



Discussion of
“Explaining Consumption Excess Sensitivity
with Near-Rationality: Evidence from Large
Predetermined Payments”

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This is a careful and thorough paper. There is a lot here and I have to ignore many results/issues in my short discussion (mainly inference and data).

1. Overview

- The Experiment: Alaska Permanent Fund
 - A sovereign wealth fund of an oil-producing state that compensates residents $\approx \$1000/\text{capita}$ in October for living in Alaska for a year
 - Previously used by Hsieh (2003)
- The Data:
 - Account-level transactions from a personal finance account aggregator/financial planning service
 - Tracks spending and (some) balances and some demographics
 - Also CEX
- Estimation: Monthly spending changes around payment

$$\Delta c_{it} = \sum_s \beta_s \cdot PFD_{i,t-s} + \alpha_t + \text{Alaska}_i + \lambda' x_{it} + \varepsilon_{it}$$

Regress change in spending on distributed lags of permanent fund payment in sample of households from Alaska (treatment) and Washington (control) states

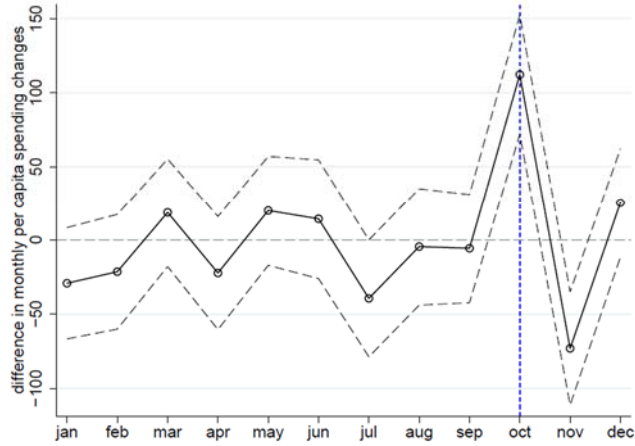
2. Methodology: Euler equations, testing, identification, and estimation

- Testing:
 - Hall (1988), e.g. Campbell Mankiw (1992)
 - Time-series moment **tests** consumption smoothing
 - Only three Octobers of time-series variation
 - Hsich (2003) uses the CEX: 20 years, 80 households/year
- To identify and estimate a causal effect:
 - Self-promotion: **randomization** in disbursement
 - Instead compare consumption growth of
 - **treatment** group of Alaskans (1,300 accts) to **control** group of Washingtonians (2,200 accts)
 - Alaskans with different amounts of payment (family size)

Seattle \approx Anchorage?



Consumption growth actually is similar except in October (& shortly after)



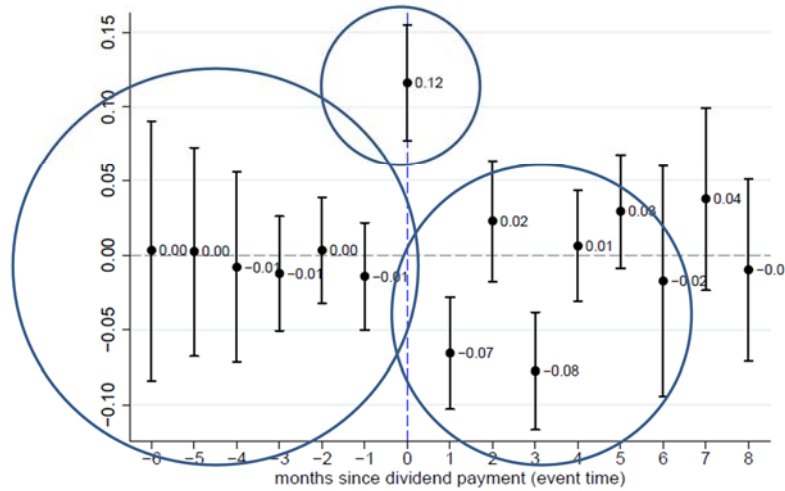
Implied MPC
from arrival:
1 Month: 12%
1 Quarter: 22%

Notes: This figure shows the average difference in monthly household per capita spending changes of nondurables and services between households in Alaska and Washington. The Permanent Fund Dividend is paid out at the beginning of October. Per capita spending is calculated using the OECD household equivalence scale. Dashed lines are 95% confidence intervals.

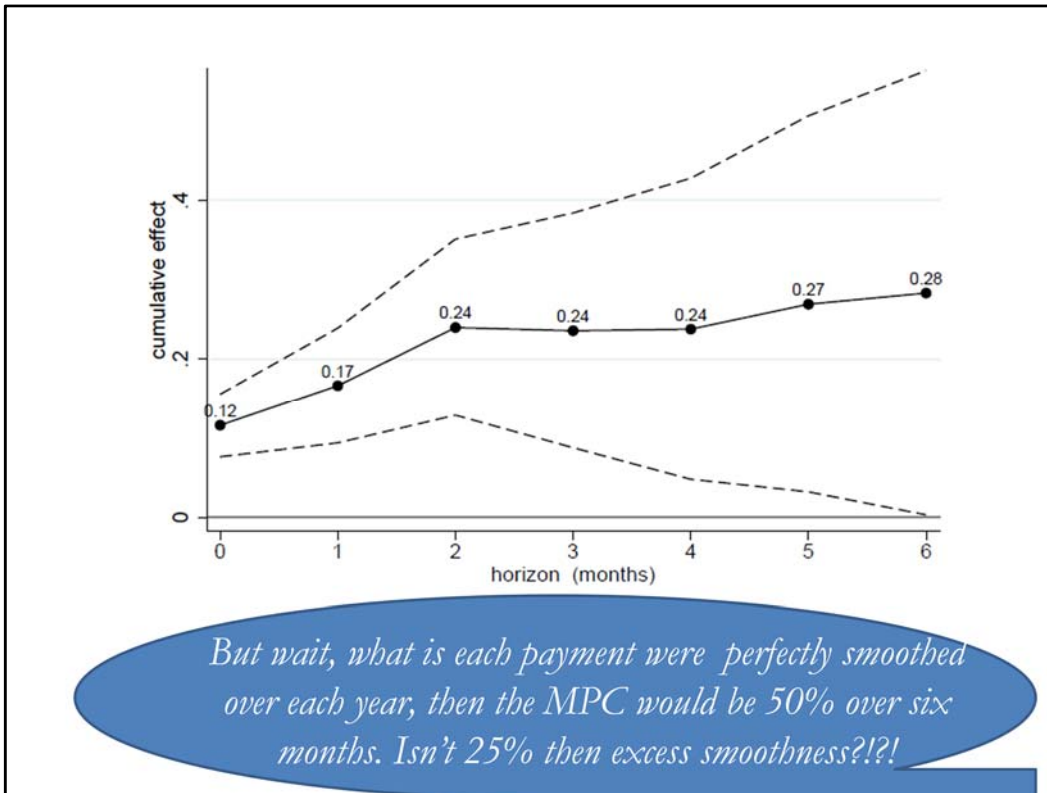
The income and consumption differences are small relative to the large permanent fund dividends. Like regression discontinuity. I would like to see the income version of this graph.

3. First main result: Significant spending responses to payments

(a) β_s s from $\Delta c_{it} = \sum_s \beta_s PFD_{i,t-s} + \alpha_t + \text{Alaska}_t + \lambda \text{FamilySize}_{it} + \varepsilon_{it}$



1. Zero ex ante
2. 12% response on arrival
3. Not completely reversed
4. Not ever estimated to be reversed



No. Level change in spending due to PIH-type behavior in Alaska differenced out by looking at spending growth

This is just an issue of how you define “MPC” with regular, expected payments

First Main Result

The timing of spending is related to the timing of the payment.

- This “mis-timed” spending on nondurables and services is 25% of payment over a quarter
- Additional spending of 15% on durable goods
 - In account-level data: purchases may be more if financing

So the ultimate MPC on arrival is quite similar to MPC's estimated elsewhere and for smaller lump-sum payments.

Implication

Overturns Hsieh (2003) (with Keung (2015) CEX paper)

“Perhaps the most convincing evidence in favor of adjustment costs or near rationality comes from Hsieh (2003).” Fuchs-Schündeln and Tarek Hassan (2016)

Table 1: Studies of the Permanent Income Hypothesis Sorted by Size and Regularity of the Income Change

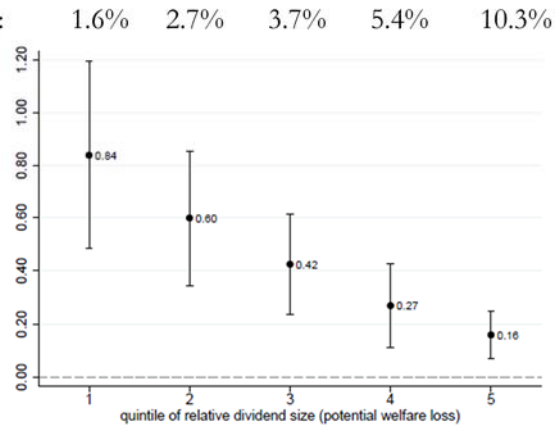
	Small	Large
Regular	Aaronson, Agarwal, and French (2012) 0.03%	Browning and Collado (2001) 2.61%
	Parker (1999) ^a 0.00038 %	Hsieh (2003) 4.79%
	Parker (1999) ^b 0.82%	Paxson (1993) -
	Shea (1995) 0.0009%	Souleles (1999) 1.24%
Irregular	Agarwal, Liu, and Souleles (2007) 0.22%	Souleles (2000)^c 5.24%
	Agarwal and Qian (2014) 0.04%	
	Broda and Parker (2014) 0.31%	
	Coulibaly and Li (2006) 0.56%	
	Johnson, Parker, and Souleles (2006) 0.10%	
	Parker, Souleles, Johnson, and McClelland (2013) 0.46%	
	Scholnick (2013) 0.45%	
	Souleles (2002) 0.01%	
Stephens (2008) 0.35%		

4. Second Main Result: Higher MPC for smaller payments or higher incomes

- Compare the MPCs of households with different ex ante characteristics
- Not a causal interpretation – high income does not cause high propensity to consume
- Fine. Difference still identified and can be matched to differences in a model.
- What model? Near rationality (Caballero, 1995; Reis, 2006)? Small time cost of accessing high-return assets (Abel, Eberly, Panageas, 2013; Kaplan Violante, 2014)?

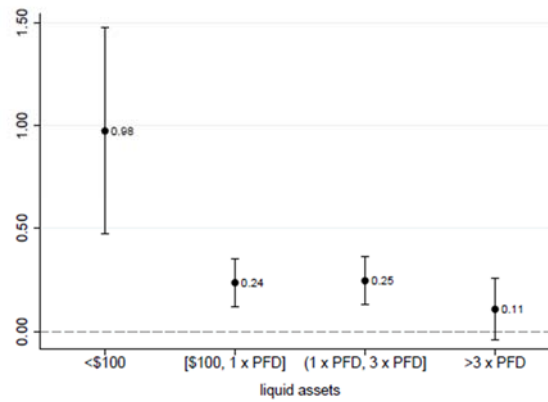
Small payments (relative to income or consumption) associated with larger MPC

Ratio of dividend to
annual spending:



- Mainly because **lower income households have lower MPC**
- Ex-post compensating variation “loss” by households across quintiles: 0.05% 0.08% 0.07% 0.06% 0.07%

Low liquidity also associated with larger MPC



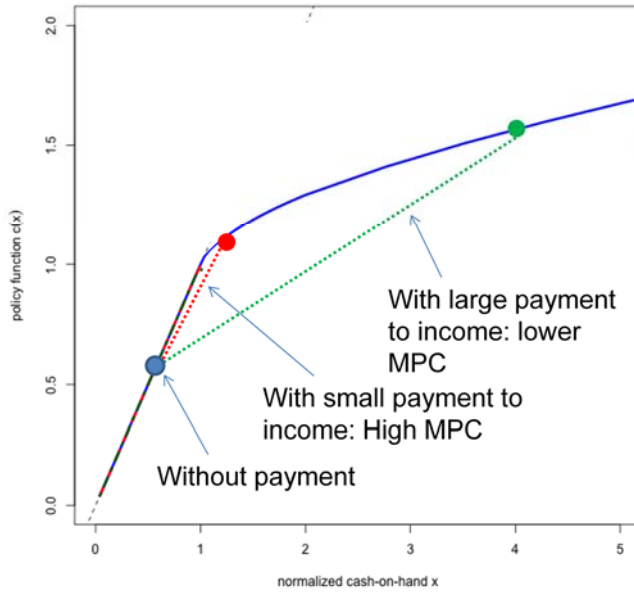
- Illiquid households have **really high MPCs**
- Standard result
- How are the illiquid households distributed by income?

Liquidity and Utility Loss

PFD payments x shock size quintile	-0.161*** (0.032)
PFD payments x liquidity quintile	-0.054** (0.023)

I would like to see more. Low liquidity appears binary. So study pattern of income responses within each group.

5. Is this near rationality?



Consider two “Buffer Stock” households with:

- Identical scaled cash on hand, etc.
- But *different* scaled payments, either due to differences in permanent income or differences in payment (family) size

6. Shameless Self-Promotion (if time permits)

Parker(2016) “Why Don’t Households Smooth Consumption?”

- Nielsen Consumer Panel; MPC on household goods
- 2008 Stimulus Payments, (mostly) randomly disbursed across weeks

1. Liquidity matters

	<i>All households</i>	<i>At least two months available income in liquid wealth?</i>	
		<i>Yes</i>	<i>No</i>
Contemporaneous week	1.49 (0.25)	0.63 (0.29)	2.78 (0.39)
<i>t-stat of 'Yes' equal 'No'</i>			4.47
Four week cumulative increase	3.70 (0.70)	2.04 (0.74)	6.57 (1.01)
<i>t-stat of 'Yes' equal 'No'</i>			3.63

2. Income matters, but in reverse: lower income, so larger payments to income, associated with *higher* MPC

	income < \$35,000	\$35,000 ≤ income <\$70,000	\$70,000 ≤ income
Contemporaneous week	3.13 (0.57)	1.41 (0.34)	0.56 (0.37)
Four week cumulative increase	6.99 (1.33)	3.44 (0.90)	1.99 (1.02)

Also:

- Households that make financial plans have lower MPCs
- Households that use coupons or deals have lower MPCs
- Households that held correct expectations about their payments have lower MPCs

Why the differences?

1. Sample. There is weak evidence in other papers of some larger MPC by high-income households. But many other papers have payments that (to some extent) scale with income.
2. Data. Account level outflows vs. good purchased.

Conclusion

1. The relatively large permanent fund payments are not better smoothed than the smaller payments studied elsewhere
2. However, low income households smooth better than high income households
 - Different from what other studies (with smaller payments) find – is this an issue of payment size?
 - But some studies do find U-shape of MPC with income or liquidity, but often weak
 - And consistent with evidence of better smoothing by households that are better “optimizers” (e.g. planners, coupon and deal users, more precise expectations)