Program Participation

Income reported, monthly, over 4 months, for up to 12 waves, for each panel that may cover up to 3 calendar years.

- Seam bias
- Misreporting

Topical modules measuring specific domains during selective, sometimes multiple, waves



#### Measuring income

#### Considerations:

- Family vs. household level; multi-family households
- Child lens: Track income through changing residences
- Contributions from non household or nonresidential members
- Remittances
- Converting in kind assistance to cash value
- EITC in the context of monthly income dynamics
- Pre vs. post tax: deductions and credits (Taxism software at NBER)



### Constructing meaningful income categories

- Informing policy:
  - Poverty thresholds
  - Specifically identifying eligible populations for certain programs (vs. proxies based on things like level of education, or poverty status)
  - Income to needs ratios
- Informing income inequality: Quintiles (bottom 20<sup>th</sup> vs. top 80<sup>th</sup>), deciles (bottom 10<sup>th</sup> vs. top 90<sup>th</sup>)
- Transitory or point in time value of income vs. average/ permanent income



### Measuring income dynamics: Constructs

Income instability has many dimensions (underlying theories of child development):

- Direction (trajectory)
- Frequency
- Magnitude
- Contemporaneous vs. cumulative



### Measuring income dynamics: Part 2

Converting theoretical constructs to quantifiable metrics.

#### Most common in economics literature:

- Coefficient of variation
- Average percent change (and its std dev)

#### Other measures:

- Number of income shocks (at varying thresholds)
- Positive vs. negative shocks
- A large shock
- Number of time periods, e.g. waves, with similar income

#### Coefficient of Variation

- Illustration HH 1:
- Reference Mo. Wave 1: \$1,000
- Reference Mo. Wave 2: \$250
- Reference Mo. Wave 3: \$1000
- Standard deviation: \$530
- Mean: \$750
- CV: 0.71

#### Illustration HH 2:

Reference Mo. Wave 1: \$1,000

Reference Mo. Wave 2: \$750

Reference Mo. Wave 3: \$500

Standard deviation: \$354

Mean: \$750

CV: 0.47



# Measuring income dynamics: Trade offs

	CV	АРС	Total # income shocks	Positive vs. negative shocks	% of waves with no change
Dimension/theory	overall	overall	Frequency & magnitude	Direction & frequency	frequency
Invariance to starting point	X	X			
Symmetry	X	X	X		
Treatment of zero	Χ	X	X	X	X
Invariance to avg income	X		X	X	X
Audience translatability			X	X	X



# Understanding income dynamics: Research design trade-offs

- "Macro" picture, national data, secondary analyses:
- External validity, representativeness
- Flexibility & power to examine subpopulations
- Averages and aggregates might miss local household context significant to children
- "Micro" picture, qualitative data, diaries
- Daily accounting only possible with frequent in person visitation; prohibitive costs so small samples
- Context representativeness, over time, situational pictures
  - Across income/RE comparisons difficult to do with small Ns

## Open questions & opportunities

- Room for advancement in constructs mapped onto a developmental framework (break out of the box of tracking trends)
- Triggers and consequences
- Interpretation: Favorable or unfavorable
- Methodological challenge: Income level vs. income change
- More room to learn about the unique Hispanic lens





# Heather Sandstrom

**Urban Institute** 

Measures of Income Instability

# What are the data telling us?

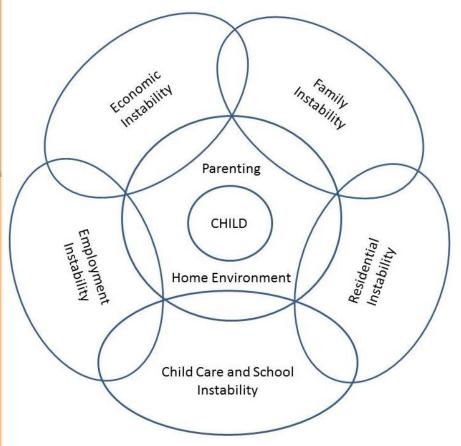
- A significant portion of Hispanic children are very poor and remained very poor through Great Recession
- May be experiencing fewer income shocks but they have little to lose
  - Some families reporting zero income
  - Disconnected from labor force
- Hard to know what's really happening to families
  - Day-to-day instability not captured in survey data
  - Informal work for cash (unreported)
  - Pooling of household resources



# What contributes to income instability?

- Hard to observe triggers of income instability in survey data
- Qualitative evidence of job instability and disconnection
  - Lack of working papers, language barriers
  - Limited education and training
  - Mothers with young children may choose to not work
  - Difficulty finding affordable, trustworthy child care
  - No or limited access to transportation
  - Fear of deportation and abuse from employers
- Multi-generation households and two-parent families common in Hispanic families
- But the most vulnerable are doubling up in unsafe housing, facing stress of migration and deportation

## Instability causes stress, affects child development



- Instability= Adverse life change or discontinuity in one's experience in which an individual lacks choice and control
- "Domino effect"
- Some change is normal and anticipated, but sudden and dramatic disruptions can be stressful
- Supportive adults can act as a buffer against any negative effects of stress
- Chronic "unbuffered" stress can be harmful to children's mental health and cognitive functioning



Sandstrom, Heather and Sandra Huerta. 2013. The Negative Effects of Instability on Child Development: A Research Synthesis. Washington, DC: Urban Institute.

# When measuring (income) instability we must consider:

Frequency and duration: Episodic vs. chronic

**Directionality**: Upward/positive vs. downward/negative change

Magnitude: Big shock vs. small bump (How much is too much?)

**Reason:** Planned vs. unexpected (What's causing shocks?)

**Timing:** More vulnerable in early childhood

**Population**: Worse for families in poverty or at the edge

One bad thing puts family in crisis mode; difficult to recover



We need more mixed-methods research to better understand these dimensions

# To measure impacts on children, must also consider potential stabilizing factors

#### Economic capital

- Availability of financial assets
- Access to public safety net

#### Social capital

- Strength of informal social networks
- Quality of supportive adult relationships

#### Cultural capital

 Knowledge, skills, education → Parents transmit the attitudes and knowledge needed to succeed

#### Personal resiliency factors

Positive mental health, self-efficacy, and motivation





# Carola Suárez-Orozco UCLA

Income Instability & the Economic Lives of Latino Children



#### Latinos are not a monolith

- From most privileged to most vulnerable
- In U.S. 15 generations to arrived yesterday
- By third generation majority are English speaking only; most second generation are some degree of bilinguals; most first generation are Spanish speakers, but increasingly Indigenous language speakers



Though more likely to be low income & less likely to access public support, somewhat buffered by:

- Greater likelihood to live in 2 parent families
- Multiple generations living together
- In Larger households
- With multiple earners



#### Multiple vulnerabilities

- Parental unauthorized status
  - Less likely to access benefits (even for citizen children who qualify)
- Deportation of parents (food and houseinsecurity



#### Measurement Challenges

- Difficult to accurately capture (un) documented status
- Under-representation of Indigenous language speakers (a growing sector of Latino population)



#### Critical Importance of Mixed Methods Approaches

- For Linguistic & Cultural Accuracy
- Implement qualitative approach at initial phase to develop measures that capture constructs that represent community concerns and lived experience as well as linguistically accessible measures
- In last phase for member checks and to make sense of emerging evidence



### Response

- Response to Comments
- Future Directions for Measuring Income Instability

[Note: The following slides expand upon the brief responses given in the webinar due to limited time.]



### Response to comments

- Quality of data is not neutral to race/ethnicity.
  - Item or measurement bias, and nonresponse might vary by race/ethnicity, or within Hispanic subgroups.
- Capturing representative populations of Hispanics and construction of research samples.
  - Inherently takes "volunteers" to participate in studies.
  - Highly mobile families fall into pockets that often are not captured.
- Importance of collecting income information from ALL members of the household.



## Response to comments (cont'd)

- Predictability is a challenging dimension of income instability.
  - Findings from qualitative approaches can help tease out scenarios and generate hypotheses, but not the best approach to determine consequences.
  - Quantitative designs can contribute: (a) experiments that provide stable monthly income; (b) capitalizing on unexpected income shocks, e.g. natural disasters (monsoons that wipe out farmer's income), hitting cliffs in benefits, plant closings, etc.



## Promising directions

- Themes emerging from qualitative studies are testable in quantitative formats.
  - Examples
    - Availability of child care & trust of providers (testable in the NSECE)
    - Job connections among young mothers (testable in SIPP)
    - Access to transportation (testable with geo-coded data)
- Other hypotheses are not feasible to explore in large data.
  - Example the extent to which fear drives behavior
  - Need to see more triangulation across research strategies.



# Promising directions (cont'd)

- Shift from a deficit perspective to a strengths perspective.
  - Income instability could be a chain of events that lead to economic security, even in the case of unpredictable change.
  - How to support already high employment rates among lowincome Hispanic households.
- Developing meaningful constructs through mixed methods.
  - E.g., constructs that combine information about family income instability with community stability.



# Q&A

• See tip sheet posted on the Center website www.hispanicresearchcenter.org.

## Thank you!





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