The Supplemental Expenditure Poverty Measure: A New Method for Measuring Poverty

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Introduction

- The question: how to measure poverty
- How we got interested in the topic
- Why is a poverty measure important?
- Two main measures: income and consumption
- Idea in both: compare a household's income/consumption to a threshold, call it poor if falls below that threshold (threshold=enough to buy a Minimum Bundle of necessities of life)

Our Study

- We argue that if there is any transferring of resources across periods, both income and consumption measures are conceptually flawed
- We argue that low income families do some shifting of resources across periods
- We propose a new, third measure that estimates that shifting and computes a new measure of “available resources” from multiple periods to compare to the threshold

- We also argue that spending is a better measure of available resources than income
- If a family spent $2,000 in cash on things in a month, that must have been “available” to them to purchase the Minimum Bundle
- But we add to current spending the potential spending they could have had from easily accessible resources from the past or from the future
- “Liquid Available Resources” is the measure
- “SEPM”

Findings

- Using *current* (annual) spending, poverty rates both in levels and trends are not too different than Census income poverty rates (called the “SPM”), using Census threshold

- But the threshold used is critical because expenditure and income are very differently distributed at the bottom—you can get expenditure poverty rates higher or lower than income poverty rates, for different thresholds (or different adjustments to resources—see below)

Findings (continued)

- Adding in liquid assets as a measure of potential resources (pulling resources from the past) makes only a small difference in the poverty rate
- But adding in potential credit card borrowing has a possibly greater effect, possibly lowering poverty rates by 2 percentage points
- But we have only a crude estimate of potential card borrowing: more research is needed

Next:

- Quick critique of income and consumption measures then
- A few details and graphs from our study

Income Poverty: Critique

- Excludes liquid and easily available assets (e.g., bank balances)
- Excludes credit card borrowing to buy the Minimum Bundle
- Well known to be underreported on surveys
- Observed spending (assuming it is better reported!) is superior: will capture all formal and informal sources of income (at least if underreported income shows up in spending)

Consumption Poverty: Critique

- Counts service flows from autos and homes but those are entirely illiquid; cannot be used to buy the Minimum Bundle

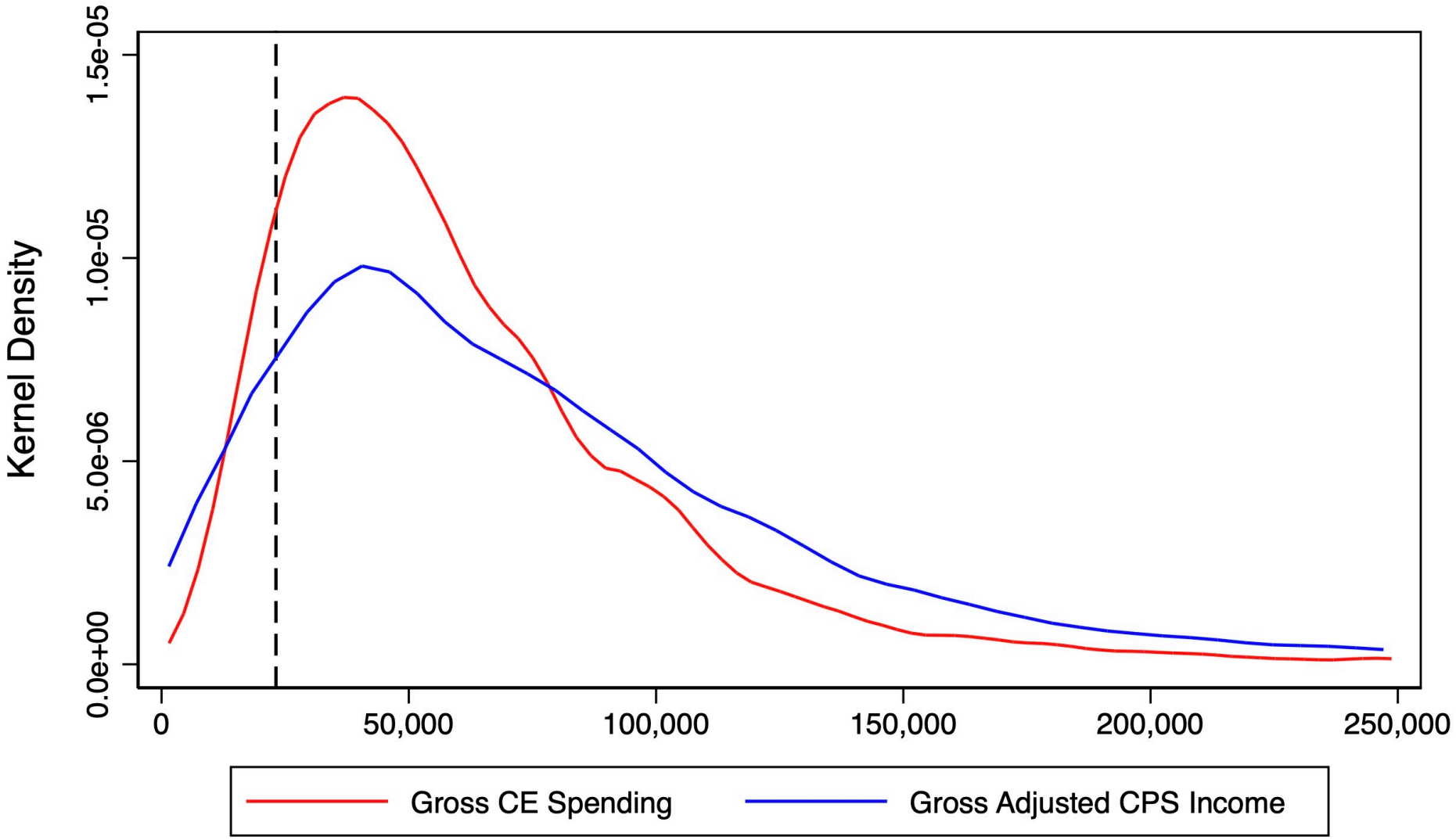
- If there is any transfer of liquid resources from the past or the future, it will get it wrong. Example:

- Family 1 charges $400 on their credit card to buy the Minimum Bundle, Family 2 does not, even though they have the same income
- Family 1 will be non-poor and Family 2 will be poor
- The problem is the annual time frame; consumption in one period does not represent available resources
- Consumption is *NOT* a measure of permanent income

Our Study: Use Current then Potential Spending as "Available"

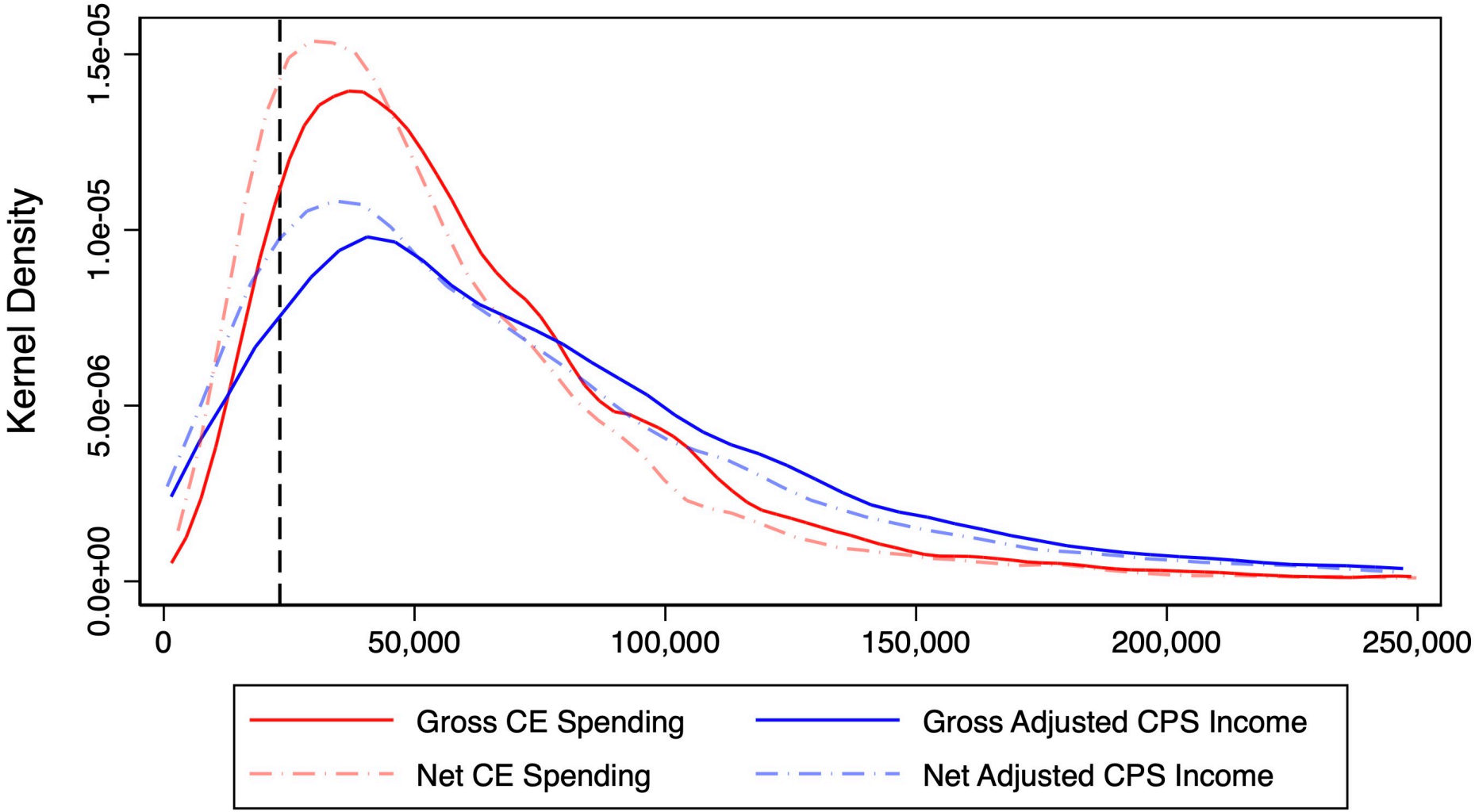
- Spending data: Consumer Expenditure (CE) Survey, 2004-2019
- Count ALL cash expenditures as available (including loan repayments and all spending on "saving")
- Estimate poverty rates using the Census "Supplemental Poverty Threshold" (the best threshold; and uses area adjustments for COL)
- Like Census, add certain in-kind expenditures not reported in survey
- Like Census, deduct certain work-related, medical, and other expenses, for comparability
- Then add liquid assets from bank accounts and add potential additional credit card borrowing

Figure 2: Distribution of Gross CE Spending and Gross Adjusted CPS Income, 2019



Notes: Gross CE Spending is total household spending on all items in the year. Gross Adjusted CPS Income is total income in the year after-tax and with SNAP benefits added. Dashed line denotes average threshold.

Figure 3: Gross and Net CE Spending and Adjusted CPS Income, 2019



Notes: Gross CE Spending is total household spending on all items in the year. Gross Adjusted CPS Income is total income in the year after-tax and with SNAP benefits added. Net measures include four in-kind transfers and exclude three types of capped adjustments (work-related and child care costs, child support paid, and medical out of pocket expense). Dashed line denotes average threshold.

Poverty Rates, 2019

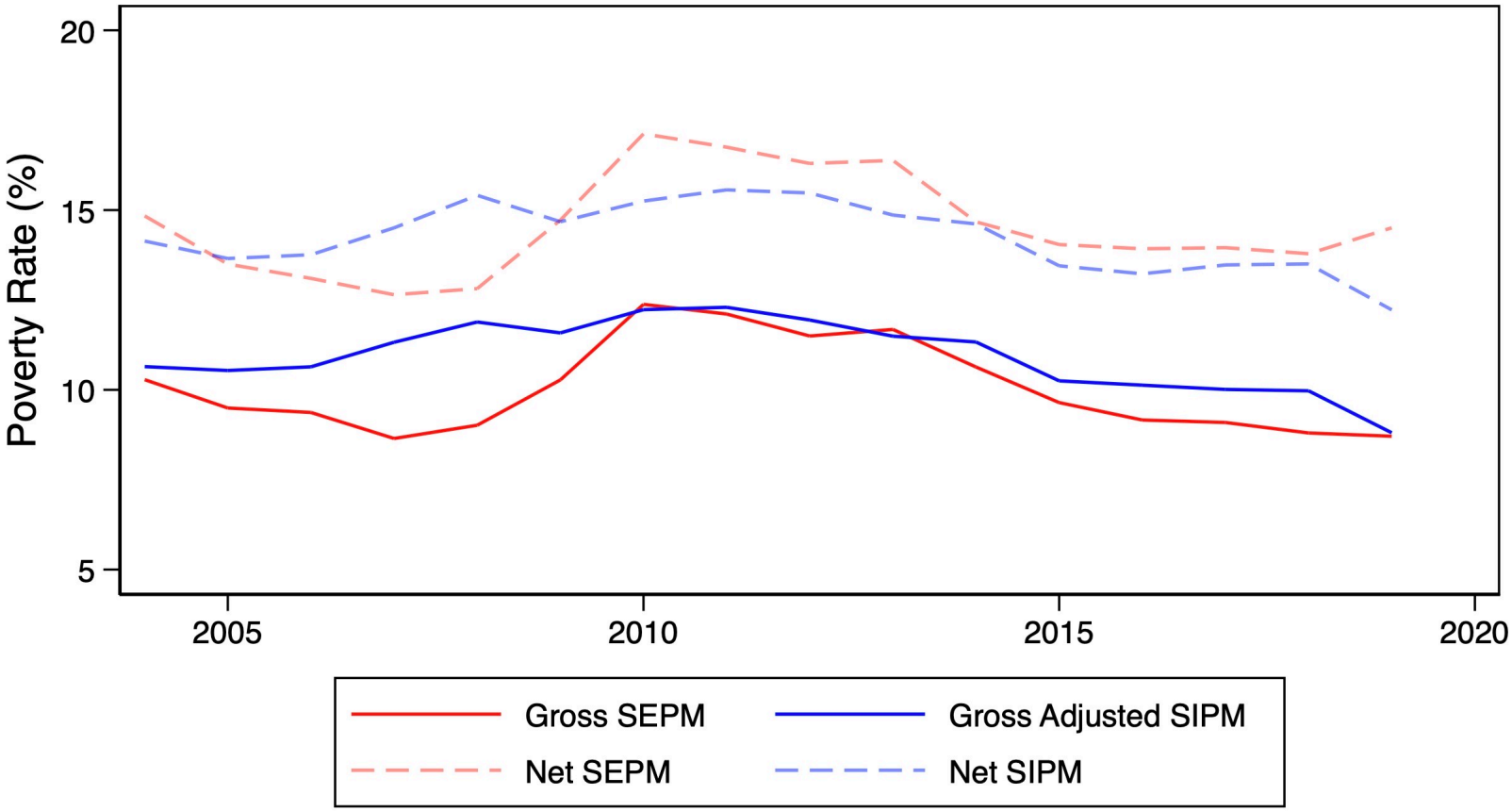
	SEPM	SIPM
Gross	.087	.088
Net	.145	.122

Gross income is after tax plus SNAP.
Net Resources adds other in-kind aid and deducts work expense, child care, capped medical out of pocket expense, child support.

Table 2: SEPM and SIPM Poverty Rates

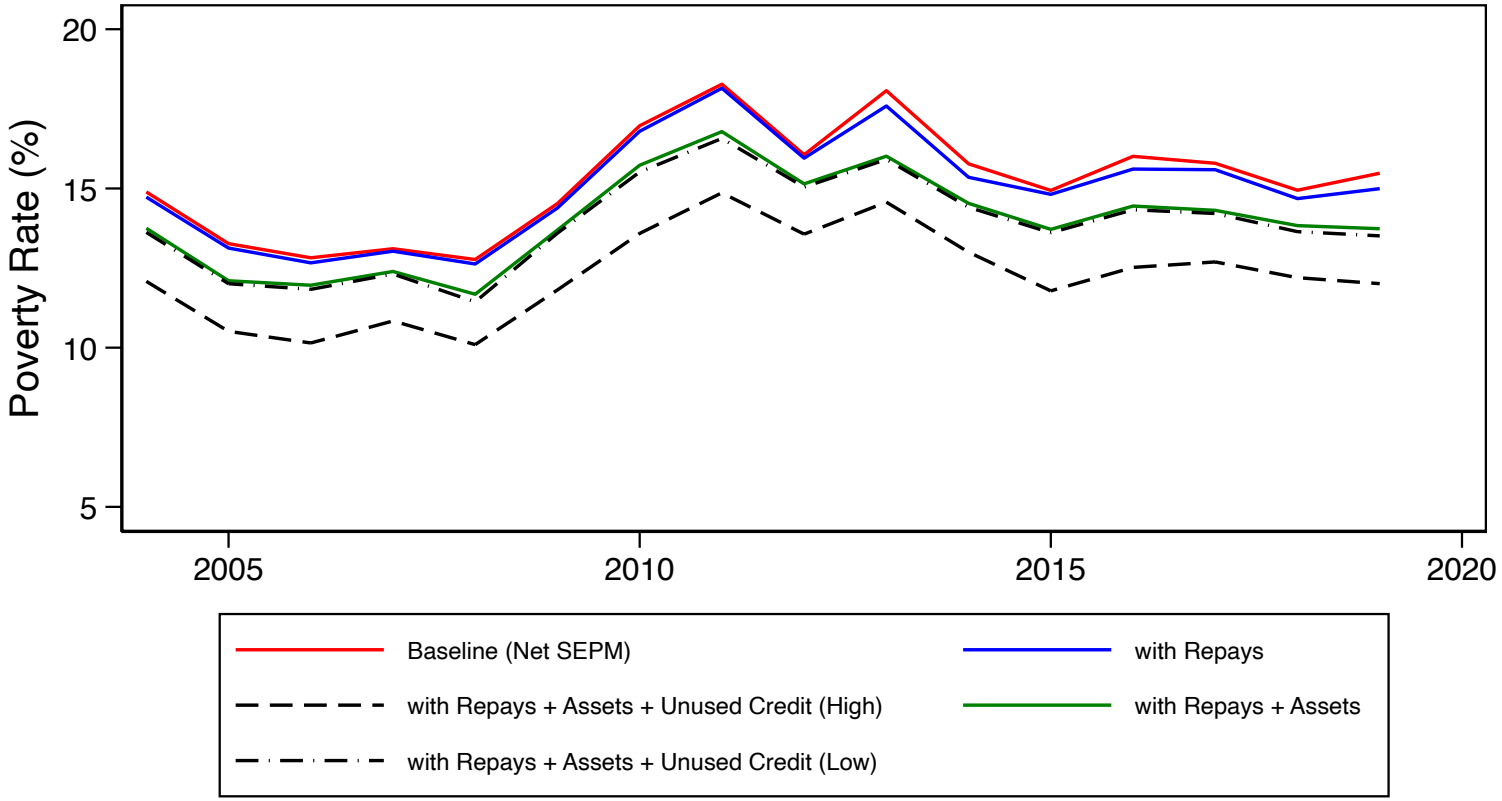
Expenditure or Adjusted Income	SEPM	SIPM
Deep Poverty Resource < 0.5 SPM Threshold		
Gross	0.009	0.035
Net	0.015	0.041
Poverty Resource < SPM Threshold		
Gross	0.087	0.088
Net	0.145	0.122
Near-Poverty Resource < 1.5 SPM Threshold		
Gross	0.242	0.188
Net	0.326	0.255

Figure 4: SEPM and SIPM Poverty Rates, Gross and Net, 2004–2019



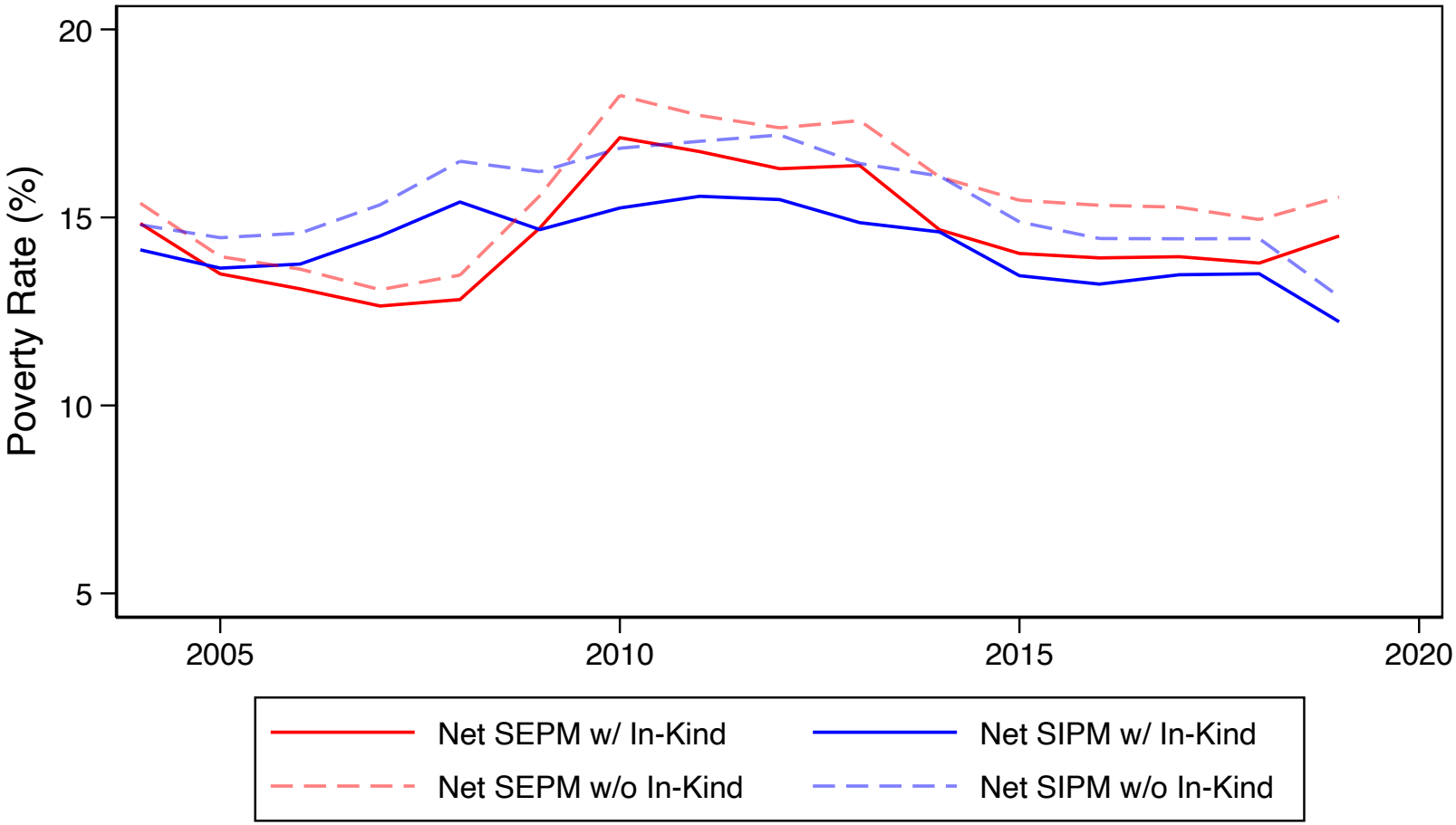
Notes: Gross SEPM poverty rate is based on total household spending on all items in the year. Gross Adjusted SIPM poverty rate is based on total income in the year after-tax and with SNAP benefits added. Net poverty rates are based on total spending and income after tax and with SNAP that include three in-kind transfers and excludes three types of capped adjustments (work-related and child care costs, child support paid, and medical out of pocket expense).

Figure 6: Net SEPM Poverty With and Without Repays, Liquid Assets, and Unused Credit, 2004–2019



Notes: Net measures include four in-kind transfers and exclude three types of capped adjustments (work-related and child care costs, child support paid, and medical out of pocket expense). Credit limits are imputed as the maximum of an individual's credit balance and 53% of their monthly income. Unused Credit is the difference between an individual's limit and their balance. The High version applies the credit limit to all credit users. The Low version applies the limit to credit users with positive balances.

Figure 6: Net SEPM and SIPM Poverty Rates, With and Without In-Kind Aid, 2004–2019



Notes: Net poverty rates are based on total spending and income after tax and with SNAP and include four in-kind transfers and excludes adjustments (work-related and child care costs, child support paid, and medical out of pocket expense).

Limitations of SEPM

- CE has smaller sample than CPS
  - But spending has less variation
- SEPM does not impose a life-time budget constraint (but neither do other poverty measures)
  - But SEPM measures inability to purchase a basic bundle over a policy relevant horizon

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