

Checked Out: Unbanked Households' Engagement with the Tax System and the Social Safety Net

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Big Picture

- State and federal agencies disburse \$billions in assistance aid to eligible participants every year.
- Eligibility is often determined using financial records (e.g., bank statements, tax returns, assets statements).
- Eligible unbanked households may be excluded (these households might need the aid the most).

Tax returns were important for disbursement of COVID stimulus payments.

- Eligibility for the stimulus was based on the most recent tax return (2019 or 2018).
 - **AGI** determined eligibility and amount.
 - Up-to-date **direct-deposit** information or mailing address determined the method of distribution.
- Non-filers experienced delays.
- Late in the process, the IRS issued some stimulus payments on prepaid debit cards.

Administering benefits to the unbanked is possible but not easy.

- SNAP and WIC (Electronic Benefit Transfer (EBT) card)
- TANF and unemployment compensation (paper checks, EBT)
- Social Security or veterans' benefits (pre-paid debit card)
- If unbanked households' economic activity is less formal, program administrators are less able to target eligible nonparticipants or verify applicants' eligibility.

Economic activities of unbanked households are also important for monitoring tax compliance.

- If unbanked households are disengaged from systems that generate information returns by 3rd parties, IRS might be less able to:
 - Monitor how much these households should owe in taxes
 - Identify whether these households should be filing tax returns
- Transaction costs of accessing tax refunds or paying tax underpayments disincentivize voluntary tax return filing

Research questions:

- Does lack of engagement with the financial system extend to the tax system and the social safety net?
- To the extent that unbanked households appear in administrative records:
 - how does their engagement compare to that of banked households?
 - what can we learn about unbanked households' economic activity?

Social Safety Net Coverage

- We compare program take-up between banked and unbanked households.
 - Those who took up benefits are eligible.
 - But there might be people who are eligible but don't take up benefits.
 - we also observe people who applied for benefits but were rejected, perhaps because they were ineligible.
- If program outreach efforts at identifying eligible households are effective, then we should see no difference in take-up by banking status among eligible households.

Tax and Financial Records

- Compare the incidence of tax filings by banking status.
- Specifically:
Forms W-2, 1040, 1040 Schedule A, 1040 Schedule C, 1040 Schedule D, 1040 Schedule E, 1040 Schedule F, 1040 Schedule SE, 1098, 1099-R, 1099-DIV, 1099-G, 1099-INT, 1099-MISC, and SSA-1099.

Data

- Unbanked status can only be identified in surveys (CPS FDIC, SCF, SIPP)
- We investigate unbanked households' engagement by linking the Survey of Income and Program Participation (SIPP) data for 2017 to administrative records.

Showing today

- **SNAP and TANF**
- **1040s**
- **IRMF**

Done, but not showing today

- PIKs
- DER
- Numident

On our to-do list

- TANF
- OASDI/SSI
- WIC

Supplemental Nutrition Assistance Program and Temporary Assistance for Needy Families

- State level monthly SNAP and TANF data in 2017 for:
 - AZ, FL, HI, IL, IN, MD, MT, and WY (SNAP states)
 - CT, ID, KY, MS, ND, NJ, NV, NY, OR, TN, and UT (SNAP and TANF)
- We focus on active cases and their benefit amounts
- There are gross and net income eligibility limits (varies by state)
- There are asset eligibility limits, so recipients are incentivized to keep wealth outside of bank accounts (Hubbard, Skinner, and Zeldes, 1995; Ziliak, 2003; Hurst and Ziliak 2006)
- Undocumented non-citizens are not eligible
 - Some states may use non-federal SNAP funds
- Non-citizens must (varies by state):
 - have lived in the US for 5 years
 - be receiving disability-related assistance
 - be under 18

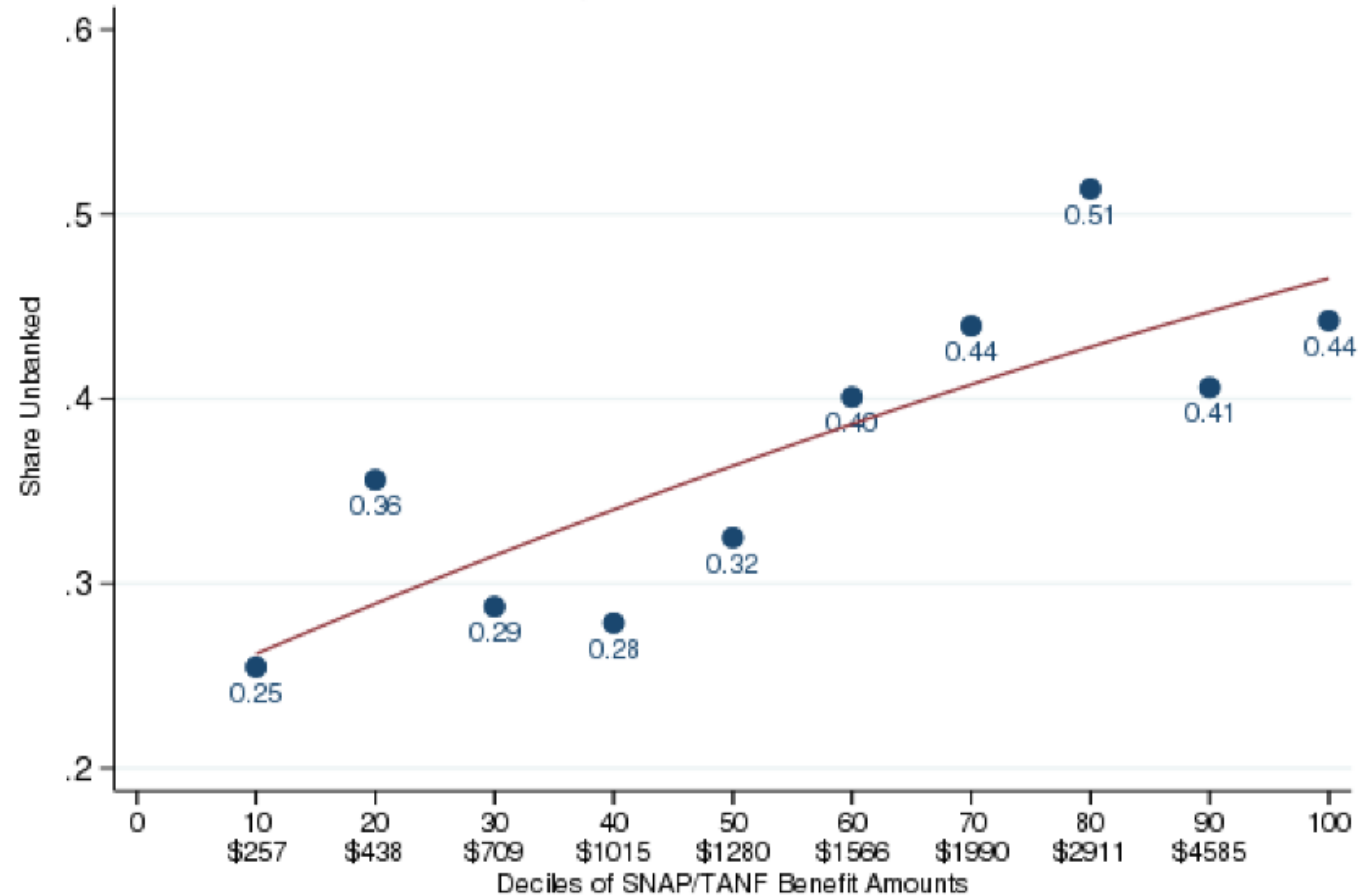
The 1040 Returns Master File

- It provides information on adjusted gross income, wage and salary earnings, interest, dividends, gross rental income, social security income, and EITC income for every tax return filed for 2017.
 - We take only the latest tax return for each person.
 - We link using Protected Identification Keys (PIKs) only for primary and secondary filers in today's results.
 - PIKs are assigned to survey respondents via probabilistic matching algorithm that compares their survey-provided age, sex, and address with information on tax returns and applications for social security numbers (Layne and Wagner, 2014).

Information Returns Master File (IRMF)

- Provides indicators for each of the following forms received in 2017:
 - 1099-MISC
 - 1099-R
 - 1099-G
 - 1099-S (not disclosed)
 - W-2
 - SSA-1099 or RRB-1099
 - 1099-INT
 - 1099-DIV
 - 1098
- We link using PIK only in today's results

Distribution of unbanked households by SNAP and TANF benefit amounts.



Unbanked households are less likely to file federal taxes.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Any tax filer	Any wage & salary income	Any dividend income	Any taxable interest income	Any nontaxable interest income	Any rental income	Any social security income	Any EITC income
Unbanked Households	-0.094***	0.001	0.013	-0.049***	0.016***	-0.006	-0.025***	0.148***
	(0.011)	(0.011)	(0.009)	(0.011)	(0.005)	(0.007)	(0.01)	(0.015)
Controls	X	X	X	X	X	X	X	X
Adjusted R-squared	0.085	0.41	0.185	0.217	0.074	0.04	0.535	0.199
Observations	22000	21500	21500	21500	21500	21500	21500	21500

Source: U.S. Census Bureau 2017 Survey of Income and Program Participation linked to the 1040 Master Return File as indicated in the text.

Notes: Estimates are unweighted.

Unbanked households earn less income than banked households.

	(9) ln (Wage & Salary Income)	(10) ln (Dividend Income)	(11) ln (Taxable Interest Income)	(12) ln (Nontaxable Interest Income)	(13) ln (Rental Income)	(14) ln (Social Security Income)	(15) ln (EITC Income)
Unbanked Households	-0.451***	0.119	-0.042	0.666	0.344	0.008	-0.257***
Controls	(0.043) X	(0.362) X	(0.253) X	(0.587) X	(0.347) X	(0.056) X	(0.036) X
Adjusted R-squared	0.248	0.111	0.061	0.071	0.048	0.154	0.117
Observations	17500	5500	8600	1300	2300	6300	7600

Source: U.S. Census Bureau 2017 Survey of Income and Program Participation linked to the 1040 Master Return File as indicated in the text.

Notes: Estimates are unweighted.

Unbanked households are less likely to itemize deductions but more likely to pay self-employment tax.

	(16) Any Schedule A Filed?	(17) Any Schedule C Filed?	(18) Any Schedule D Filed?	(19) Any Schedule E Filed?	(20) Any Schedule F Filed?	(21) Any Schedule SE Filed?
Unbanked Households	-0.034***	0.049***	-0.003	-0.007	-0.005	0.072***
Controls	(0.013) X	(0.015) X	(0.009) X	(0.009) X	(0.003) X	(0.014) X
Adjusted R-squared	0.213	0.037	0.181	0.071	0.021	0.033
Observations	21500	21500	21500	21500	21500	21500

Source: U.S. Census Bureau 2017 Survey of Income and Program Participation linked to the 1040 Master Return File as indicated in the text.

Notes: Estimates are unweighted.

Unbanked households are less likely to have an informational return.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Any information returns for the household	Number of information returns in the household	Any 1099-Misc	Any 1099-R	Any 1099-G	Any W-2 records	Any Social Security Administration Railroad Benefit record	Any 1099-Int	Any 1099-Div	Any 1098 record
Unbanked Household	-0.159*** (0.01)	-0.582*** (0.084)	0.003 (0.01)	-0.088*** (0.011)	-0.066*** (0.013)	0.055*** (0.011)	0.030*** (0.011)	-0.080*** (0.01)	-0.01 (0.008)	-0.065*** (0.01)
Controls	X	X	X	X	X	X	X	X	X	X
Adjusted R-squared	0.106	0.256	0.037	0.283	0.068	0.446	0.536	0.166	0.165	0.377
Observations	26000	25000	25000	25000	25000	25000	25000	25000	25000	25000

Source: U.S. Census Bureau 2017 Survey of Income and Program Participation linked to the 1099 Information Return Master File as indicated in the text.

Notes: Estimates are unweighted.

Takeaways

- Unbanked households are not completely checked out!
 - They do appear in SNAP and TANF records and are more likely to receive higher benefits than banked households.
 - Unbanked households are much less engaged with the tax system, but perhaps more engaged than we might have feared (some have 1099-INTs!)
 - Among households that appear in IRMF and 1040s, unbanked households:
 - Have much less income, across types (except transfer income)
 - Are relatively more likely to be self-employed (participating in the informal economy?)
 - Have fewer asset-generated tax records (fewer assets?)

Thank you!

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Appendix

- [Who is Unbanked in SIPP?](#)
- [Who is Unbanked in SIPP? \(II.\)](#)
- [Who is Unbanked in SIPP? \(III.\)](#)
- [Financial Engagement Among SNAP Participants](#)
- [Unbanked households and SNAP benefits](#)
- [Unbanked households have a lower PIK rate](#)
- [Unbanked households are less likely to have a record in DER](#)

Who is Unbanked in SIPP?

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Banked	Unbanked	Difference	Banked	Unbanked	Difference
		Everyone		Excluding Non-respondents		
Men	0.485 (0.500)	0.477 (0.499)	-0.008 (0.006)	0.484 (0.500)	0.467 (0.499)	-0.018*** (0.007)
White	0.801 (0.399)	0.679 (0.467)	-0.122*** (0.007)	0.811 (0.392)	0.685 (0.464)	-0.125*** (0.007)
Black	0.111 (0.314)	0.219 (0.414)	0.109*** (0.006)	0.104 (0.305)	0.216 (0.412)	0.112*** (0.007)
Asian	0.056 (0.230)	0.050 (0.218)	-0.006* (0.003)	0.054 (0.227)	0.047 (0.211)	-0.008** (0.004)
Other Race	0.032 (0.176)	0.051 (0.221)	0.019*** (0.003)	0.031 (0.173)	0.052 (0.222)	0.021*** (0.003)
Hispanic	0.132 (0.339)	0.257 (0.437)	0.125*** (0.006)	0.126 (0.332)	0.248 (0.432)	0.121*** (0.007)
Foreign born	0.155 (0.362)	0.171 (0.376)	0.016*** (0.005)	0.152 (0.359)	0.167 (0.373)	0.015** (0.006)
Observations	41,500	7,400	49,000	36,500	6,300	43,000

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Who is Unbanked in SIPP? (II.)

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Banked	Unbanked	Difference	Banked	Unbanked	Difference
No High School Diploma	0.092 (0.289)	0.390 (0.488)	0.298*** (0.006)	0.090 (0.287)	0.383 (0.486)	0.293*** (0.007)
High School Diploma	0.255 (0.436)	0.309 (0.462)	0.055*** (0.006)	0.252 (0.434)	0.311 (0.463)	0.059*** (0.007)
Some College Education	0.294 (0.456)	0.197 (0.398)	-0.098*** (0.006)	0.295 (0.456)	0.203 (0.402)	-0.093*** (0.006)
Bachelor's Degree or Beyond	0.359 (0.480)	0.104 (0.305)	-0.256*** (0.005)	0.362 (0.481)	0.104 (0.305)	-0.258*** (0.005)
Age 15-30 years old	0.200 (0.400)	0.454 (0.498)	0.254*** (0.007)	0.181 (0.385)	0.430 (0.495)	0.249*** (0.007)
Age 30-45 years old	0.239 (0.426)	0.203 (0.402)	-0.036*** (0.006)	0.237 (0.425)	0.205 (0.403)	-0.032*** (0.006)
Age 45-60 years old	0.254 (0.436)	0.188 (0.391)	-0.067*** (0.005)	0.258 (0.438)	0.198 (0.399)	-0.060*** (0.006)
Age 60 and older	0.308 (0.461)	0.156 (0.362)	-0.152*** (0.005)	0.324 (0.468)	0.167 (0.373)	-0.157*** (0.006)
Observations	41,500	7,400	49,000	36,500	6,300	43,000

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Source: The Survey of Income and Program Participation, 2017.

Notes: Standard deviations are in parentheses for Columns (1), (2), (4), and (5). Clustered standard errors at the household level are in parentheses for Columns (3) and (6). Excluding non-respondents for Columns (4)-(6) means imputed bank status is excluded.

Who is Unbanked in SIPP? (III.)

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Banked	Unbanked	Difference	Banked	Unbanked	Difference
Married	0.542 (0.498)	0.289 (0.453)	-0.252*** (0.006)	0.555 (0.497)	0.302 (0.459)	-0.253*** (0.007)
Worked for an employer	0.618 (0.486)	0.364 (0.481)	-0.254*** (0.007)	0.610 (0.488)	0.352 (0.478)	-0.258*** (0.007)
Self-employed	0.087 (0.282)	0.041 (0.199)	-0.046*** (0.003)	0.088 (0.283)	0.039 (0.195)	-0.049*** (0.003)
Member of a labor union	0.079 (0.269)	0.032 (0.175)	-0.047*** (0.003)	0.079 (0.270)	0.030 (0.169)	-0.050*** (0.003)
Has a union contract	0.008 (0.088)	0.002 (0.040)	-0.006*** (0.001)	0.008 (0.087)	0.002 (0.041)	-0.006*** (0.001)
Observations	41,500	7,400	49,000	36,500	6,300	43,000

Engagement with Financial Institutions Among SNAP Participants

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Unbanked Status	Full Sample 0.354 (0.478)
Imputed Unbanked Status	0.122 (0.327)
Checking account ownership	0.622 (0.485)
Savings account ownership	0.340 (0.474)
Certified Deposit ownership	0.006 (0.0779)
Money Market ownership	0.013 (0.112)
Observations	1300

Source: Authors' calculations from merged Survey of Income and Program Participation and SNAP Administrative Records.

Notes: Estimates are weighted by annual weights. Standard deviations are in parentheses.

Unbanked households qualify for higher SNAP benefits than banked households.

Controls are indicators for: men, white, black, Asian, Hispanic, foreign born, High school dropouts, High School Diploma, At least a Bachelor's Degree, and age

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	(1)	(2)	(3)
A. Full Sample			
	Log (SNAP benefit)	Log (SNAP benefit)	Log (SNAP benefit)
Unbanked Indicator	0.3475*** (0.0689)	0.3060*** (0.0696)	0.1967*** (0.0718)
Annual Weights		X	X
Controls			X
Adjusted R-squared	0.0212	0.0166	0.0690
F	25.41	19.36	5.596
Observations	1300	1300	1300
B. Aged 24 and Older			
	Log (SNAP benefit)	Log (SNAP benefit)	Log (SNAP benefit)
Unbanked Indicator	0.2736*** (0.0753)	0.2399*** (0.0757)	0.2191*** (0.0782)
Annual Weights		X	X
Controls			X
Adjusted R-squared	0.0125	0.0098	0.0688
F	13.19	10.05	5.223
Observations	1000	1000	1000
C. Reported Sample			
	Log (SNAP benefit)	Log (SNAP benefit)	Log (SNAP benefit)
Unbanked Indicator	0.3745*** (0.0744)	0.3284*** (0.0750)	0.2457*** (0.0778)
Annual Weights		X	X
Controls			X
Adjusted R-squared	0.0240	0.0187	0.0710
F	25.33	19.15	5.432
Observations	1100	1100	1100

Source: Authors' calculations from the merged Survey of Income and Program Participation 2017 and SNAP Administrative Records.

Notes: Standard errors in parentheses are clustered at household level.

Unbanked individuals and households have a lower PIK rate.

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	(1) Missing PIK	(2) Missing PIK	(3) Missing PIK for Everyone	(4) Missing PIK for Everyone
Unbanked Household	0.066*** (0.007)	0.064*** (0.007)	0.039*** (0.006)	0.037*** (0.006)
Controls 1	X			
Controls 2		X		
Controls 3			X	
Controls 4				X
Adjusted R-squared	0.096	0.097	0.037	0.038
Observations	52000	52000	26000	26000

Source: The Survey of Income and Program Participation (SIPP) merged with Protected Identification Key (PIK) crosswalk in 2017.
 Notes: The first two columns are individual-level regressions, and the last two columns are household-level. Estimates are unweighted. Standard errors are in parentheses.

Unbanked households are less likely to have a record in DER.

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	(1) Any Household Record in DER	(2) Any 1040 Schedule SE Record	(3) Any Deferred Earnings Record	(4) Log of Total Earnings
Unbanked Household	-0.063*** -0.01	0.048*** -0.013	-0.094*** -0.014	-0.684*** -0.051
Controls 1	X	X		
Controls 2			X	
Controls 3				X
Adjusted R-squared	0.502	0.037	0.164	0.311
Observations	25500	19000	19000	19000

Source: The Survey of Income and Program Participation (SIPP) merged with the Detailed Earnings Record in 2017.

Notes: Estimates are unweighted. Standard errors are in parentheses.