

Changes under Consideration for 2021: Thresholds

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Current Estimation of SPM Thresholds

- At the CU level, convert 5 years of quarterly 2-Child FCSU expenditures to thresholds year dollars using the All Items CPI for all urban consumers (CPI-U), and to 2 adult with 2 children reference unit thresholds using the 3-parameter equivalence scale

$$FCSU_{i,q} = F_{i,q} + C_{i,q} + S_{i,q} + U_{i,q} \qquad FCSU_{i,2016} = \left(\frac{CPI_{2016}}{CPI_{yr}} \right) * FCSU_{i,q} * 4$$

- Rank CUs by equivalized 2A+2C $FCSU_{i,2016}$ expenditures.
- Housing tenure-specific thresholds produced based on means within 30th-36th percentile range (identified as “E”) of $FCSU_{i,2016}$

$$SPM_{j,2016} = 1.2 * FCSU_{E,2016} - SUE + SUE_j \qquad \frac{SUE_j}{SPM_{E,j}} = a_j = \text{housing share of 2A+2C } SPM_{E,j} \text{ thresholds}$$

- At threshold level, apply geographical price adjustment (MRI) for sub-national thresholds

$$SPM_{j,g,2016} = [(a_j * MRI_g) + (1 - a_j)] * SPM_{j,2016}$$



Planned Changes for Production of “National” Initial Threshold

1. Include in thresholds values for in-kind benefits
2. Expand estimation sample from consumer units with exactly two kids
 - a. CUs with any number of children, or
 - b. All CUs
3. Move base of thresholds from 33rd percentile to percentage of median
4. Move telephone out of utilities, and add internet
5. Base thresholds on 3 years of CE data rather than 5 years
6. Lag thresholds one year
7. To convert earlier quarterly FCSU expenditures into threshold year dollars: move from using annual CPI-U to composite FCSU annual averages



Not Planned as Changes for Thresholds

- Geographic adjustment of expenditure data prior to threshold creation
- Replace owner shelter out-of-pocket spending with rental equivalence
- Use of specific categories of goods and services (e.g., personal care and non-work related transportation) rather than 20% multiplier
- Addition of medical/health care to FCSU
- Use of 12 months of CU data rather than multiple quarterly by 4
- Use yet to be created price index based on spending rather than rents
- Different equivalence scale



Impacts Relative to Published

Change Planned	Impact on Thresholds	Impact on Housing Shares
In-kind benefits	own with mortgage: 2.8% higher Renters: 3.4% higher owners w/o mortgages: 4.5% higher	Marginal impact
Expand sample		
Child>0	own with mortgage: 3.1% lower Renters: 2.7% lower owners w/o mortgages: 2.2% lower	Marginal impact
All CUs	own with mortgage: 4.3% higher Renters: 4.3% higher owners w/o mortgages: 9.6% higher	own with mortgage: 50.2% to 50.9% renters: 49.7% to 50.5% owners w/o mortgages: 41.1% to 44.8%
Percentage of median (80.8%= "33"/"median" FCSU)	Marginal impact	Marginal impact
Telephone service separate (not in housing utilities)	Marginal impact but for owners w/o mortgages: 1.7% lower	own with mortgage: 50.2% to 44.2% renters: 49.7% to 44.1% owners w/o mortgages: 41.1% to 33%

Impacts related to published based on 2 children, 5 years of data, around 33rd percentile; "marginal" = less than 0.4%
All but expanded sample based on estimation sample with 2 children



Impacts Relative to Published

Change Planned	Impact on Thresholds	Impact on Housing Shares
Add internet	own with mortgage: 1.7% higher Renters: 2.1% higher owners w/o mortgages: 1.1% higher	own with mortgage: 50.2% to 49% renters: 49.7% to 48.7% owners w/o mortgages: 41.1% to 39.4%
3 years of CE data	own with mortgage: 0.7% higher Renters: 2.4% higher owners w/o mortgages: 3.0% higher	own with mortgage: 50.2% to 49.3% renters: no change owners w/o mortgages: 41.1% to 41.5%
Lag by 1 year	own with mortgage: 0.4% lower Renters: 0.8% lower owners w/o mortgages: 2.0% lower	Marginal for all but owners w/o mortgages: 41.1% to 40.5%
Use created “composite FCSU CPI-U”	own with mortgage: 2.0% higher Renters: 2.3% higher owners w/o mortgages: 1.9% higher	owner with mortgage: 50.2% to 49.8% renters: marginal owners w/o mortgages: 41.1% to 40.7%

Impacts related to published based on 2 children, 5 years of data, around 33rd percentile; “marginal”= less than 0.4%
All but expanded sample based on estimation sample with 2 children



Combined Changes Relative to 30-36th Percentile of FCSU: SPM 2016 2A+2C Thresholds

Published

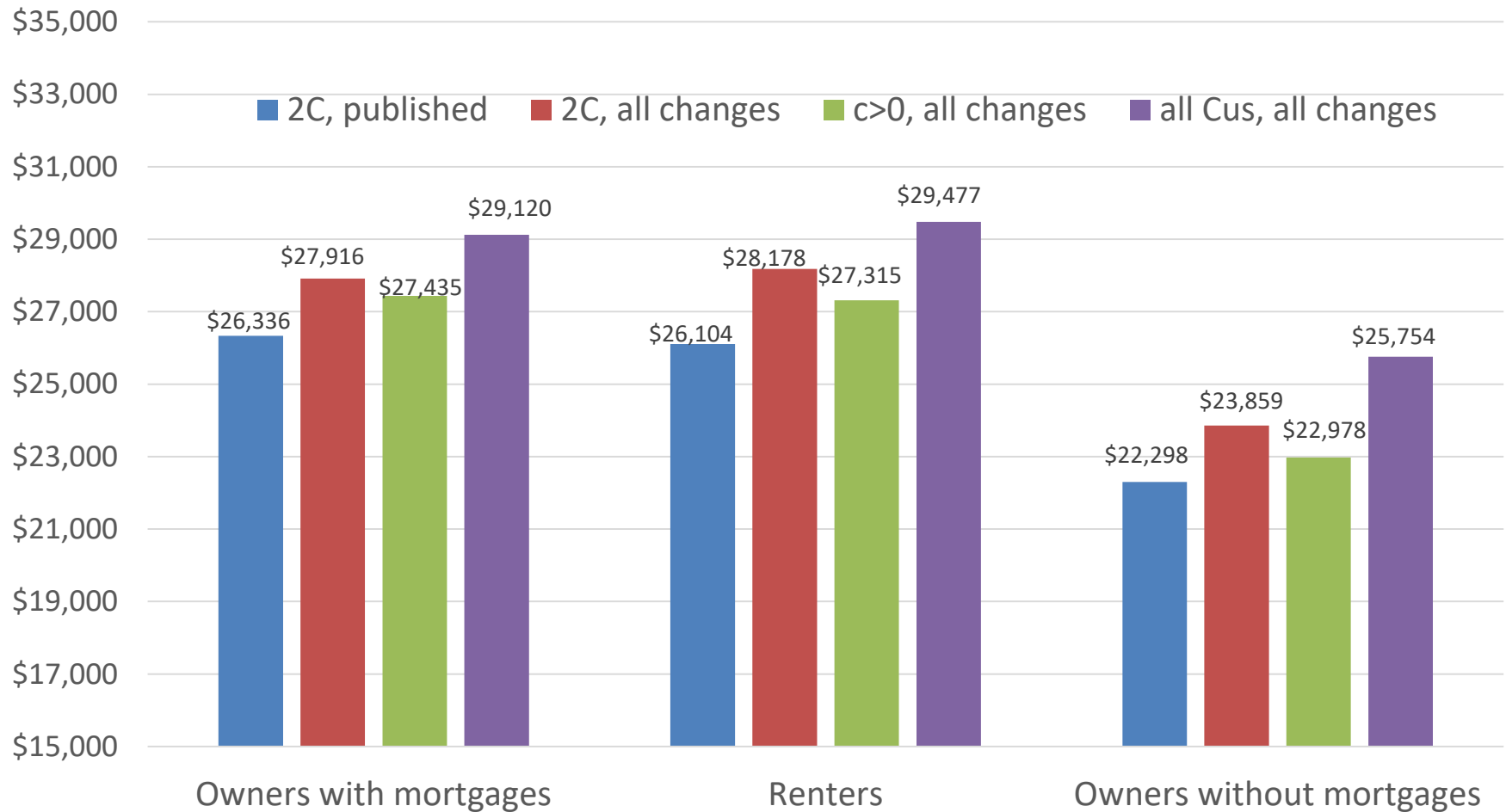
- 5 years of CE data
- no lag
- No in-kind benefits (other than SNAP)
- Telephone in housing utilities
- Internet not included
- Use All Items CPI-U to adjust quarterly CU FCSU expenditures to threshold year dollars

Combined Changes

- 3 years of CE data
- 1-year lag
- In-kind benefits added
- Telephone not in housing utilities
- Internet added
- Use composite FCSU CPI-U to adjust quarterly CU FCSU expenditures to threshold year dollars

NOTE: Does not include change to percentage of the median because the percentage can be selected that does not change the thresholds.

Impact of Combined Changes Based on 30-36th Percentile of FCSU and Different Estimation Samples: SPM 2016 2A+2C Thresholds

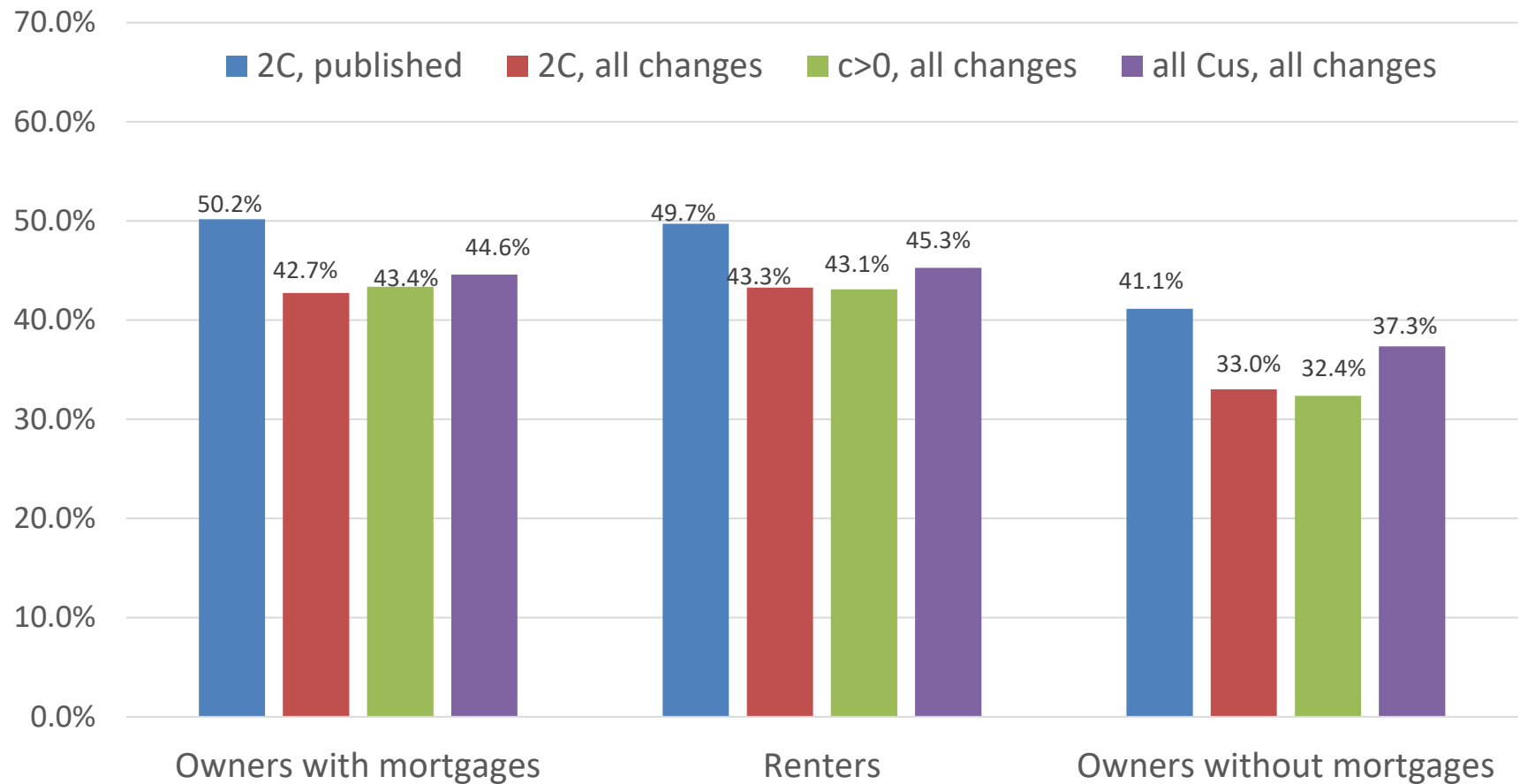


NOTE: Does not include change to percentage of the median because the percentage can be selected such that The thresholds will not change.

NOTE: Published base on 2C, 5 years of data, no in-kind (except for SNAP), telephone in U, no internet, CPI-U to adjust FCSU at CU level



Impact of Combined Changes Based on 30-36th Percentile of FCSU: S+U as % of SPM 2016 2A+2C Thresholds



NOTE: Does not include change to percentage of the median because the percentage can be selected such that The thresholds will not change.

NOTE: Published base on 2C, 5 years of data, no in-kind (except for SNAP), telephone in U, no internet, CPI-U to adjust FCSU at CU level



Discussion of Planned Changes

Change Planned	Justification	
In-kind benefits	Consistency in measurement with resources	
Expand sample		
Child>0	Represents larger share of the population	
All CUs	Represents full population	
Percentage of median	Reduces impact of in-kind benefit imputations; expectation of greater stability	
Telephone service separate (not in housing utilities)	Increased cell service expenditures as share of total; cell not geo specific	
Add internet	Increased means of communication in addition to telephone	
3 years of CE data	In combination with increasing sample size, reduce impact of recession	
Lag by 1 year	CPS ASC data not available in time to produce in-kind benefits for thresholds for most recent year	
Composite FCSU CPI-U	More reflective of threshold component price changes	

Contact Information

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