



**U.S.**  
**Financial**  
**Diaries**

**The Financial Lives of**  
**Low-Income Households**

Jonathan Morduch (NYU)

Glasgow Centre for Population Health  
June 30, 2016

# % of population living daily on less than:

Measured by

**World Bank**

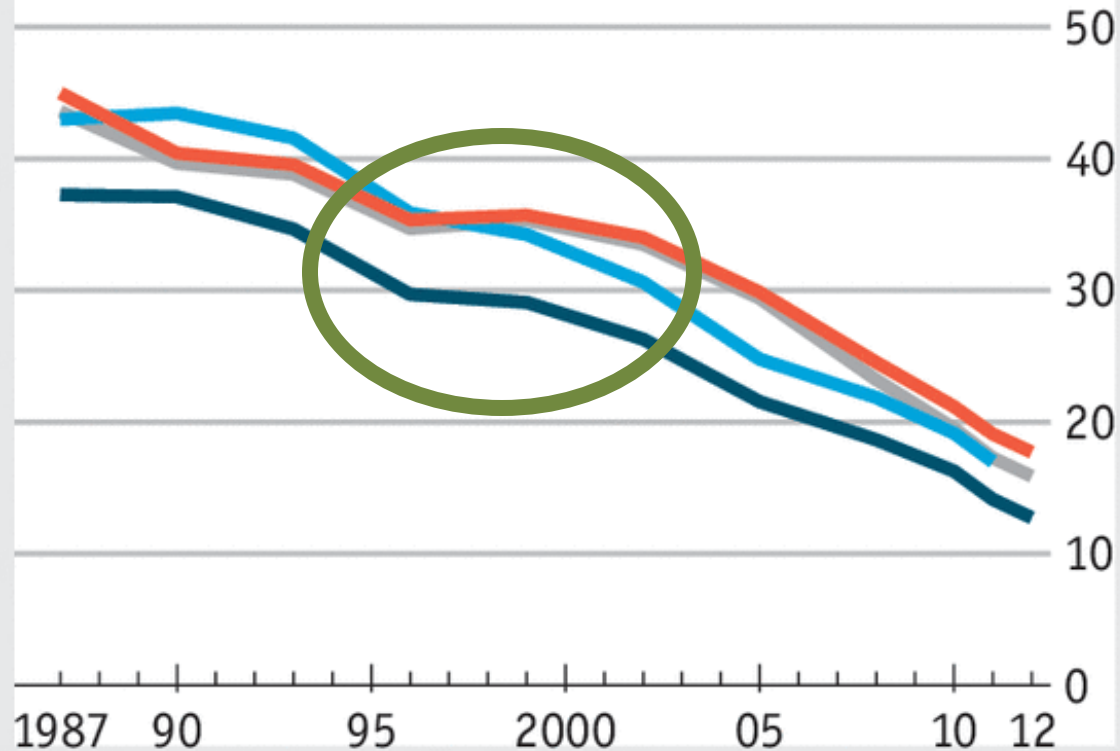
■ \$1.90

■ \$1.25†

**Global Consumption & Income Project**

■ \$1.90

■ \$1.25†



Sources: World Bank; Global Consumption & Income Project

The Economist. October 2015. "Poor statistics. The tricky work of measuring falling global poverty. The number of poor people is declining, but the data are fuzzy" <http://www.economist.com/news/finance-economics/21673530-number-poor-people-declining-data-are-fuzzy-tricky-work-measuring-falling>

How do you live on  
\$1.90 a day?

\$2...



Can't even  
buy a small  
coffee



# Cape Town, South Africa





# Rural Bangladesh





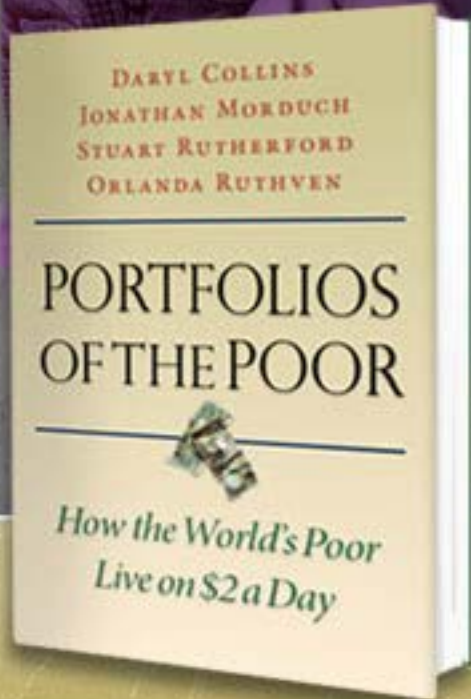
Delhi, India





# PORTFOLIOS OF THE POOR

How the World's Poor  
Live on \$2 a Day



By Daryl Collins, Jonathan Morduch,  
Stuart Rutherford and Orlanda Ruthven

If you earn \$2 a day, it's easy to assume...

You live hand-to-mouth

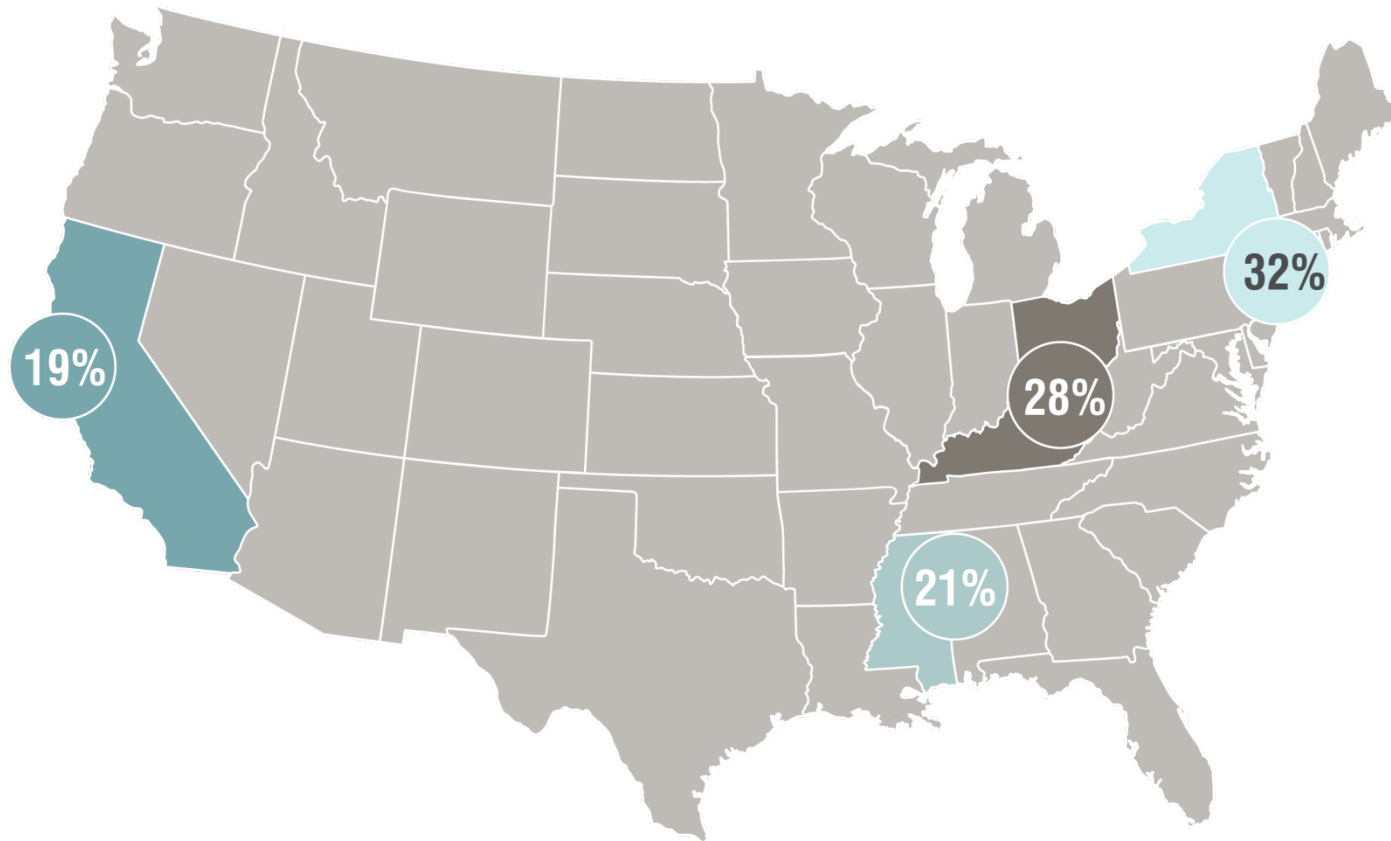
You can't plan for the future

You can't save

**You can't have much of a financial life**



# U.S. Financial Diaries



## CALIFORNIA

San Jose & environs  
Urban & rural  
46 hh; 78 adults

## EASTERN MISSISSIPPI

Rural  
50 hh; 87 adults

## OHIO/KENTUCKY

Cincinnati & environs  
Small town & rural  
69 hh; 130 adults

## NEW YORK CITY

Brooklyn & Queens  
Urban  
79 hh; 158 adults

PRELIMINARY DATA - DO NOT  
CITE

# US Financial Diaries

## Principal Investigators

- **Jonathan Morduch**, Professor of Public Policy and Economics, New York University
- **Rachel Schneider**, Senior Vice President, Insights and Analytics, Center for Financial Services innovation



The US financial diaries were created jointly by the NYU Financial Access Initiative, the Center for Financial Services Innovation, and Bankable Frontier Associates.





Leadership support for the project is provided by the Ford Foundation and the Citi Foundation, with additional support and guidance from the Omidyar Network.



FORDFOUNDATION

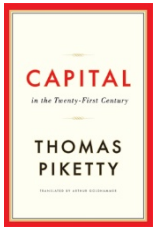
*Working with Visionaries on the  
Frontlines of Social Change Worldwide*

Citi Foundation

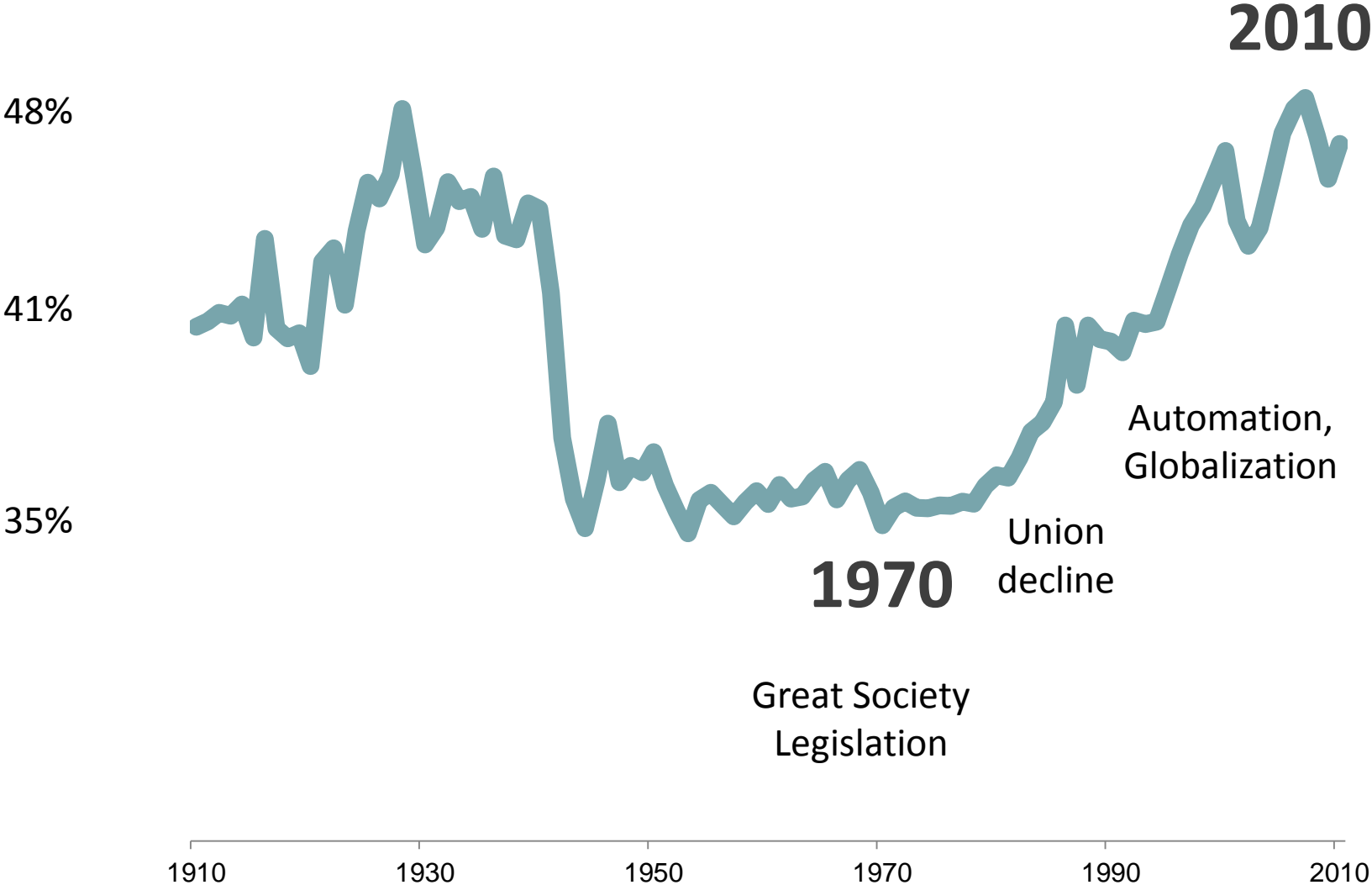


OMIDYAR NETWORK™



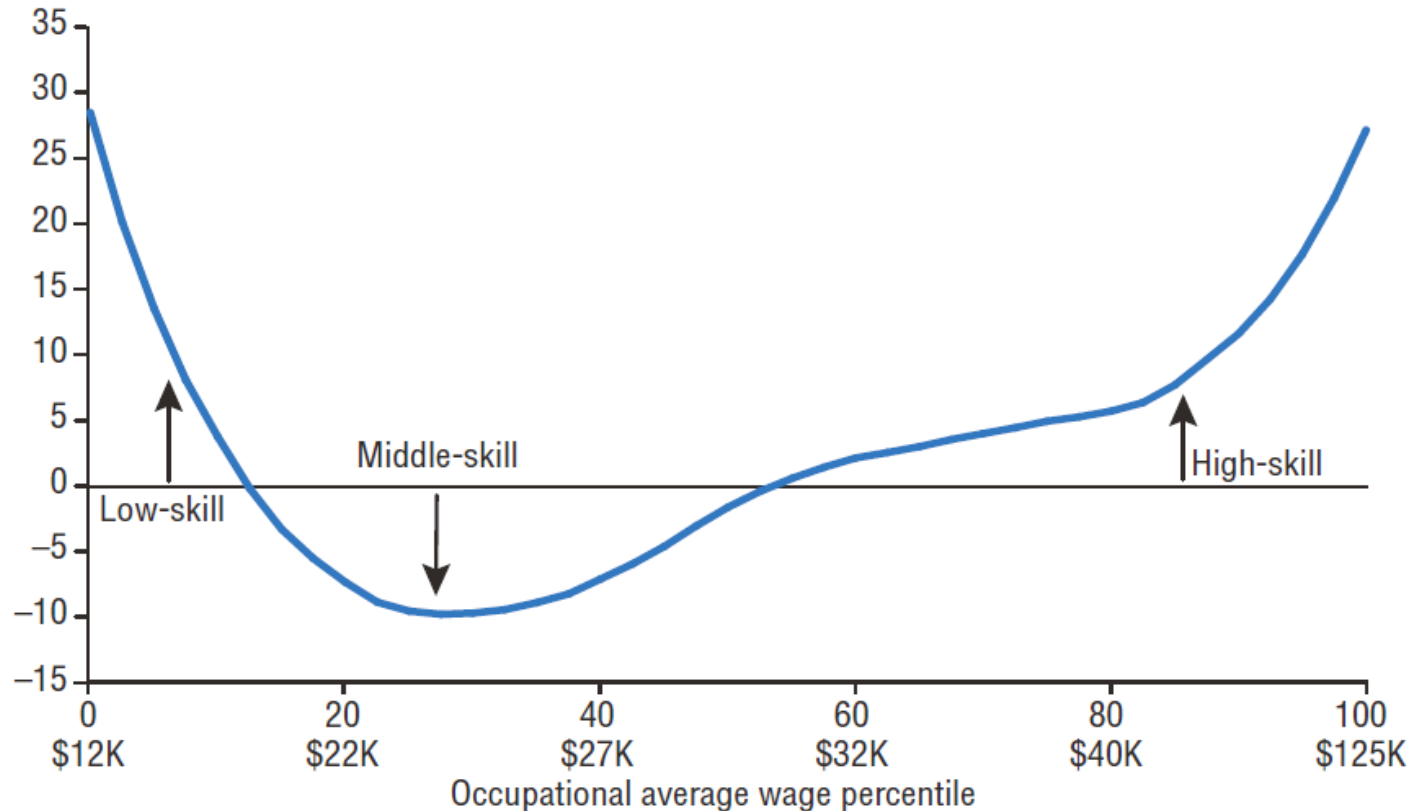


# Income share of the top 10%, U.S.



# Middle-skill jobs shrinking

Percentage change in employment share, 1980–2005



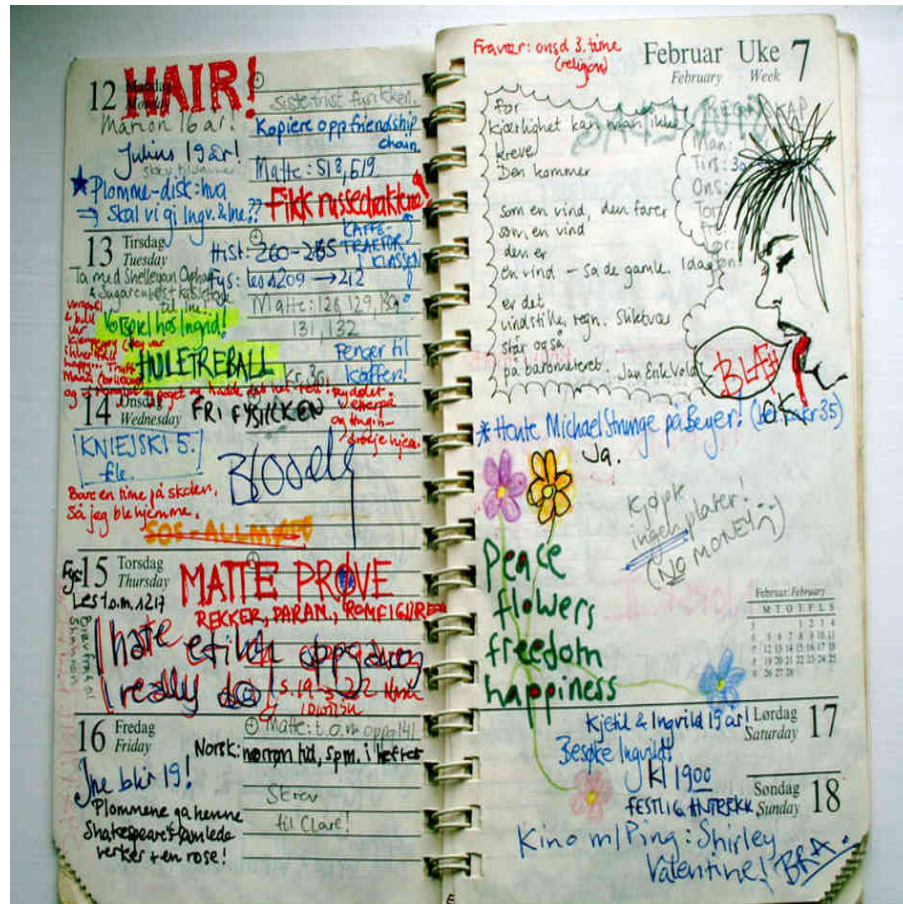
NOTE: Dollar amounts are annual income in 2004 dollars.

Chart 1 in Anton Cheremukhin. "Middle-Skill Jobs Lost in U.S. Labor Market Polarization." Dallas Fed, *Economic Letter* 9 (5), May 2014.  
SOURCE: Adapted with permission from "The Growth of Low-Skill Service Jobs and the Polarization of the U.S. Labor Market," by David H. Autor and David Dorn, *American Economic Review*, vol. 103, no. 5, 2013, pp. 1553–97.

# Problem: We have annual data mostly



# Life is lived day to day, month to month



# US Financial Diaries

**High-frequency data**  
Households surveyed  
every 2-4 weeks



**INCOME**



**ASSETS**



**CASH FLOW**

**244 Households**  
**316,763 cash flows**  
100 spending categories  
38 income types  
69 financial instruments

# Margin of error

## US Financial Diaries

Margin of error



Missing outflows + inflows divided by total outflows

**Volatility**



# E. Mississippi





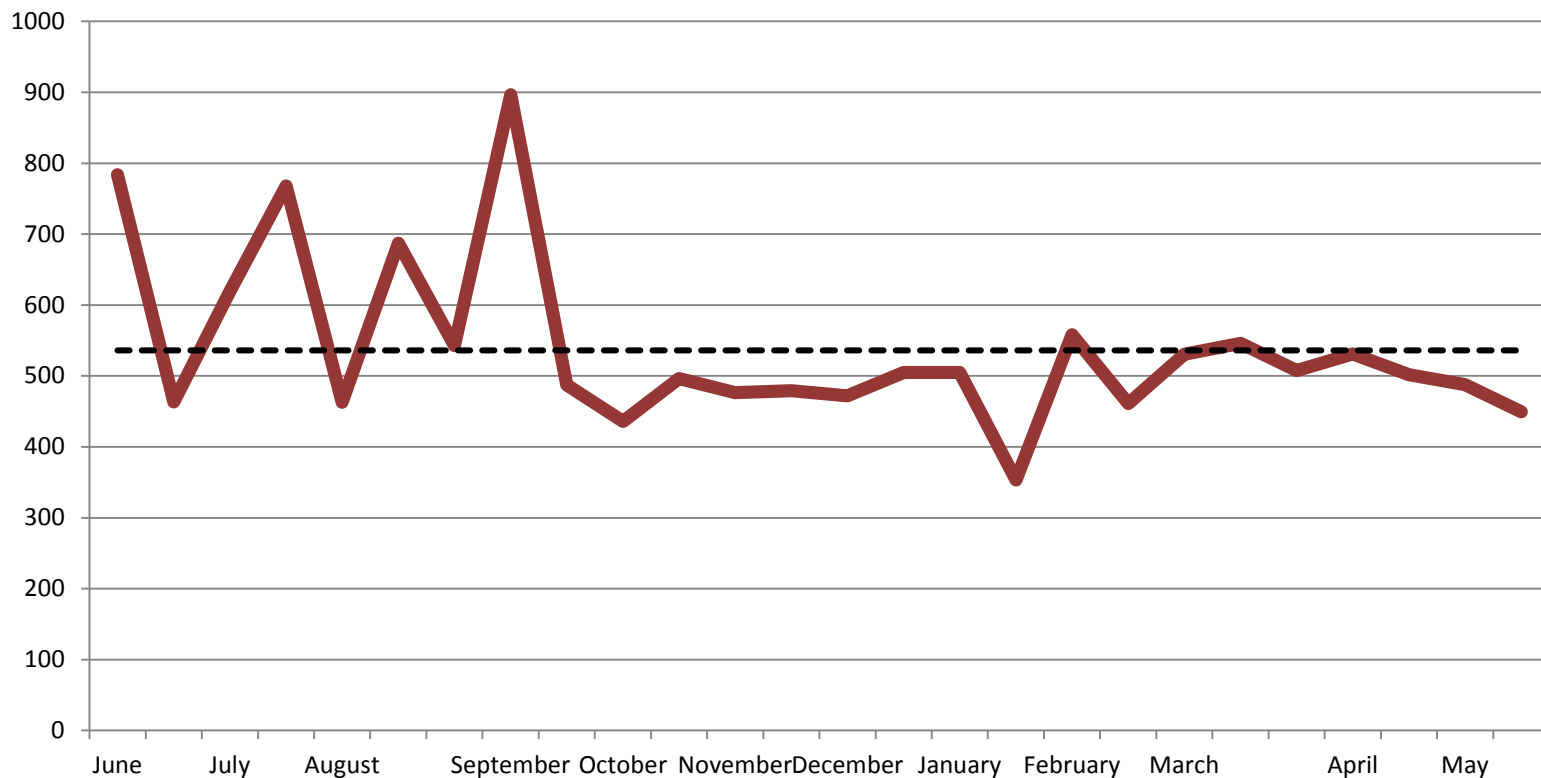


Macon and Columbus, August 2013, Photo: Whitten Sabbatini



Macon and Columbus, August 2013, Photo: Whitten Sabbatini

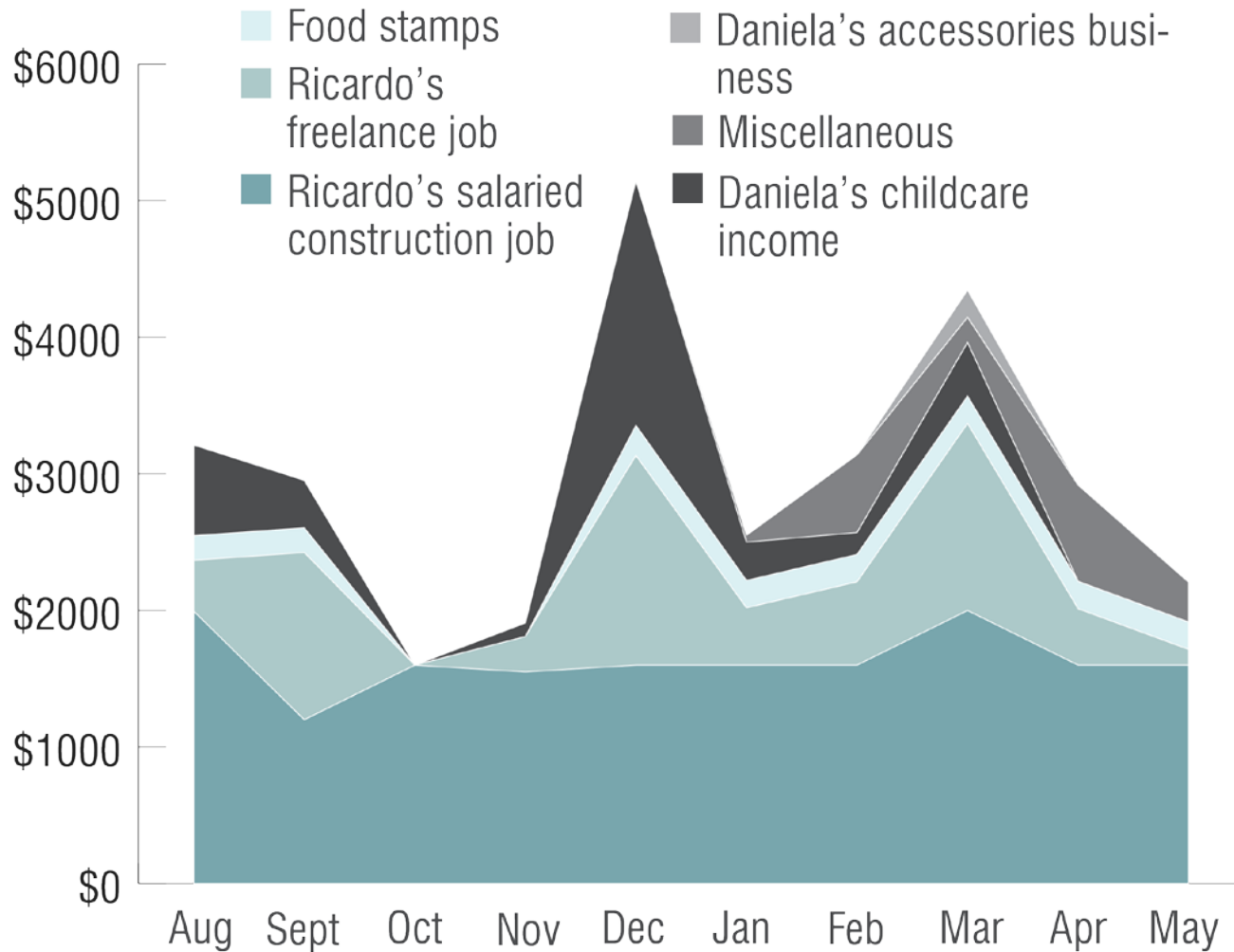
# Janice's bi-weekly paychecks



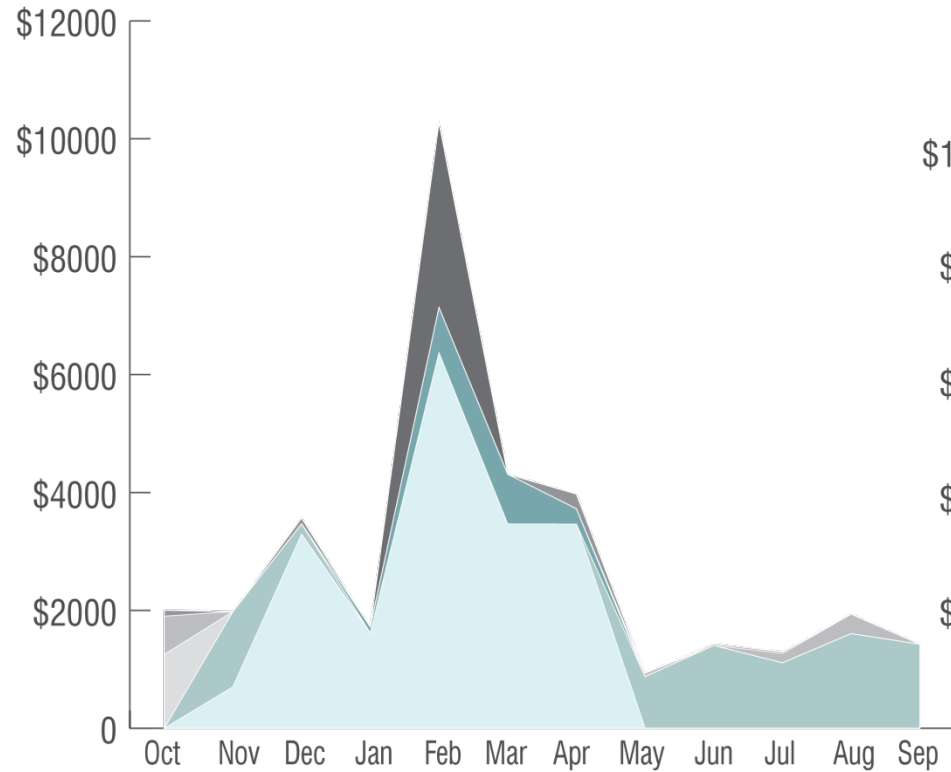
After taxes, Janice and her son Marcus had income over \$22,000, about 20 percent over the poverty line in rural Mississippi

Poor 5 months

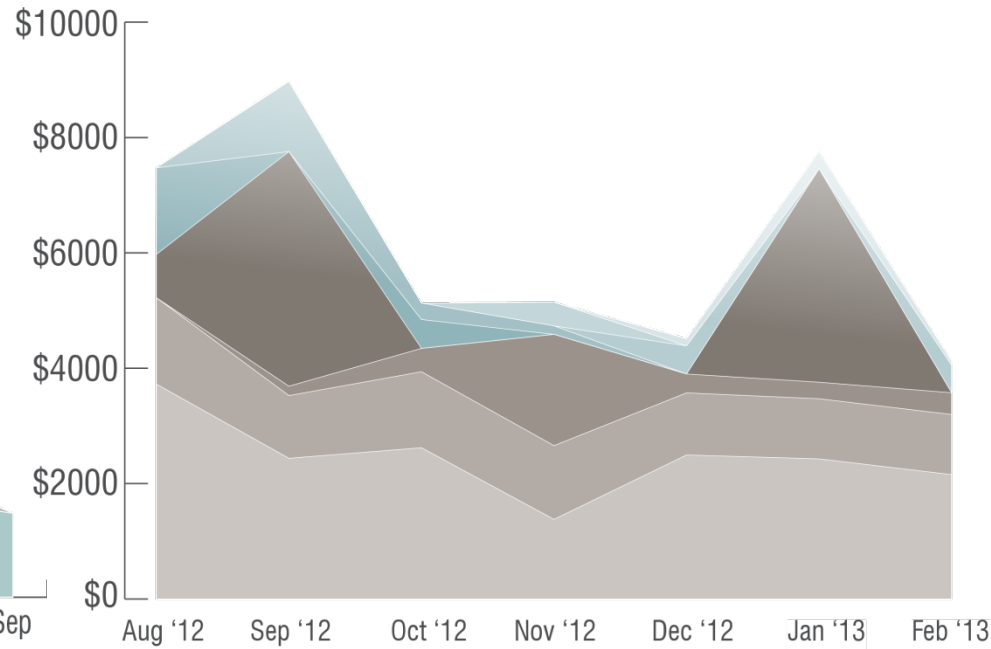
# Garza Family Income, N. California



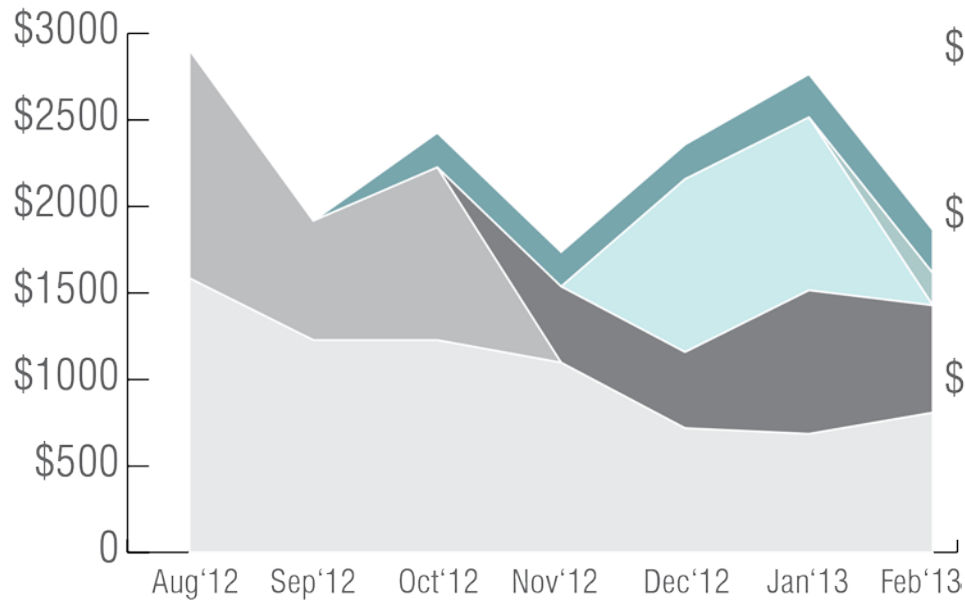
# Sandra Young Brooklyn, NY



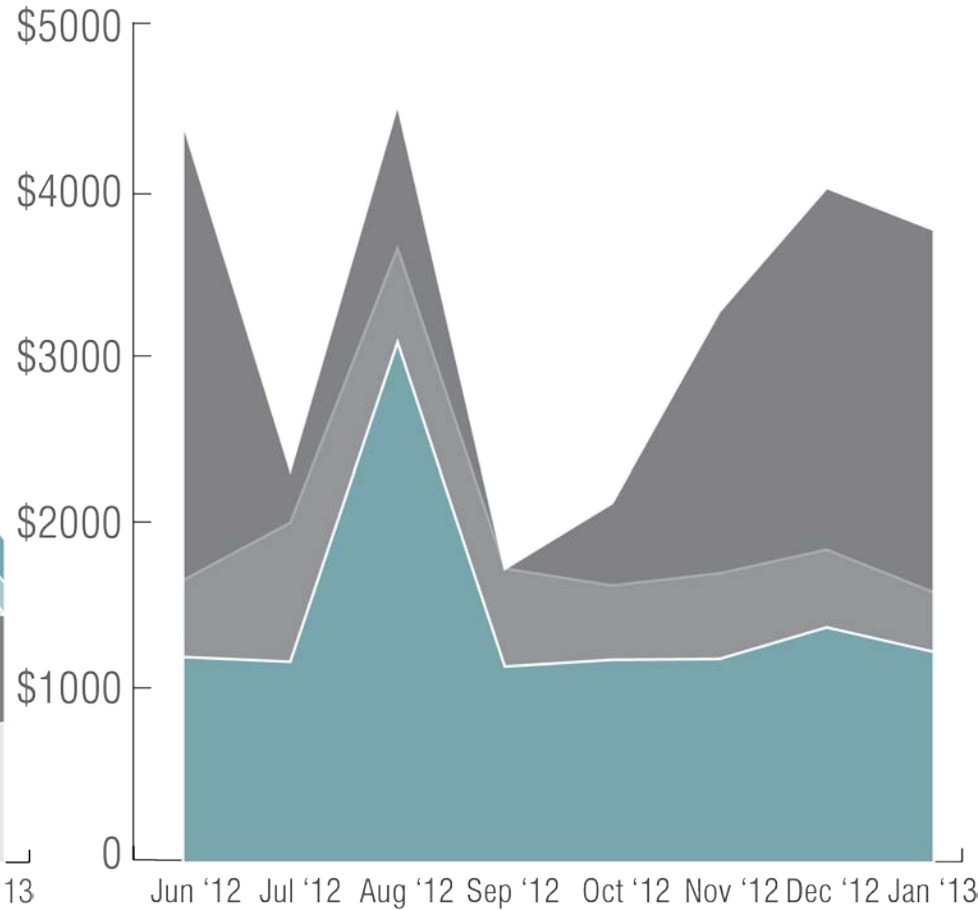
# Johnson Family Cincinnati



# Hossein Family Queens, NY



# Adrian Family Mississippi













# ***Spikes and Dips***

# Few families have steady income

+ 25%



Average  
Income

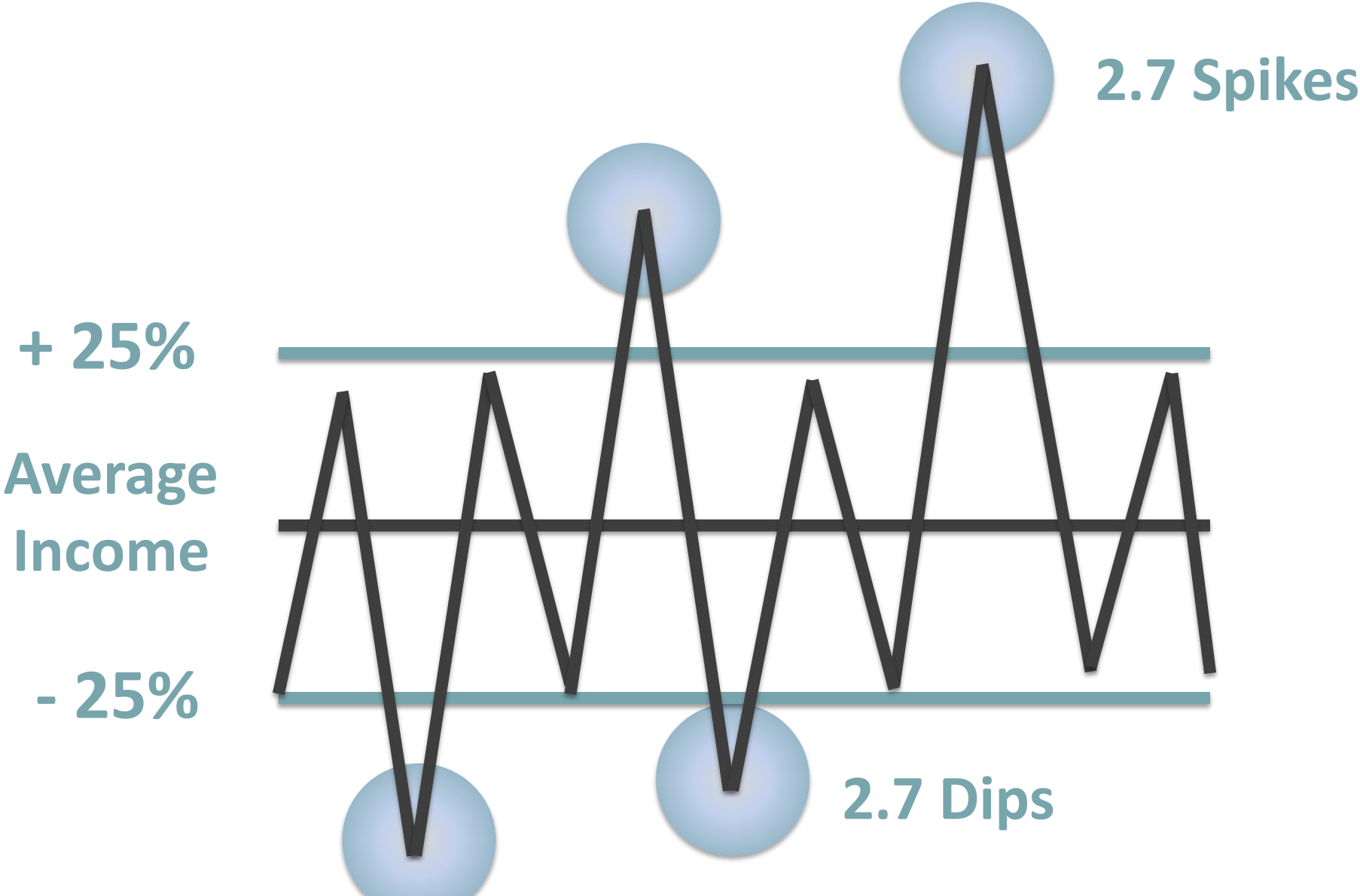


- 25%



# Five spikes/dips per year on average

US Financial Diaries



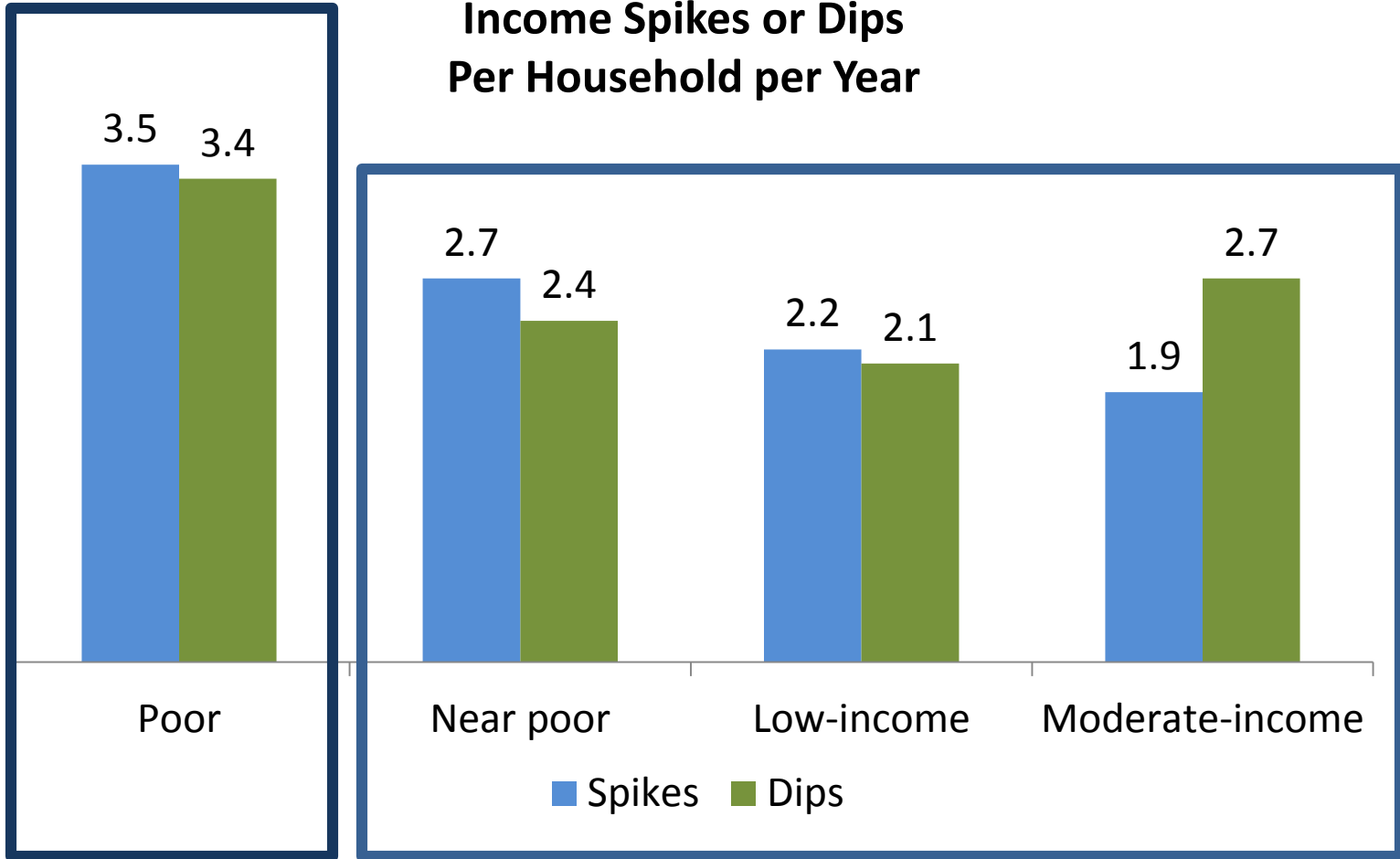
# Typical causes

- **Work hours** rising and falling
- **Lumpy payments (tax refunds, etc.)**
- **Health problems and emergencies**
- **Predictable childcare and transportation** needs (with uncertain timing and size)
- **Shifting household membership**

# Spikes and dips

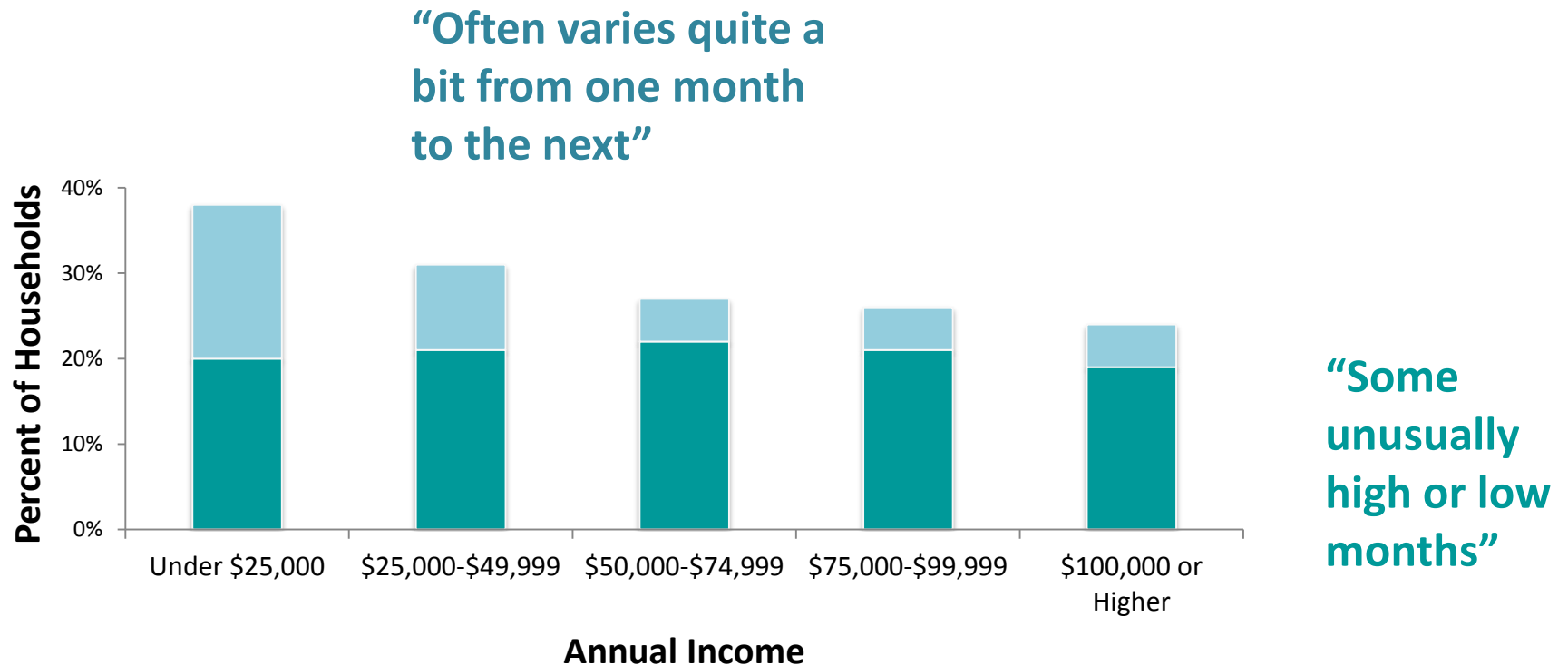
US Financial Diaries

Income Spikes or Dips  
Per Household per Year



# Self-reported month to month income variability

SHED - Federal Reserve, 2013 *Survey of Household Economics and Decisionmaking* (7/14)

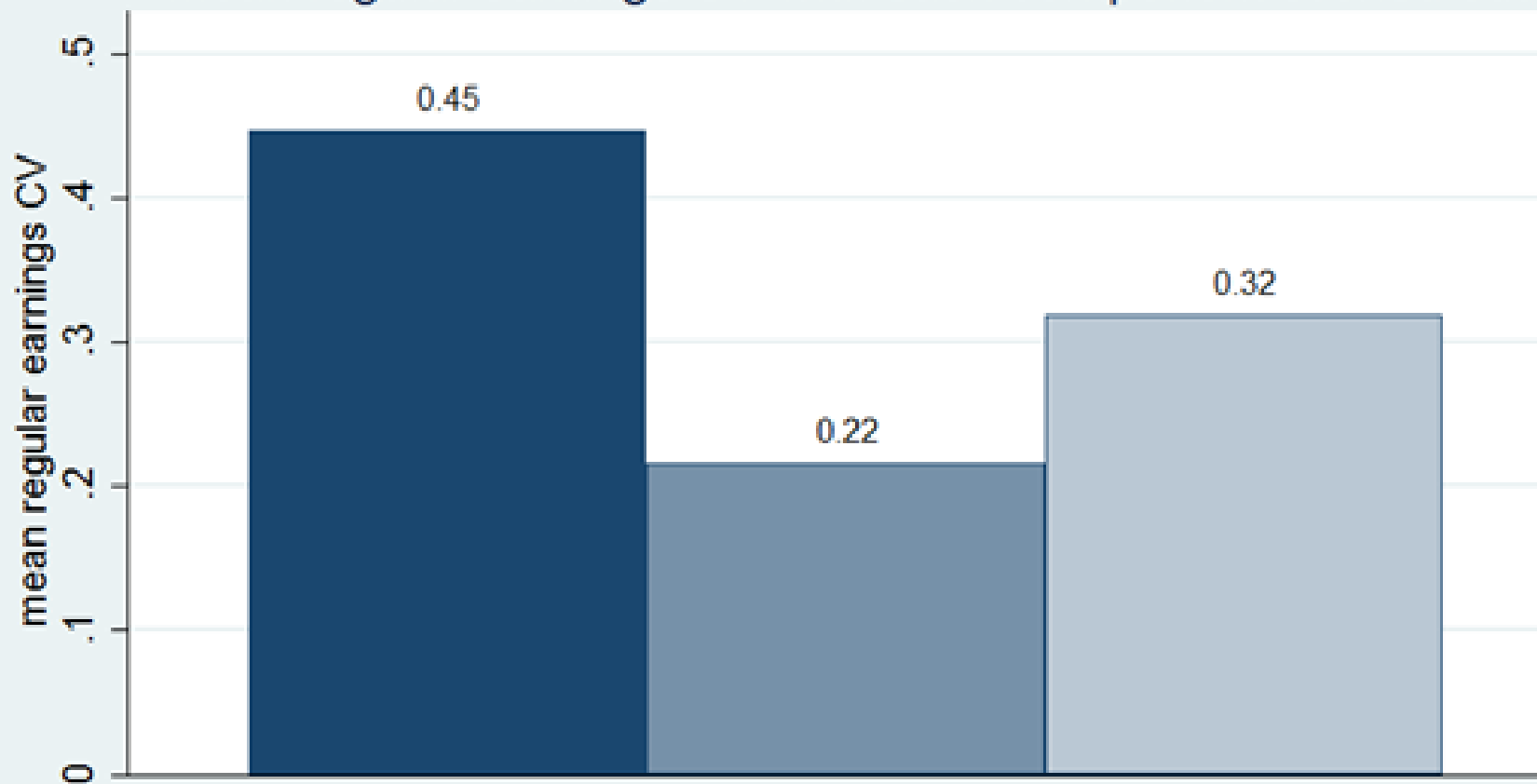


SHED: Implemented in 9/2013. Nationally-representative sample. Online panel of 50,000 individuals sampled randomly. 6,912 asked to take the survey. About 60% (4,134) agreed. Quick survey (19 minutes median time)

# Most of the volatility is within job

US Financial Diaries

Mean regular earnings CV with each component evened out



- CV of regular earnings (N=169)
- CV of regular earnings, within-jobs smoothed (N=169)
- CV of regular earnings, between-jobs smoothed (N=169)

excludes households with any \$0 income months or with tax-smoothed income CV > 1

# Economic Inequalities

Income

Wealth

**Steady, reliable, predictable finances**



**Q: Which of the following is more important to you?**

A. Financial Stability

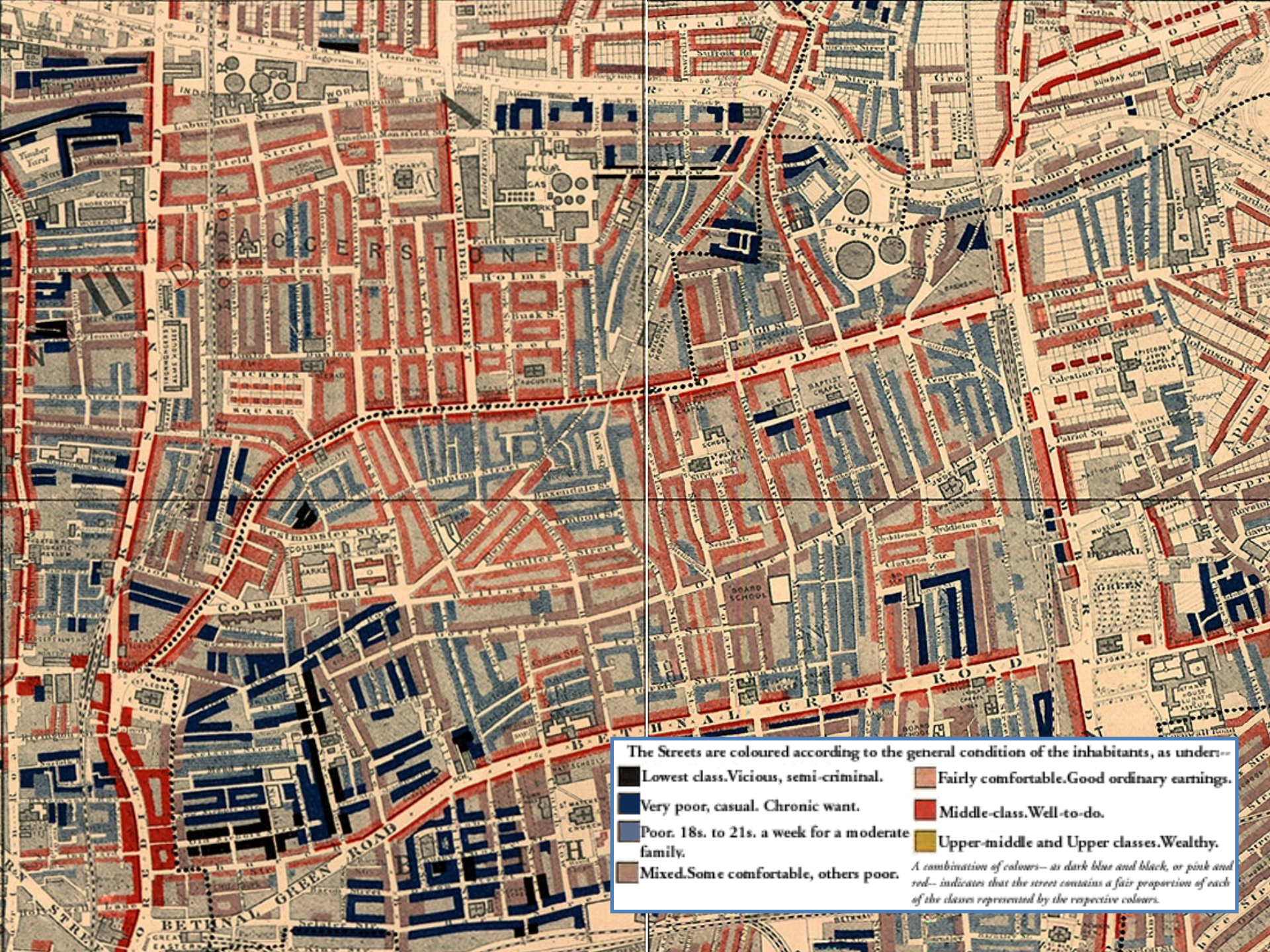
B. Moving up the income ladder



Poverty







The Streets are coloured according to the general condition of the inhabitants, as under:-

<span style="display: inline-block; width: 15px; height: 15px; background-color: black; border: 1px solid black;"></span> Lowest class. Vicious, semi-criminal.	<span style="display: inline-block; width: 15px; height: 15px; background-color: #f08080; border: 1px solid black;"></span> Fairly comfortable. Good ordinary earnings.
<span style="display: inline-block; width: 15px; height: 15px; background-color: #000080; border: 1px solid black;"></span> Very poor, casual. Chronic want.	<span style="display: inline-block; width: 15px; height: 15px; background-color: #ff0000; border: 1px solid black;"></span> Middle-class. Well-to-do.
<span style="display: inline-block; width: 15px; height: 15px; background-color: #0000ff; border: 1px solid black;"></span> Poor. 18s. to 21s. a week for a moderate family.	<span style="display: inline-block; width: 15px; height: 15px; background-color: #ffff00; border: 1px solid black;"></span> Upper-middle and Upper classes. Wealthy.
<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; border: 1px solid black;"></span> Mixed. Some comfortable, others poor.	

*A combination of colours— as dark blue and black, or pink and red— indicates that the street contains a fair proportion of each of the classes represented by the respective colours.*



## Charles Booth, Poverty Map of London, late 19<sup>th</sup> c

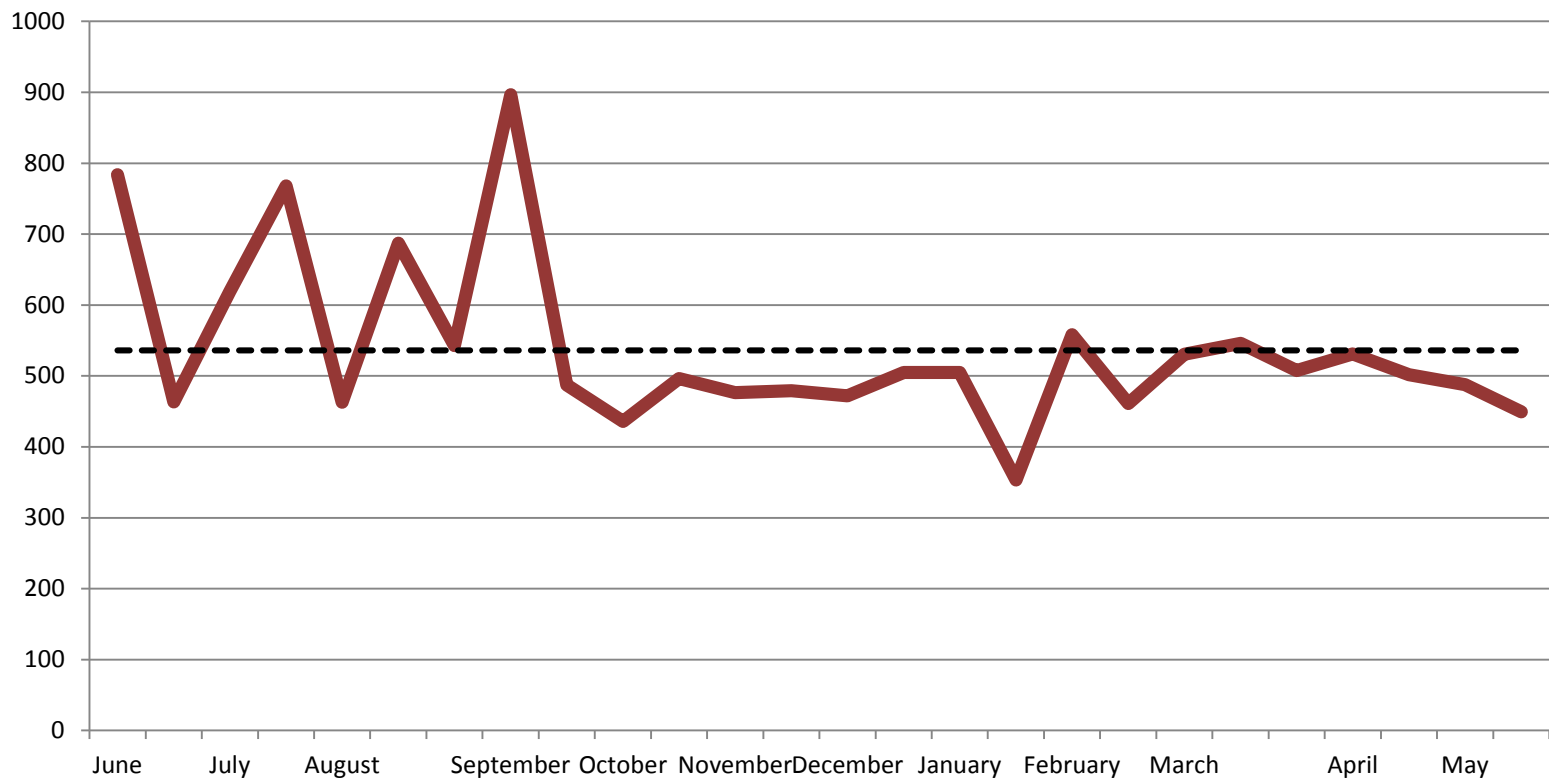
**Dark  
Blue**

Casual earnings: "very poor" (below 18s. per week for a moderate family). **The labourers do not get as much as three days work a week**, but it is doubtful if many could or would work full time for long together if they had the opportunity. Class B is not one in which men are born and live and die so much as a deposit of those who from mental, moral and physical reasons are incapable of better work.

**Light  
Blue**

Intermittent earnings. 18s to 21s per week for a moderate family. **The victims of competition and on them falls with particular severity the weight of recurrent depressions of trade.** Labourers, poorer artisans and street sellers. **This irregularity of employment may show itself in the week or in the year: stevedores and waterside porters may secure only one of two days' work in a week, whereas labourers in the building trades may get only eight or nine months in a year.**

# Janice's bi-weekly paychecks

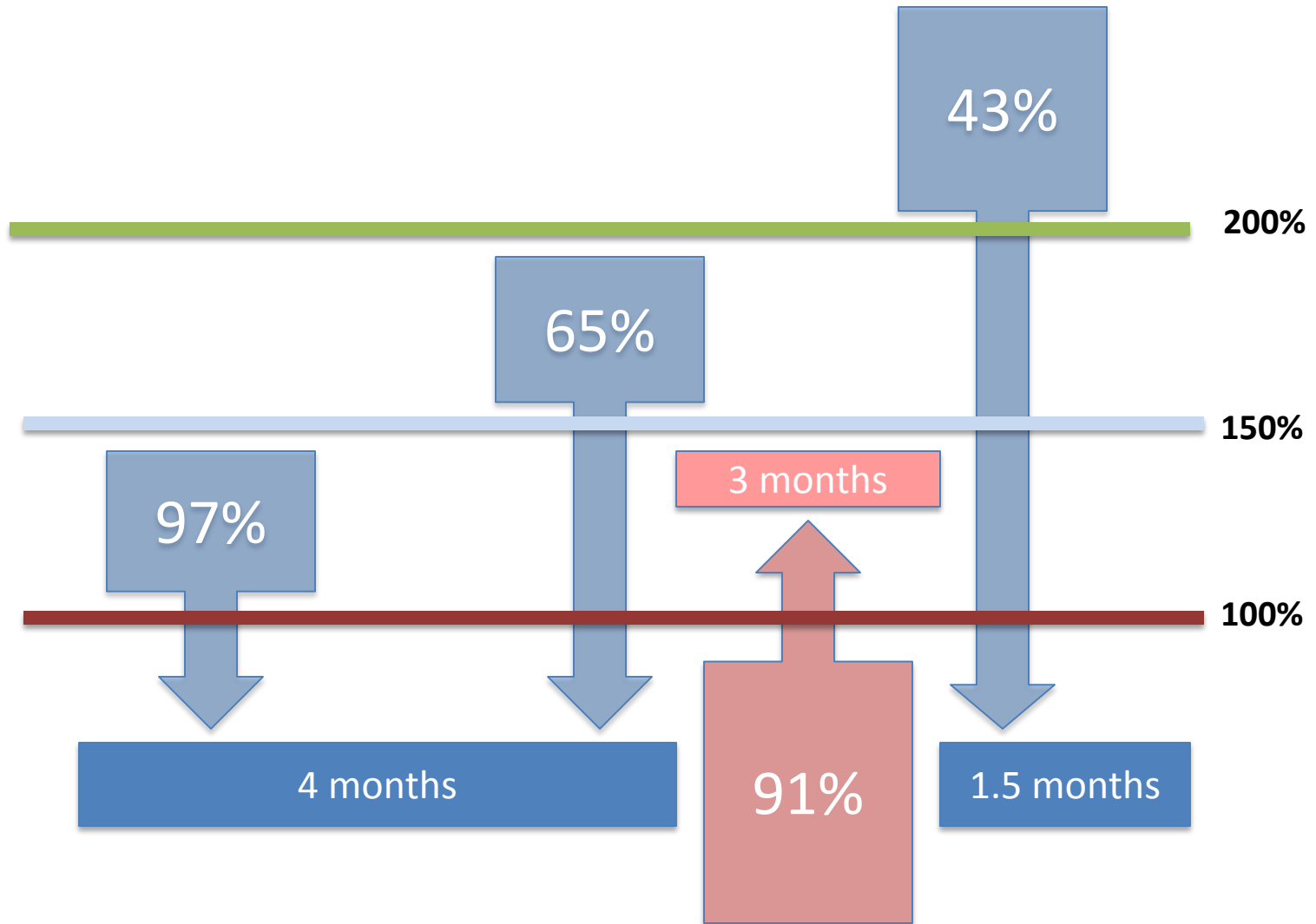


After taxes, Janice and her son Marcus had income over \$22,000, about 20 percent over the poverty line in rural Mississippi

Poor 5 months

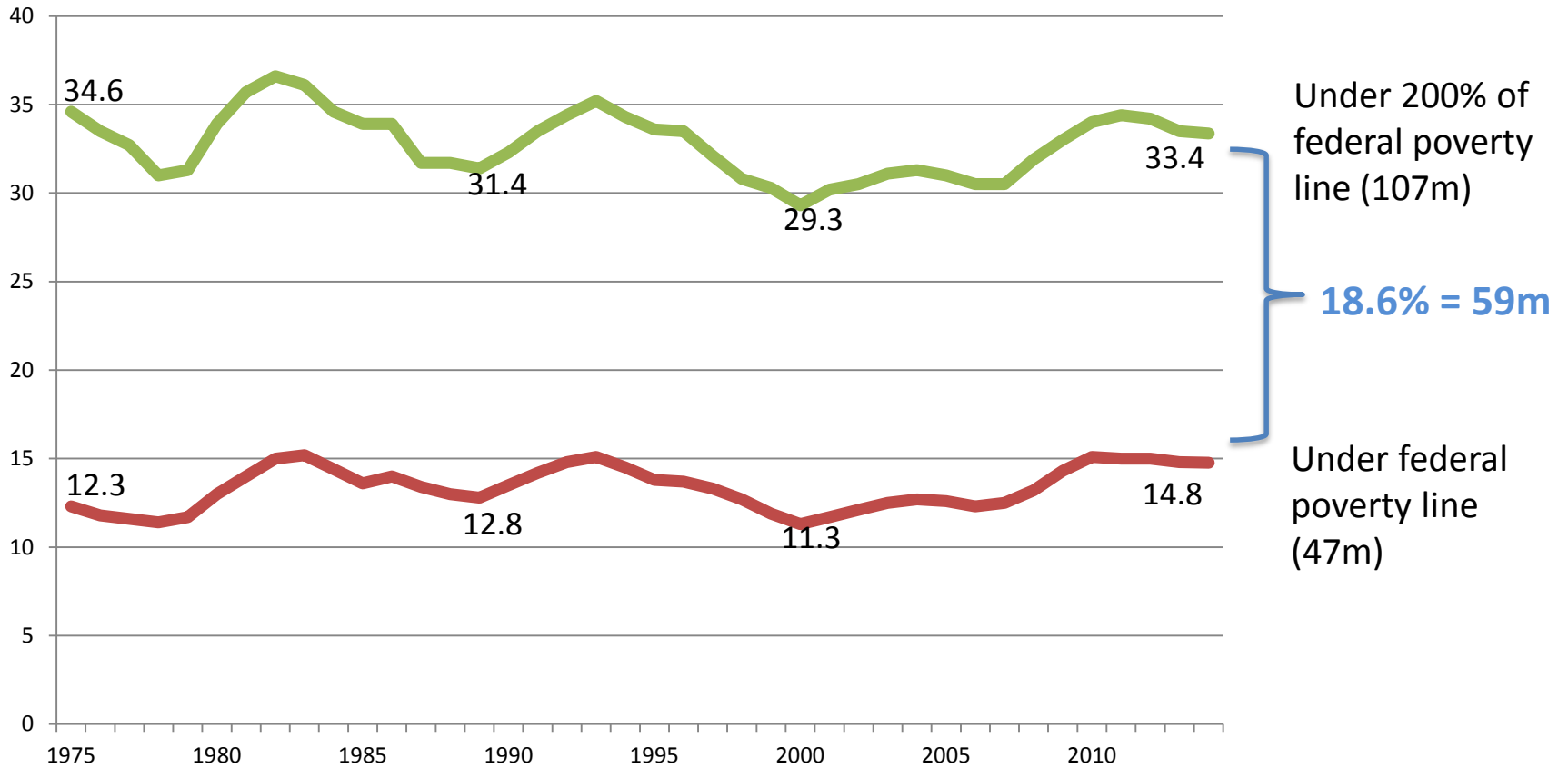
# Sometimes poor

% of USFD households with annual income above the (supplemental) poverty line that spent 1+ month with income under the poverty line



# Near poor

Percent below federal poverty line and < 200% of the poverty line, 1975-2014



Source: U.S. Bureau of the Census, Current Population Survey, Annual Social and Economic Supplements.  
<https://www.census.gov/hhes/www/poverty/data/historical/people.html>

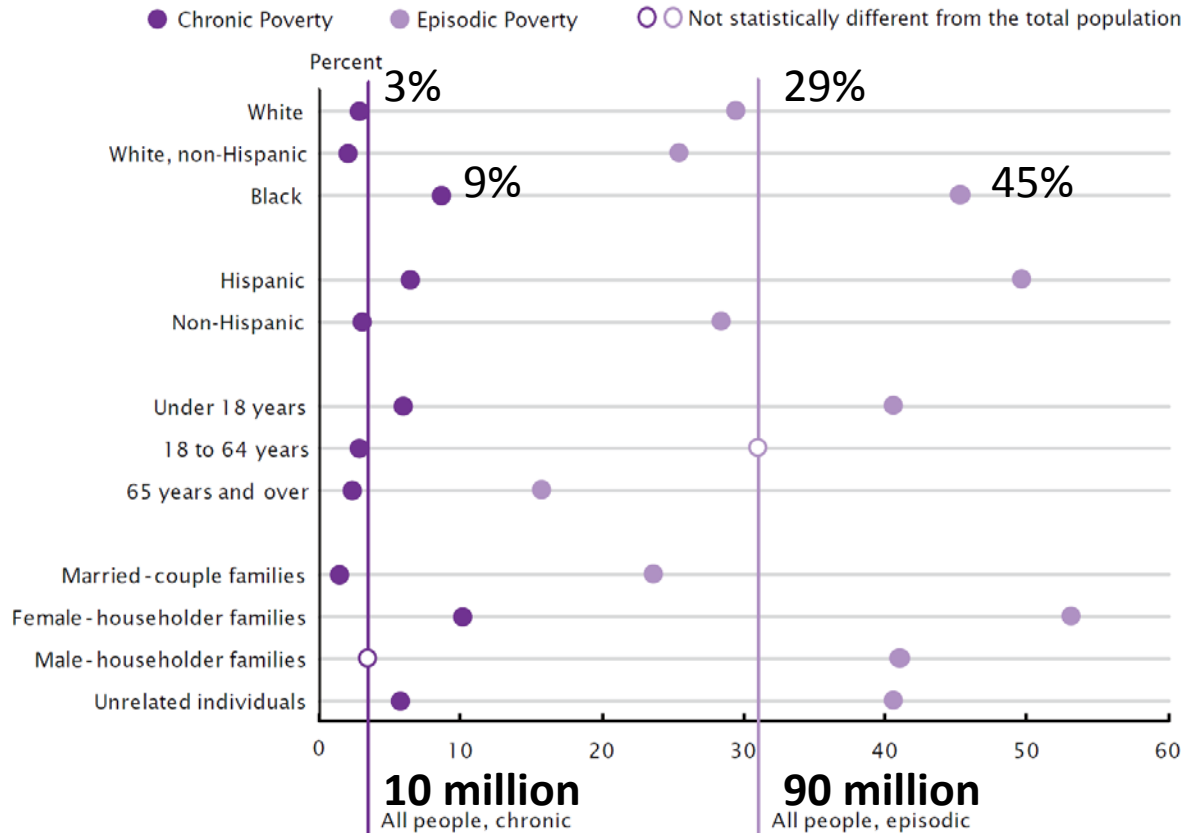


# Chronic and Episodic poverty, 2009-11

Ashley Edwards. "Dynamics of Economic Well-Being: Poverty, 2009–2011" US Census Bureau. January 2014

Figure 3.

## Chronic and Episodic Poverty by Selected Characteristics: 2009 to 2011



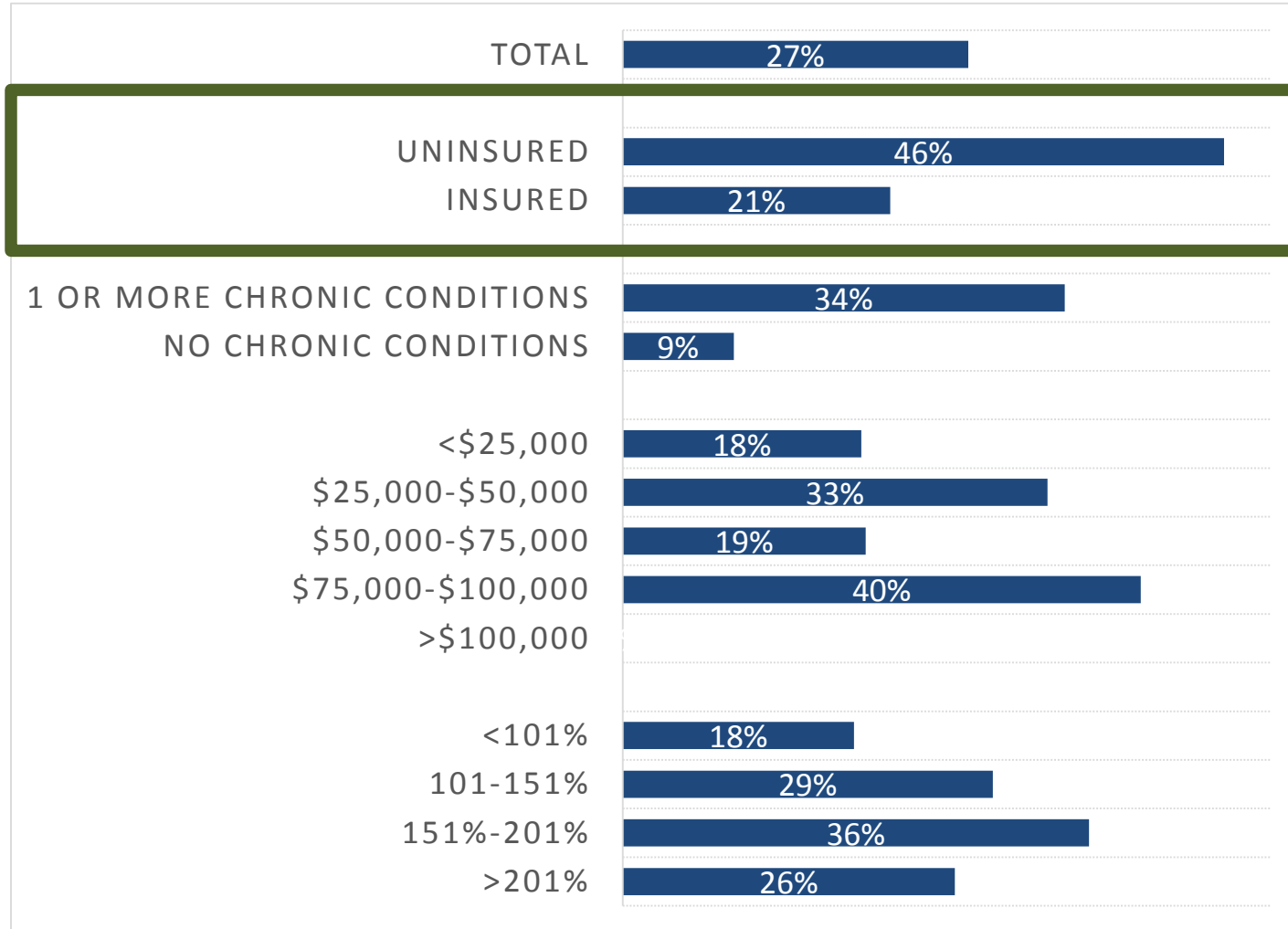
Note: Federal surveys, including the SIPP 2008 Panel, give respondents the option of reporting more than one race. These data can be shown in two ways: (1) as mutually exclusive from other race groups, which may be denoted by "alone" or (2) not mutually exclusive with other race groups, denoted by "alone or in combination with other race groups." This figure shows race using the first method. Because Hispanics may be of any race, data for Hispanics are not mutually exclusive with race. Female householders, no husband present; male householders refer to male householders, no wife present.

Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel. For information on confidentiality protection and sampling and nonsampling error, see <[www.census.gov/sipp/source.html](http://www.census.gov/sipp/source.html)>.

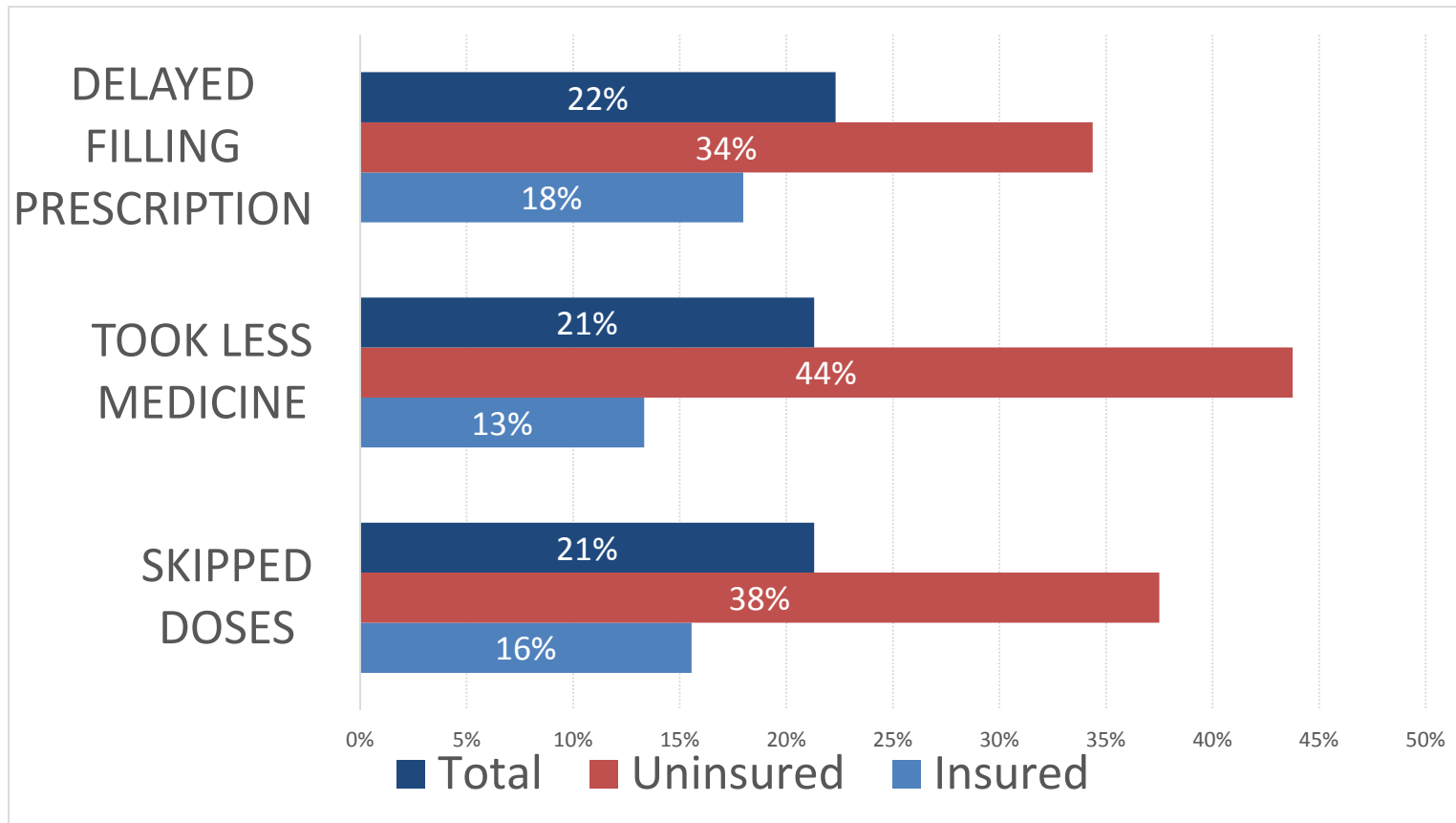
Health and finance

# Medication non-compliance

Household heads self-reports, to save money

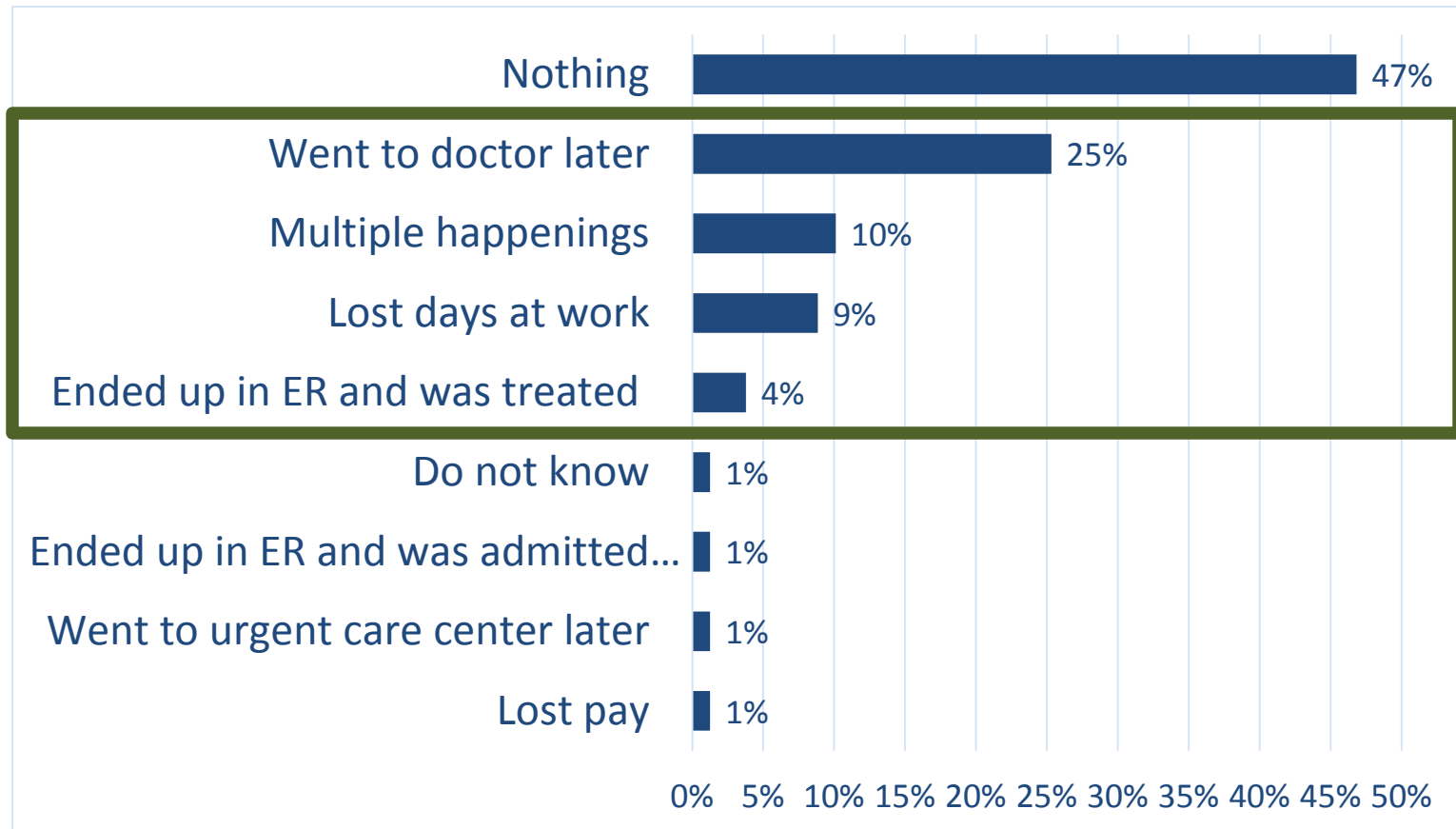


# Noncompliance





# Results of delaying or not getting care



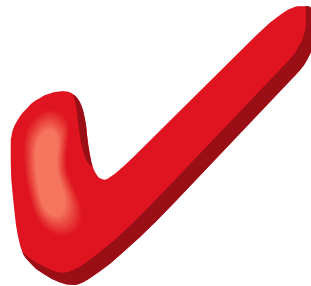
Saving

**Now** **Soon** **Later**

**Overspending  
now**



**Saving  
for  
Soon**



**Saving  
for  
Later**

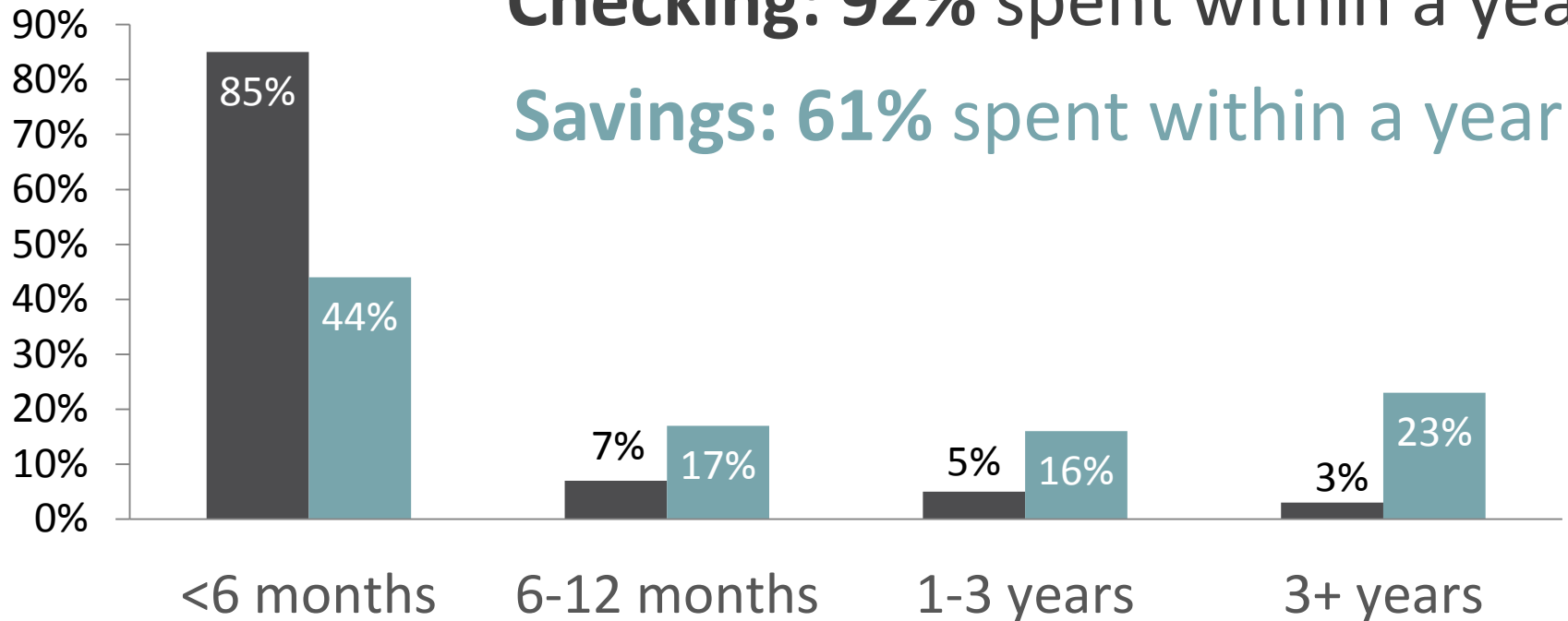




# Most savings are spent soon

**Checking: 92% spent within a year**

**Savings: 61% spent within a year**



■ Checking accounts (87% of households have)

■ Savings accounts (65% of households have)

**Structure**

**Flexibility**



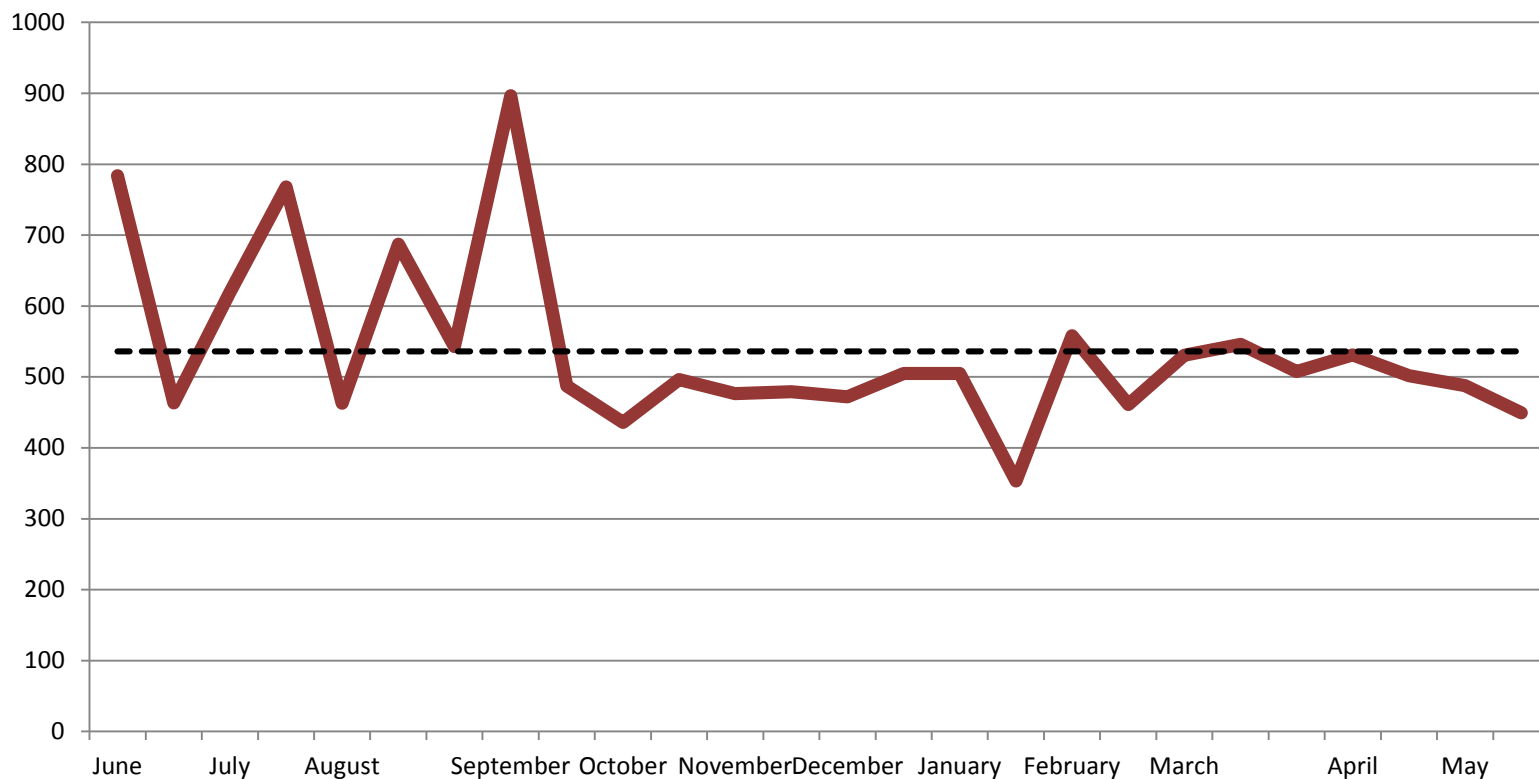








# Janice's bi-weekly paychecks



After taxes, Janice and her son Marcus had income over \$22,000, about 20 percent over the poverty line in rural Mississippi

Poor 5 months







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**Conclusion**

# Inequality and money

- Started with poverty and **income** (1960s)
- Then focus on **assets** (1990s)
- Needed: **cash flows** & financial management
- Intra-year volatility deserves more attention.
- Continuing question: Do short-term problems translate into long-term problems?



# Final thoughts

- Volatility is a big part of today's financial lives.
- Low saving balances  $\neq$  reckless spending
- Families have strategies. Financial institutions can help them do better.
- Agenda: Good jobs / good finance