

Entropy*

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1 Introduction

Literature:

Muggleton et al. (2020) find that consumption entropy over categories correlates with financial distress.

Davenport et al. (2020) study the impact of COVID-19 on the spending and savings behaviour of MDB users.

Baker and Kueng (2021) summarises literature that uses mass financial transaction data to study household financial behaviour.

Becker (2017) finds that access to a fintech money management app increases first-time savings and savings account balances among 65,000 customers of a large European bank but that update is negatively correlated with financial sophistication.

Paper:

Independent variable: entropy over categories and others

Outcome variables: first-time saving, average monthly savings

2 Data

References

- Baker, Scott R and Lorenz Kueng (2021). “Household Financial Transaction Data”. Tech. rep. National Bureau of Economic Research.
- Becker, G (2017). “Does fintech affect household saving behavior? findings from a natural field experiment”. Tech. rep. mimeo.

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Table 1: Sample selection

	Users	Accounts	Transactions	Value (£M)
Raw sample	283	1,282	682,656	125.2
Drop last month	283	1,281	681,755	125.1
At least 6 months of data	246	1,201	674,665	123.7
At least one current account	234	1,156	658,074	121.5
At least 5 monthly debits totalling GBP200	161	707	457,545	82.4
Income payments in 2/3 of all observed months	78	396	213,780	49.5
Yearly incomes between 5k and 100k	8	38	23,423	6.3
No more than 10 active accounts in any year	8	38	23,423	6.3
Debits of no more than 100k in any month	7	33	21,483	2.7
Working-age	5	21	12,676	0.8
Final sample	5	21	12,676	0.8

Table 2: Sample selection

	Users	Accounts	Transactions	Value (£M)
Raw sample	2,730	13,277	6,961,668	1,231.6
Drop last month	2,730	13,272	6,950,912	1,229.6
At least 6 months of data	2,432	12,589	6,896,903	1,219.5
At least one current account	2,304	12,234	6,695,164	1,196.8
At least 5 monthly debits totalling GBP200	1,518	7,915	4,906,252	897.3
Income payments in 2/3 of all observed months	732	4,386	2,463,604	528.9
Yearly incomes between 5k and 100k	75	434	221,652	53.4
No more than 10 active accounts in any year	67	316	193,072	34.5
Debits of no more than 100k in any month	62	287	180,160	24.5
Working-age	43	194	128,356	15.2
Final sample	43	194	128,356	15.2

Davenport, Alex, Robert Joyce, Imran Rasul, and Tom Waters (2020). “Spending and saving during the COVID-19 crisis: evidence from bank account data”. In: *Institute for Fiscal Studies, Briefing Note* 308.

Muggleton, Naomi K, Edika G Quispe-Torreblanca, David Leake, John Gathergood, and Neil Stewart (2020). “Evidence from mass-transactional data that chaotic spending behaviour precedes consumer financial distress”. Tech. rep. DOI: [10.31234/osf.io/qabgm](https://doi.org/10.31234/osf.io/qabgm). URL: psyarxiv.com/qabgm.