A Share Too Far: How Data Innovation Unraveled U.S. Credit Card Information Sharing

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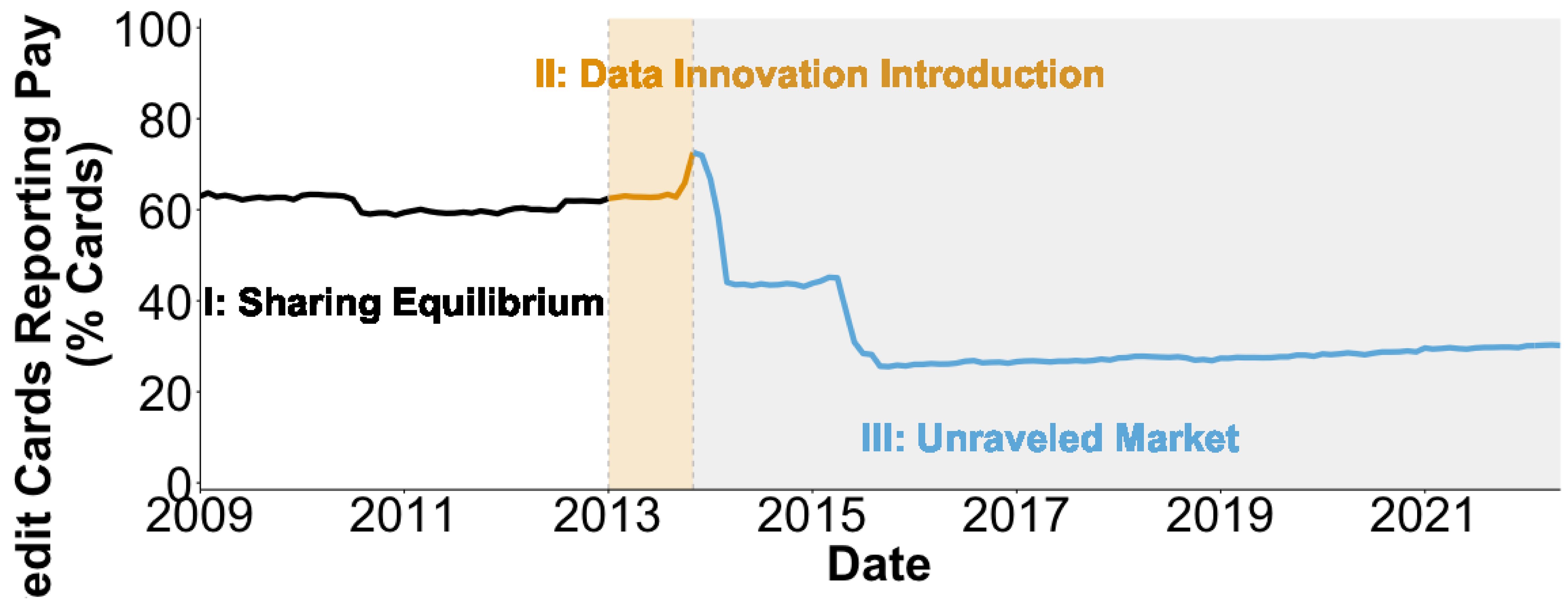
Key Points

- **Half of US credit cards stopped sharing** data on payment amounts to consumer credit bureau (2013 - 2015). Why?
- **Unraveling followed a data innovation ("Trended Data")** introduced in 2013 that shows the trends in consumer debt behaviors – especially using payments amounts data.
- **Trended Data** not only improved ability to predict credit risk but also **revealed consumers' heterogeneous behavioral types** (e.g. high spenders generating interchange revenue, revolvers generating interest revenue) lenders could use to target their marketing efforts.
- **Adverse selection:** Lenders that stopped sharing payments amounts had longer tenure, higher spending & revolving balances.
- **By not sharing payments data, lenders hide consumers' behavioral types** from competitors. Lenders who stopped sharing appear to hold market power and had most to lose from this innovation by having their profitable consumers poached.

Data

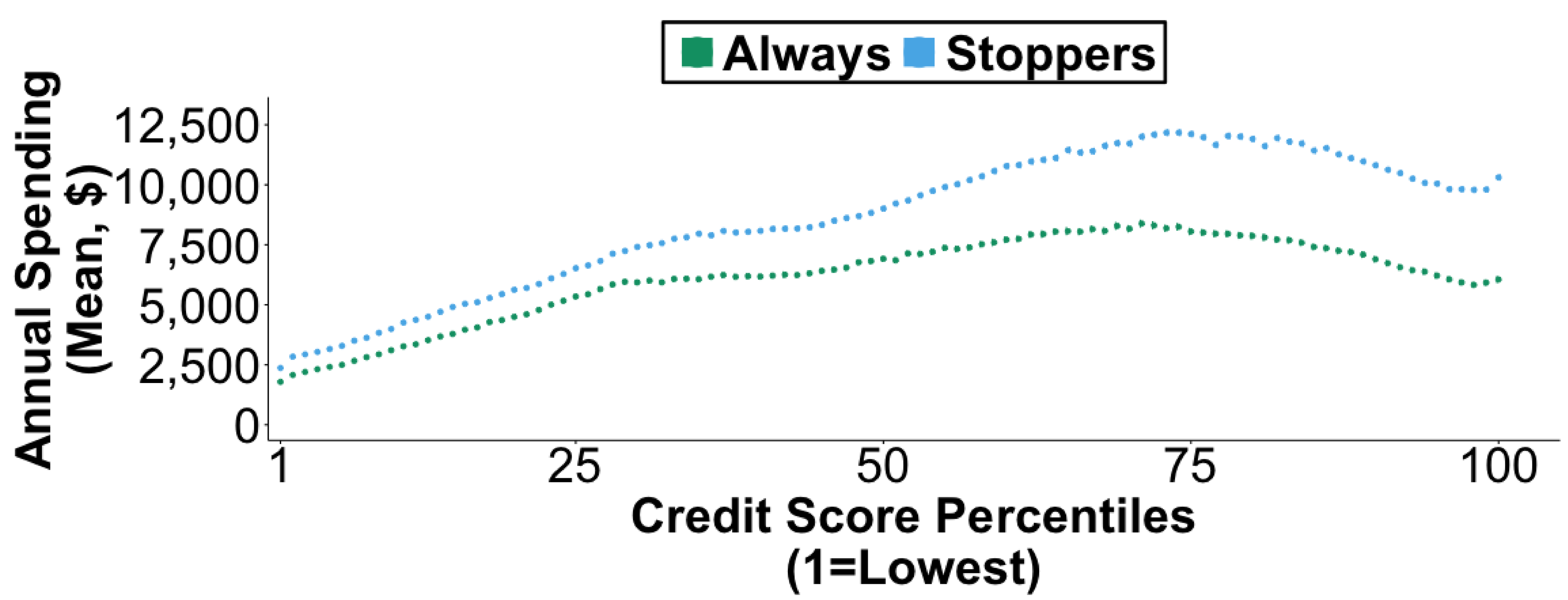
Consumer credit reporting data from the University of Chicago Booth School of Business's TransUnion Consumer Credit Panel (BTCCP). BTCCP is a monthly, anonymized, 10% representative sample of consumers in TransUnion data (2000 - 2022).

Trended Data's introduction in 2013 led to lenders stopping sharing credit cards payments amounts data

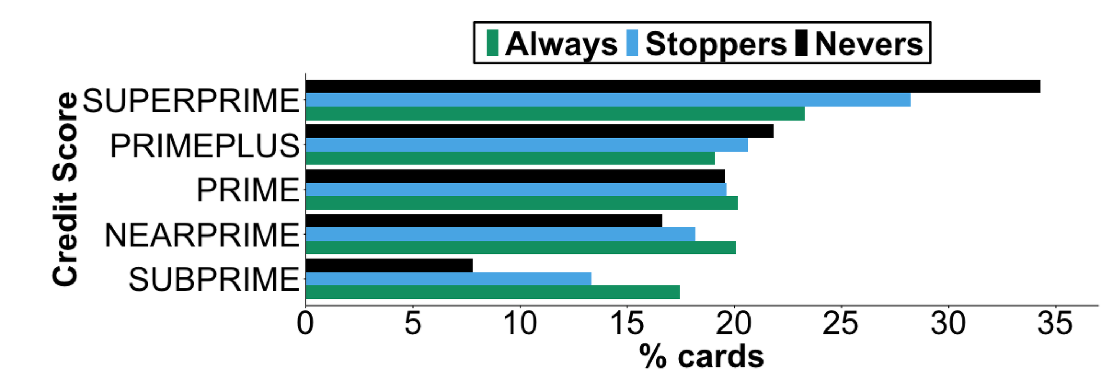


Adverse selection of credit card lenders who *stopped* sharing payments amounts data

- Lenders who stop sharing have consumers with higher expected profitability: Higher spending, longer tenure, higher revolving balances & lower credit risk (relative to lenders who always share payments amounts data). Comparisons based on 2012 portfolios before Trended Data's introduction & unraveling.



Lenders who *never* report payment amounts data have more superprime consumers



What else is in the paper?

- **Predictive models** estimating how payments data and Trended Data improve the ability of lenders to predict credit default and target profitable types - and how information rents vary heterogeneously across lenders.
- **Differences-in-difference** estimating causal effects of lenders' decisions to share data on consumers' credit access by exploiting differential exposures of credit cardholders.
- **Theory model** of how lenders decide a) which consumers to try to acquire and b) whether to share data with their competitors to assist with consumer acquisition.

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