

# Reframing Behavior: The Impact of the CARD Act on Cardholder Repayment Rates

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and Dean Elect-University of Oxford Saïd Business School)**



# Summary of preliminary findings

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1. We examine four main questions: did disclosures change behavior? Of whom? Persistent? Impact on cardholder debt?
2. Preliminary findings – good news
  - i. Fewer payments at minimum amount, on aggregate
  - ii. Some consumers reframed to the 36 month suggestion
  - iii. Reframing consumers appear to be most credit constrained
  - iv. They are somewhat persistent
3. Less positive news
  - i. They are only somewhat persistent
  - ii. Compared to similar people who did not adopt plan, they seem to be increasing their amount of debt
  - iii. Moving target

# Research setting and data

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- Affinity Plus Federal Credit Union
  - 132,000 members
  - Portfolio of about 30,000 credit cards
  - 1.3 billion in assets
  - 23 branches within Minnesota
- Going forward: Replication and extension of study with data from a large national bank
- Caveat: Not a controlled experiment!

# CARD Act: Plain language disclosures, Financial consequences of decisions

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If you make no additional charges using this card and each month you pay...	You will pay off the balance shown on this statement in about...	And you will end up paying an estimated total of...
Only the minimum payment	14 years	\$6,534
\$147	3 years	\$5,297 (Savings = \$1,237 )

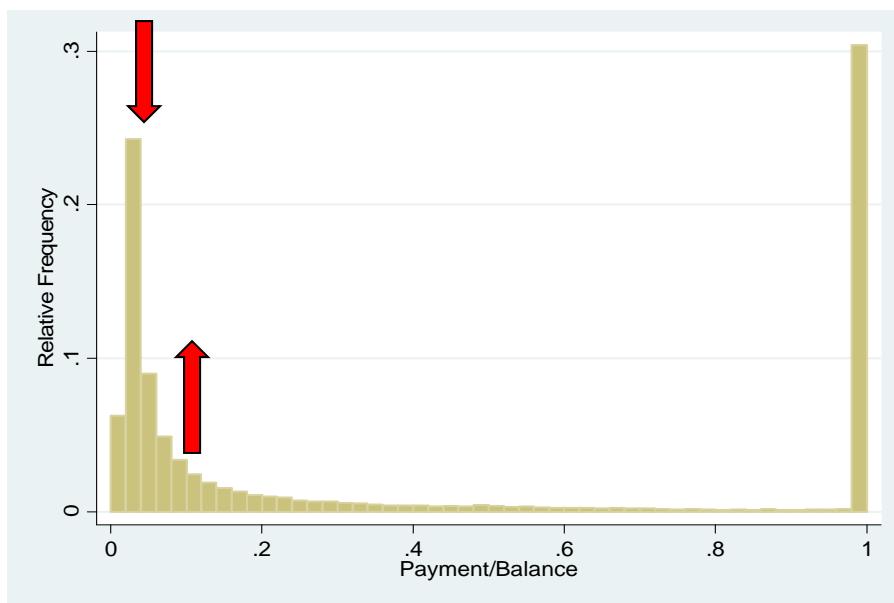
# Empirical evidence on framing effects

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- “Framing” affects decision-making in a variety of contexts
  - 401k choices (Madrian and Shea 2001)
  - Cooperation in experimental settings (Andreoni 1995)
  - Numeric judgments (Mussweiler and Strack 2000)
- Lab experiments suggest that reframing effects could be substantial for credit cardholders
  - “Minimum payment” line is excluded for some participants
  - For revolvers, when a suggested minimum payment was given the average repayment was £99 (23% of the balance). When no required minimum payment was stated, the repayment averaged £175 (40% of the balance (Neil Stewart, “The Cost of Anchoring on Credit Card Minimum Payments”, Psychological Science 20, 39-41 (2009) )

# Empirical predictions

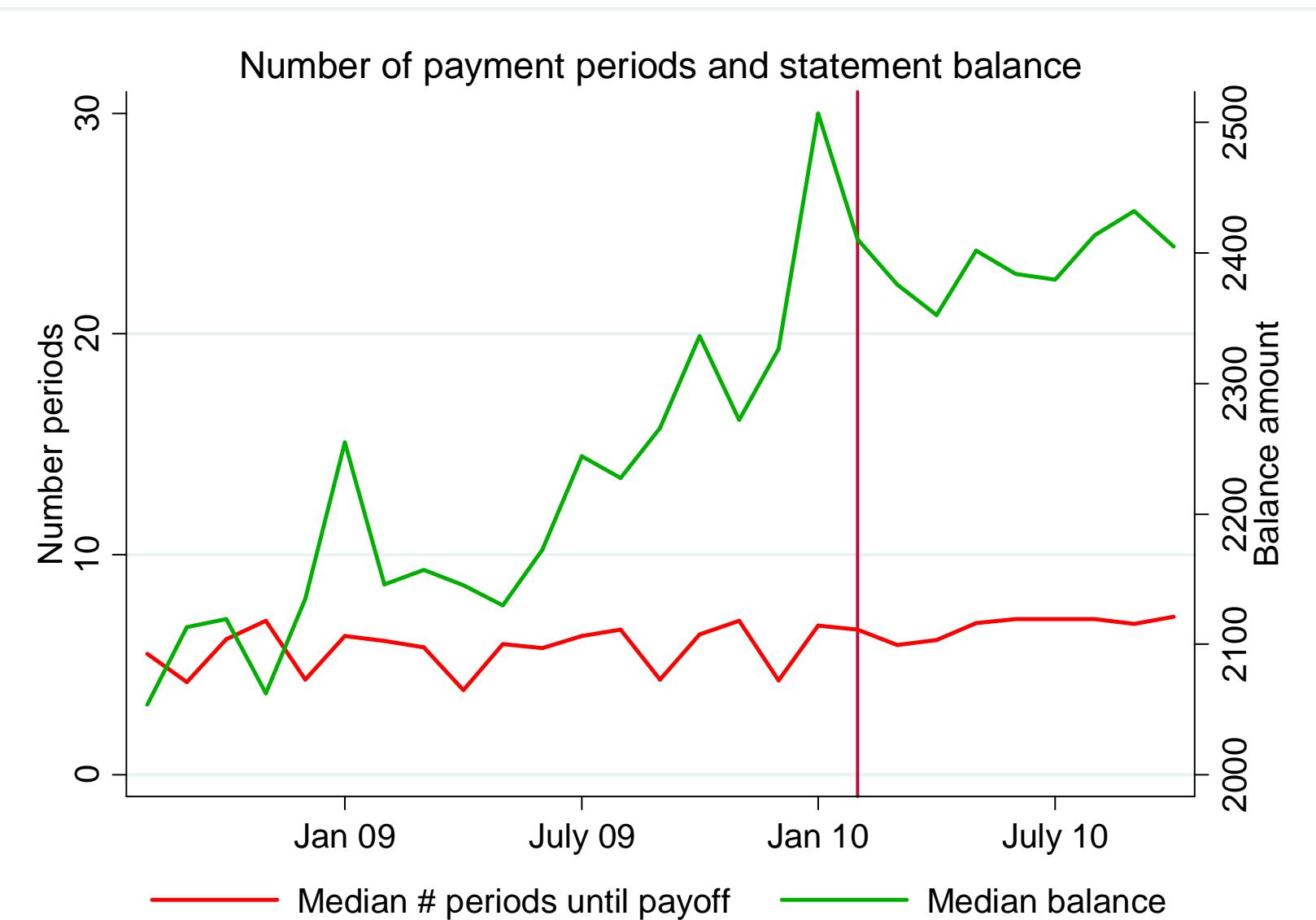
- With the 36-month disclosure, cardholders have an additional frame



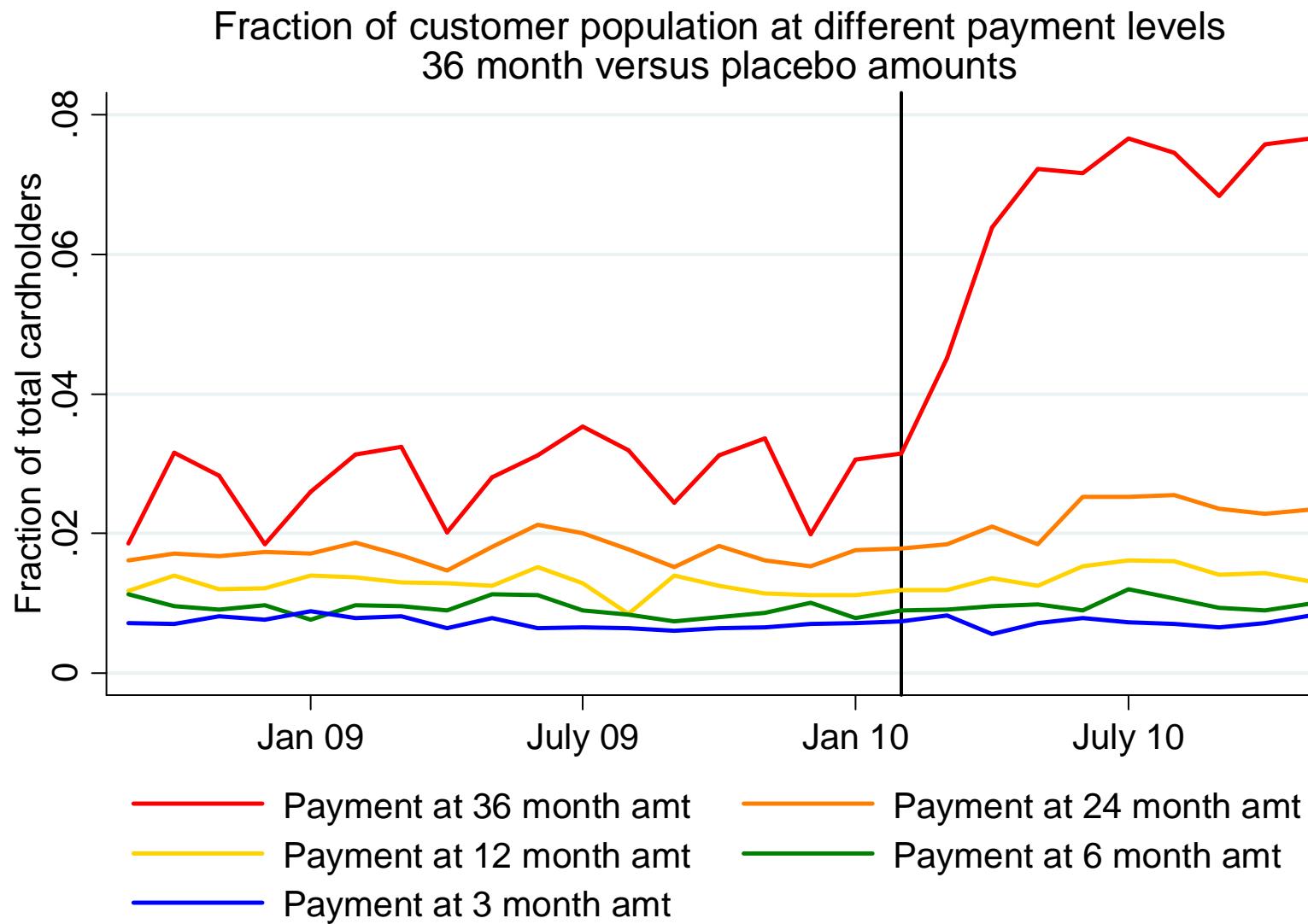
## Research questions:

- What if anything are the sizes of these first order impacts?
- Who changes behavior?
  - Demographic characteristics
  - Previous payment and card usage patterns
- Are these results persistent?
- What is the impact on indebtedness?

**Overall, trends in balance per capita and median payoff duration did not significantly change...**



**...But there is a noticeable uptake in the fraction of cardholders paying at the 36 month level...**

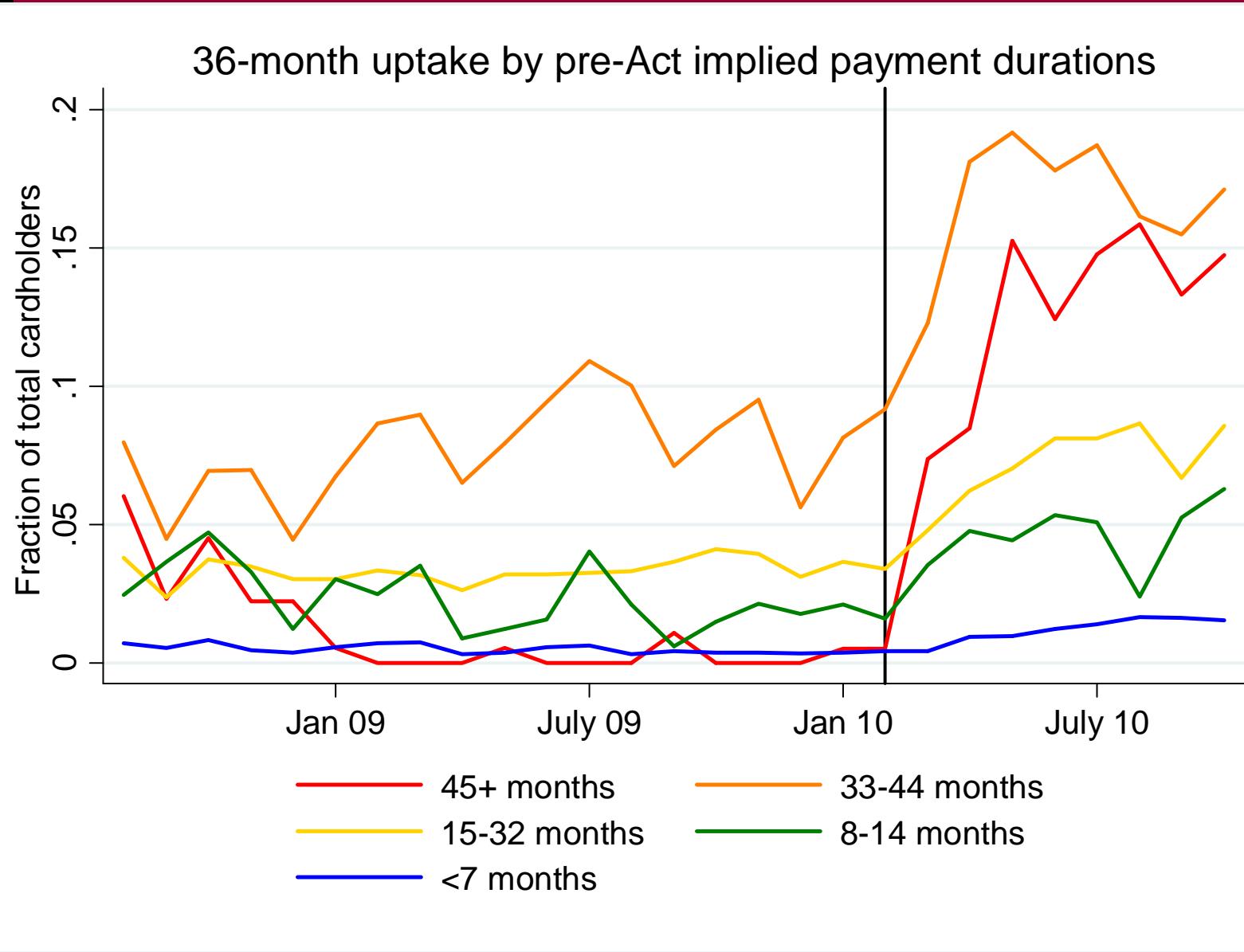


# What do we know about the customers who are following the new disclosure guidelines?

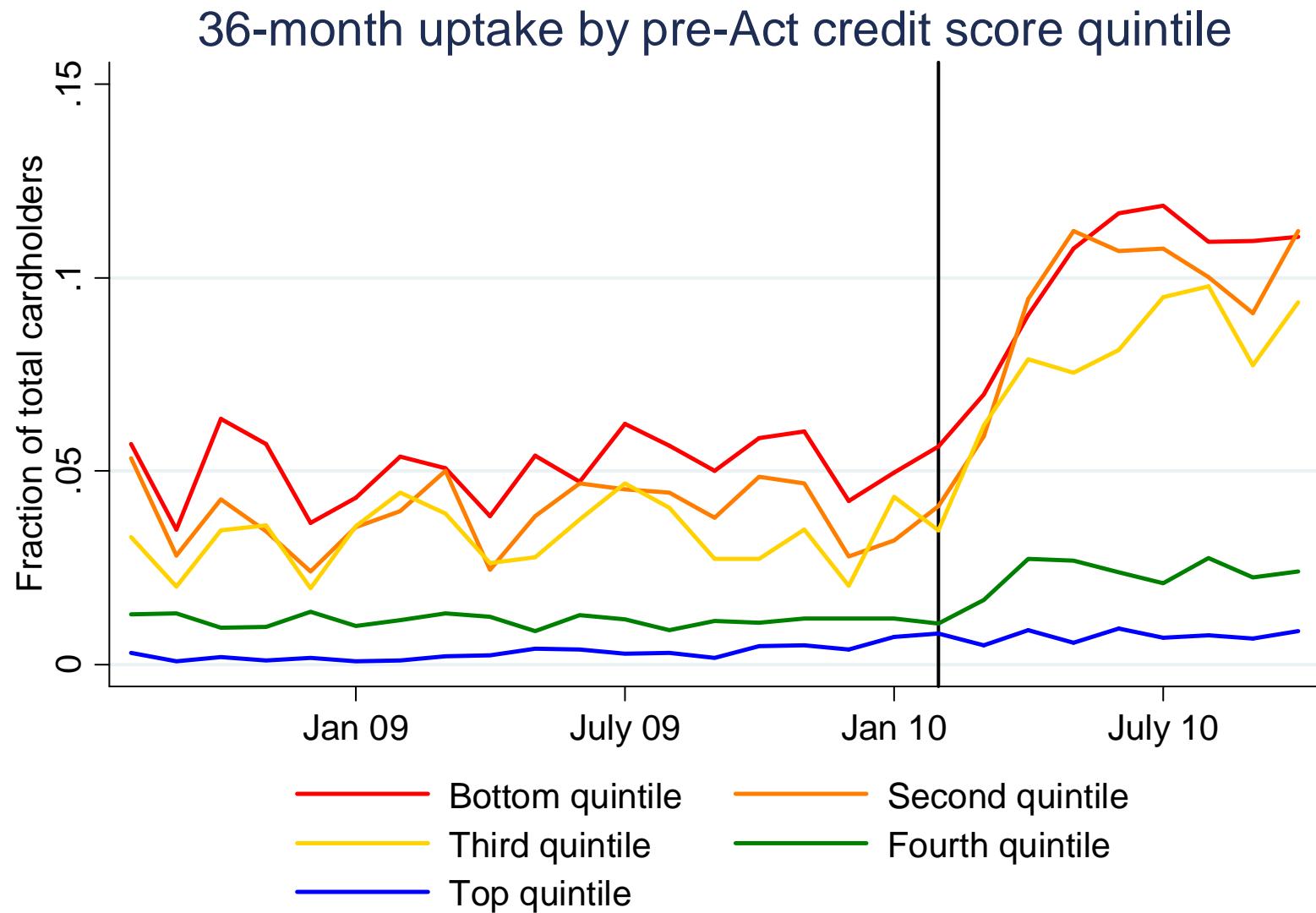
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1. Prior implied months to pay off balance
2. Credit utilization
3. Credit score
4. Balance

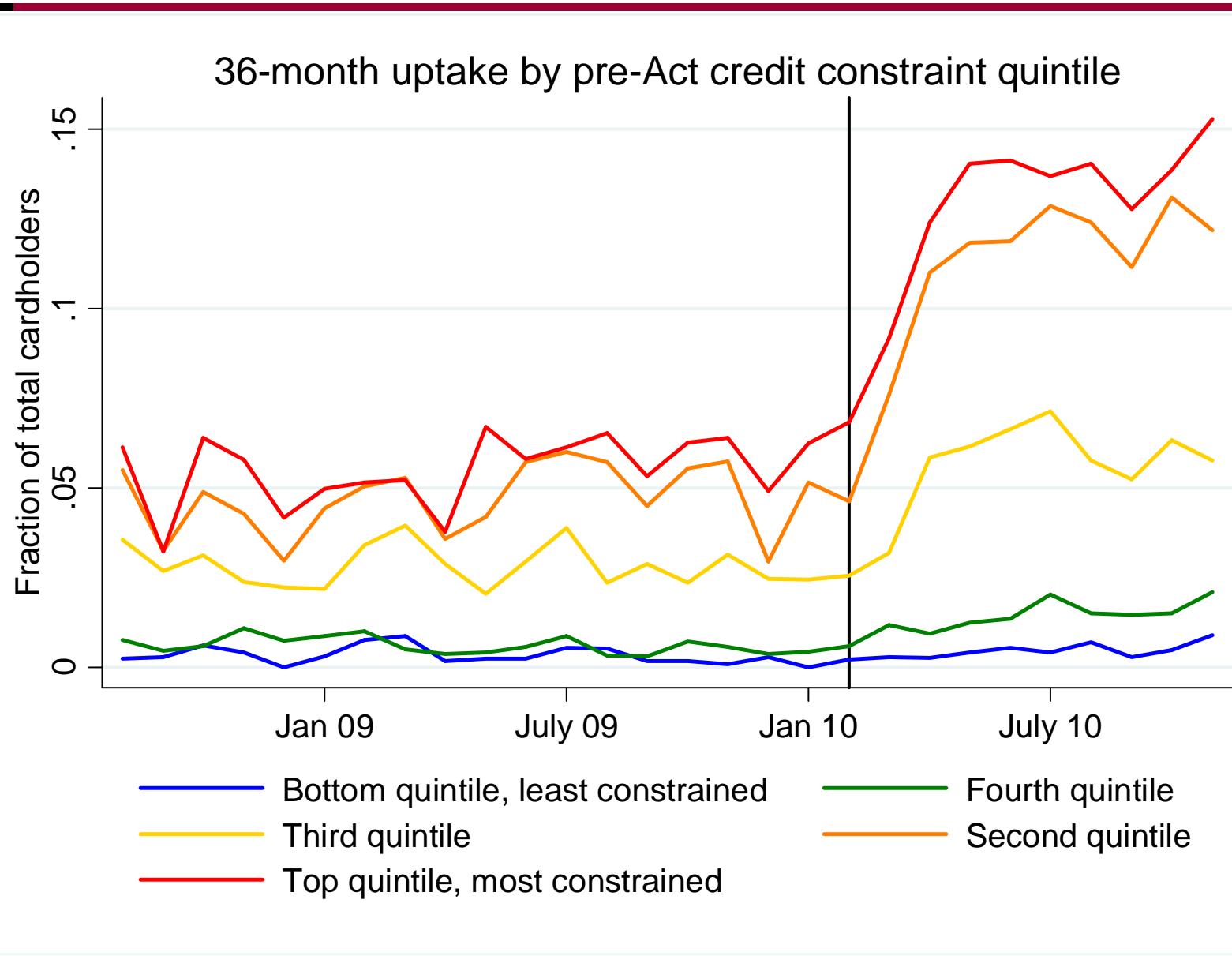
# 1. Implied months to pay off balance: Cardholders who paid more slowly prior to Act adopted 36 month payment more often



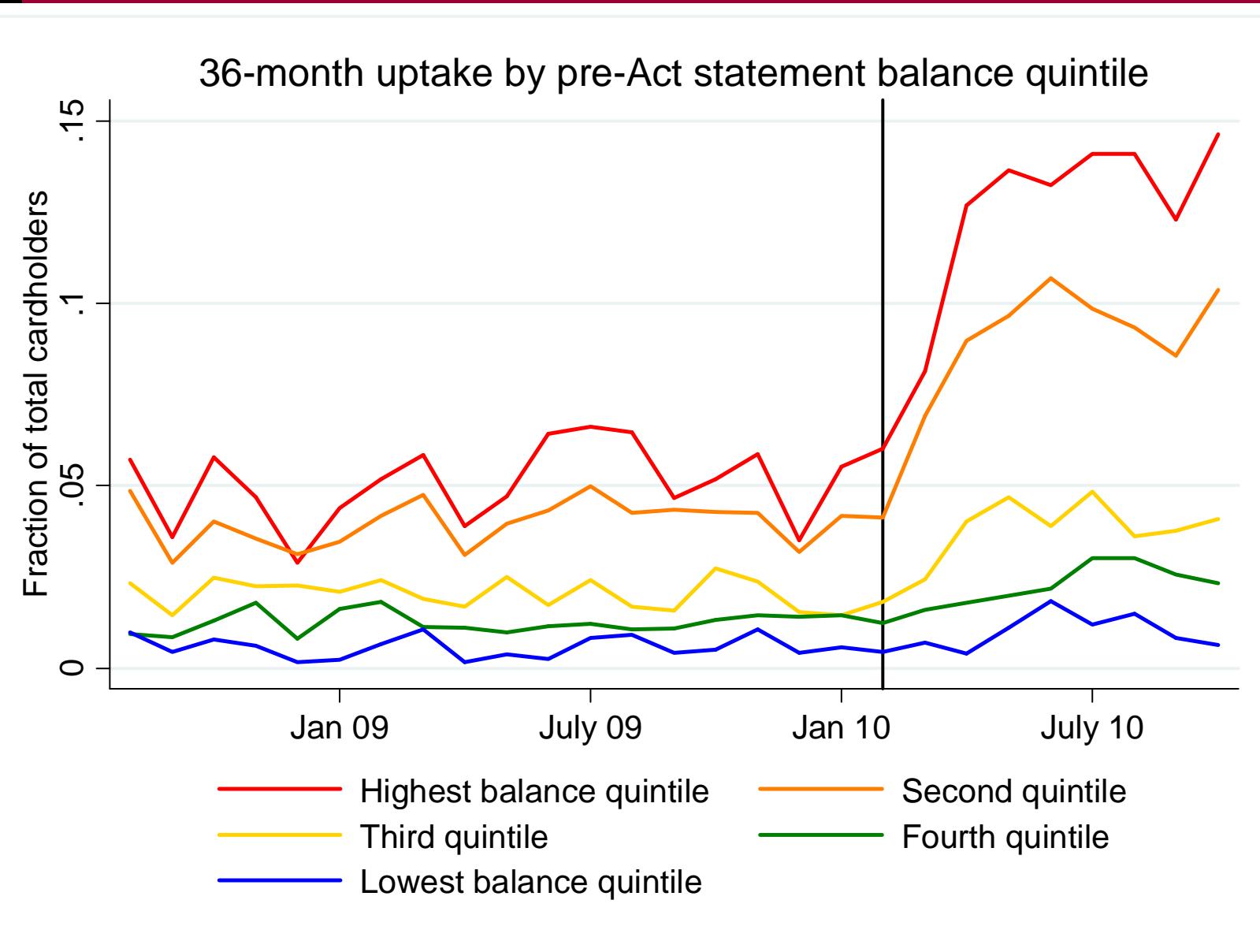
## 2. Credit score: Cardholders with lower credit scores prior to Act adopted 36 month payment more often



### 3. Credit utilization: Customers with high balance/limit ratios prior to Act adopted 36 month payment more often



## 4. High balance: Customers with higher balances prior to Act adopted 36 month payment more often



## Using regression analysis, we see that all four of these factors drive uptake of 36 month amount

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	Paid 36 amount 4+ times
Dependent variable:	
Age	0.0085
Gender	-0.1374
Duration customer	0.0026
(1) Prior duration of payment amt	0.7559***
(2) Credit score	-0.1568**
(3) Credit utilization	0.2056**
(4) Balance	0.2465***
Constant	-7.2543***
Observations	7512

## How does adopting this 36-month guideline impact customer credit behavior and overall indebtedness?

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Current balance =

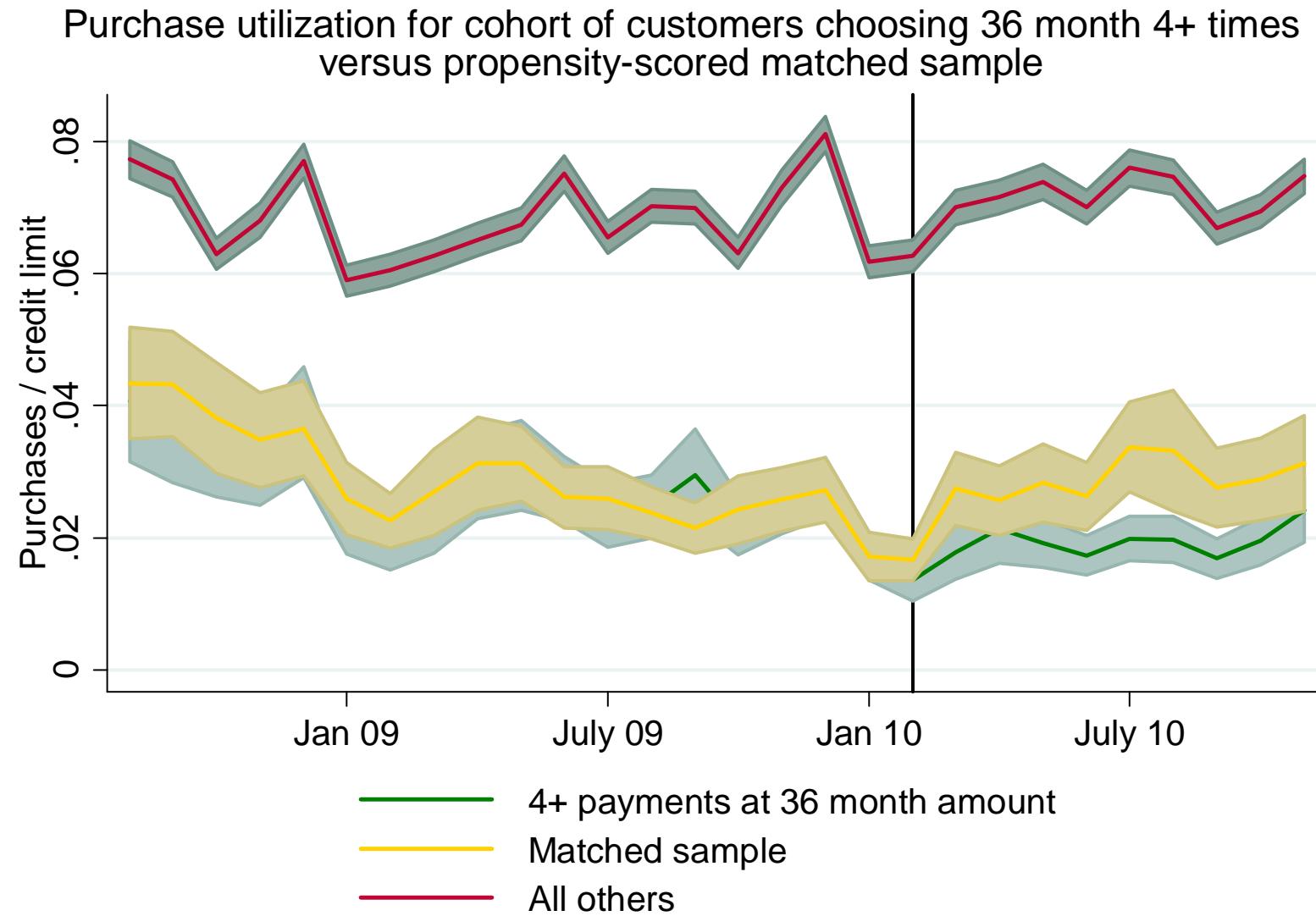
Prior balance + new purchases – payments + fees

How did adoption affect:

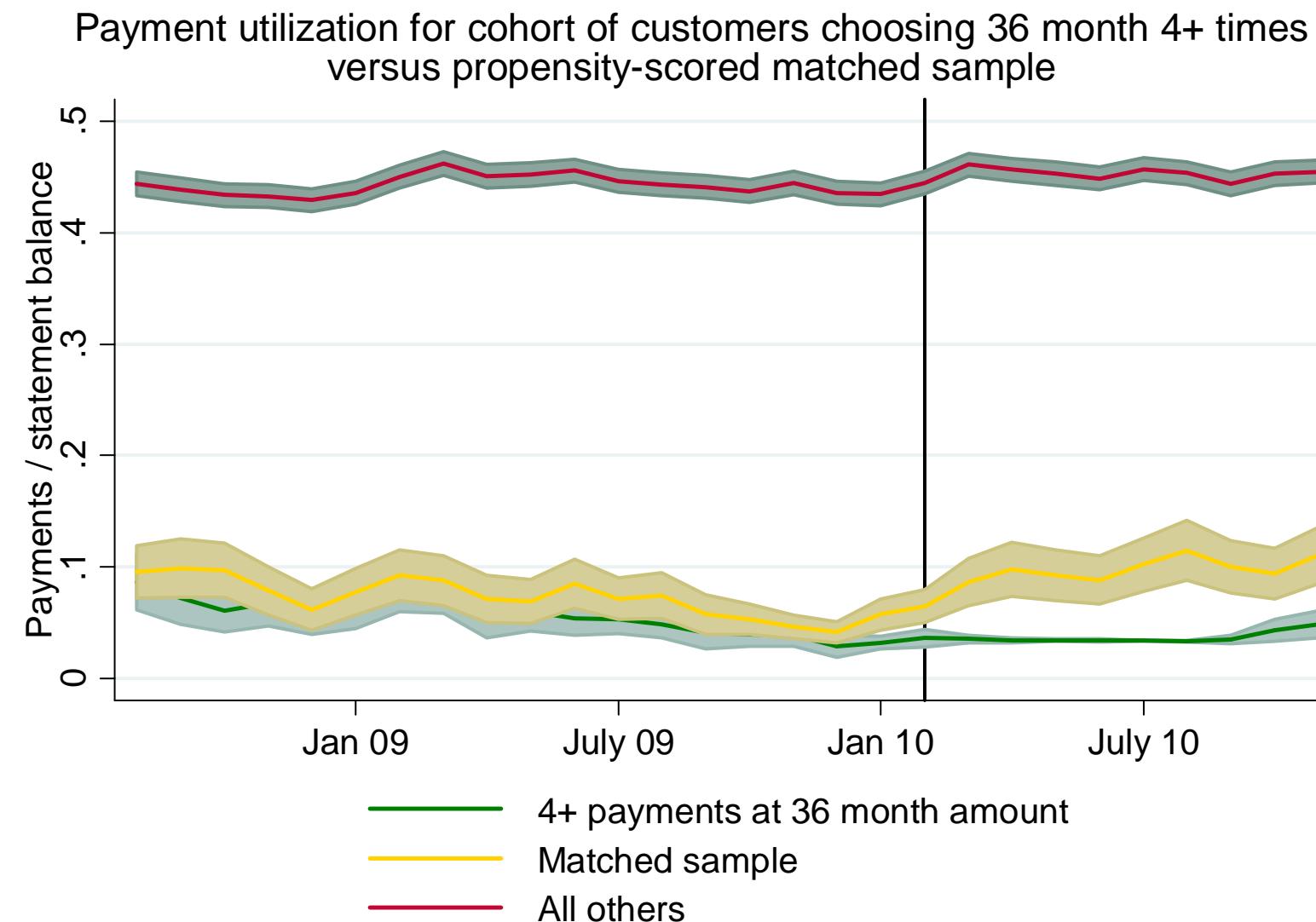
1. New purchases?
2. Payments?
3. Overall total balance?

Compared to whom?

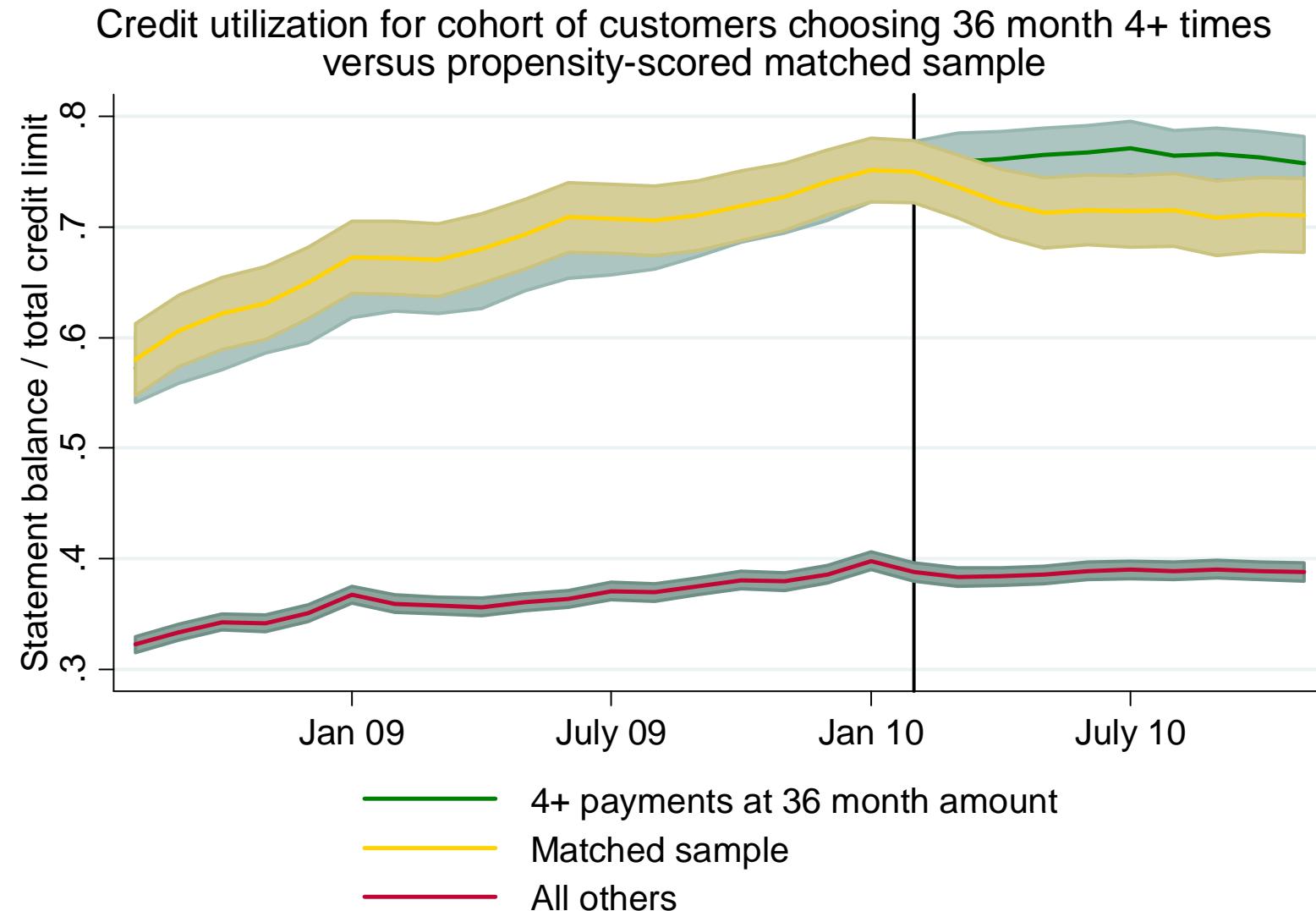
## The good news: Customers following 36 month guidelines for 4+ months made fewer new purchases than a matched cohort



## The bad news: Customers following 36 month guidelines for 4+ months made smaller payments than a matched cohort



## And more bad news: Customers following 36 month guidelines for 4+ months had higher credit balances than a matched cohort



# The new disclosure rules, as written, are a moving target – will they help consumers out of debt?

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- If someone makes no new purchases and pays exactly the 36 month number, they will NOT get out of debt in 36 months:
  - The 36 month amount is recalculated each month - the payoff period will always be 36 months away
  - With 15.32% APR (non-reward rate), it will take a member with the average balance (\$3900) paying her 36 month amount, followed by “minimum- minimum” amount, **150 months to get out of debt**

# To summarize: more research, good news—and less positive news

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1. Research should inform regulation *ex ante* and *ex post*
  - This research is preliminary, to be corroborated on second, larger card issuer's data
  - Need to study overall credit consequences for consumer
2. Preliminary findings – good news
  - Fewer payments at minimum amount, on aggregate
  - Some consumers reframed to the 36 month suggestion
  - Reframing consumers appear to be most credit constrained
  - They are somewhat persistent
3. Less positive news
  - They are *only* somewhat persistent
  - Compared to people who didn't adopt the plan, they seem to be increasing their amount of debt
  - Moving target phrasing

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