

# Extracting Customer Demand: Credit Card Spending and Post-Earnings Returns

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# Summary

- Customer spending within a fiscal quarter conveys important information about a firm's future sales, earnings and returns
  - This information is incremental to accounting information, as well as to management guidance etc.

# Summary

- Why?
  - Direct consumer spending is a **more precise measure of consumer demand**
    - Relative to, for example, product reviews or internet searches
    - Tough to game, and this is real purchases rather than intention to buy
  - Information contained in **customer base composition** helps in understanding persistence in demand

# Summary

- What might direct purchase/spending data additionally convey over, eg. sales
  - Layering in distribution and inventory management
    - Pre-committed but not yet realized sales
  - Who is buying?
    - Are they likely to buy again

# Summary

- Authors exploit a very nice dataset
  - Contains a representative sample for more than 60,000 U.S. consumers from a large U.S. bank
  - They identify individual credit card spending in a large sample of 858 US public firms from multiple industries
  - Time series is short: an eight-month period from 1st March to 31st October of 2003.

# Summary

- Authors show:
  - Aggregated credit card spending strongly correlates with a firm's sales and net income for the same period
  - Yet it contains additional information: Positive relation between firm-level credit card spending surprise and post-announcement CAR
    - after controlling for earnings and sales surprises
    - Economically large effect
    - Stronger (only present in) retail-focused industries
  - More revenue from high-spending-capacity customers, or from a more diversified customer base is associated with more stable and persistent demand in the future
    - higher return predictability from its spending surprise

# Summary

- Interesting paper with very novel results
  - Clearly written
  - Fantastic data
  - Detailed empirical analysis
  - Thought through many potential issues, many robustness checks

# Thoughts

- **Measure:**

- Standardized Unexpected Spending:

$$SUS_{iknq} = \frac{\text{Spending}_{iknq} - \text{Industry average spending}_{kq}}{\text{Industry average spending}_{kq} + 1}$$

- Largely varies in the cross-section
  - Is it capturing more retail focused firms even within the industry?
    - Firms where large part of sales come through credit card financed transactions



# Thoughts

- **Measure:**
- Suggestion (taste-dependent):
  - Use time series changes in QSUE.
    - Since you have data for 2 quarters you will lose the time dimension, but cross-sectional results still interesting, and you have a very short time series anyway
    - More in line with your earnings and sales surprise measures

# Thoughts

- **Pitch/ Motivation:**
  - Currently seem a bit focused on market efficiency angle
    - “Investors and analysts could exert effort to discover and utilize such information (either on actual spending or on customer composition), which could be helpful in investment decision making.”
  - But since this information is proprietary, these results are at best about strong-form efficiency

# Thoughts

- **Pitch/ Motivation:**

- Authors know this, and show that similar predictability patterns apply to non-retail firms using COMPUSTAT segment data
  - In spirit, results are similar:
    - Results stronger for firms
      - with a lower proportion of sales from large customers
      - whose major customers are government agencies rather than other corporations
- So, the stock market does seem to be less efficient about understanding demand persistence

# Thoughts

- **Pitch/ Motivation:**
  - This is independently interesting, but a different paper
    - Investors can be blamed for ignoring the segment disclosure (when the disclosure come? Is this tradable?), but not for ignoring the credit spending information, which is private

# Thoughts

- **Alternative Pitch:**

- **Level 1:**

- This spending information can however be used by someone who has it:

- Bank-affiliated mutual funds in their prop trading divisions

- These funds should long stocks whose card spending is unexpectedly strong this quarter, or those stocks that have a diversified customer base etc.

- Bank itself: Does the bank use this information to price loans?

- More favorable rates to lenders on whom the bank's cardholders are spending more

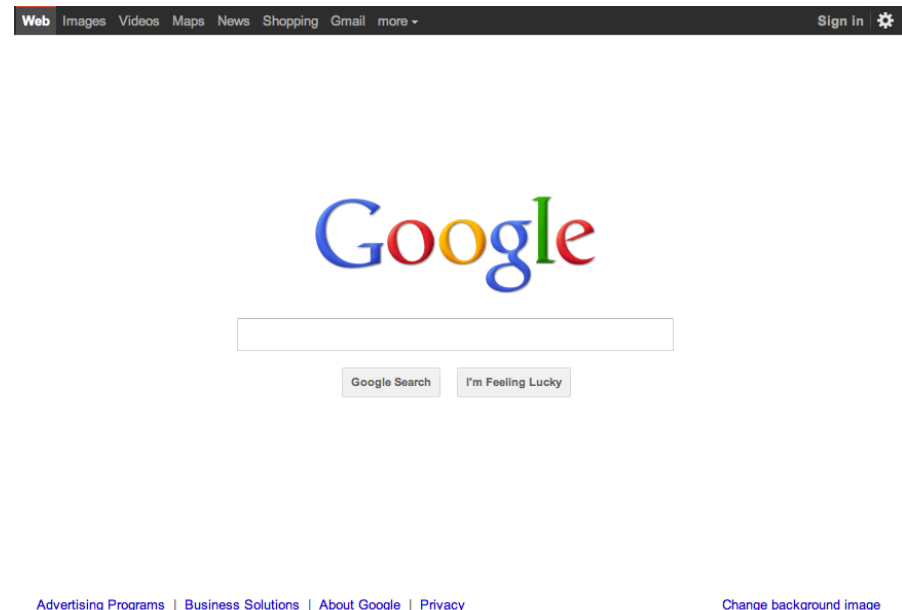
- If this is distribution (Kellogg cornflakes brands sold through Walmart) then downstream data can be used by managers

# Thoughts

- **Alternative Pitch:**
  - **Perhaps more interesting:**
    - Think about searching for information:

Then:

Now:

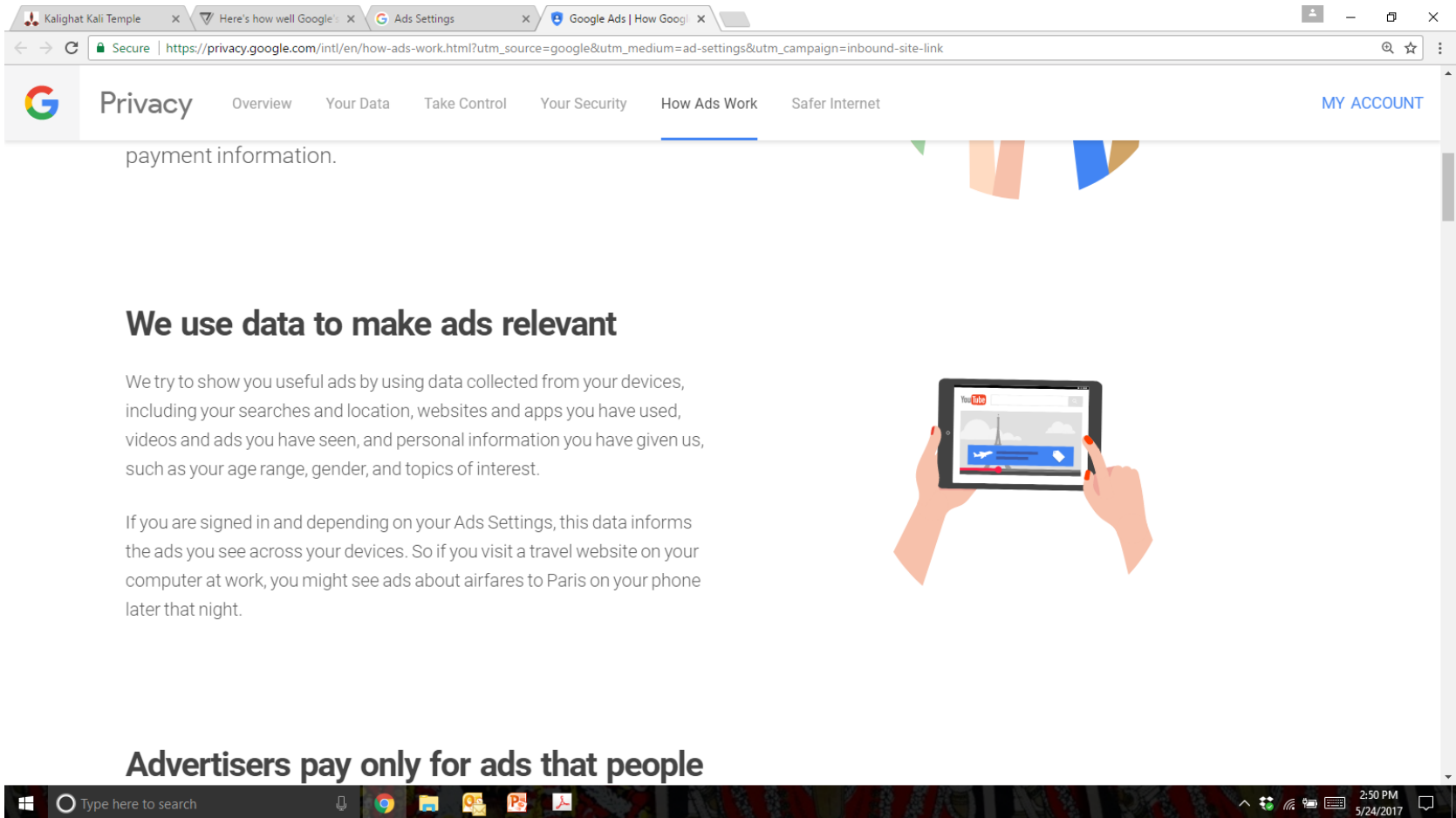


# Thoughts

- **Alternative Pitch:**

- **Perhaps more interesting:**

## Result:




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# Thoughts

- **Alternative Pitch:**
- **Perhaps more interesting:**

Banks then:



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# Thoughts

- **Alternative Pitch:**
- **Perhaps more interesting:**

Banks now:



# Thoughts

- **Alternative Pitch:**
  - **Banks as INFORMATION intermediaries**
  - Banks know a lot more about what customers are doing now than they did a couple of decades back
  - How valuable is the information they have?
    - That is where this paper comes in:
    - You show the information is topical and value relevant, and not necessarily contained in other things the firm/general public know about

# Thoughts

- **Alternative Pitch:**

- **Banks as INFORMATION intermediaries**

- In a firm-level customer demand setting, you guys are the first to show that bank credit-card issuers know something about demand that is economically significant

- You also show them how to use that information

- And exactly why it might be valuable

- E.g., customer concentration & demand persistence results

# Thoughts

- **Alternative Pitch:**

- **So should they also derive value for the data they have?**

- Privacy concerns:

- Yes, but not super stringent for aggregated information

- Would you mind your bank sharing aggregate data about how much people spent using their credit cards this month at this hotel for rooms, versus for room service?

- A lot of Google's valuation depends on the information they have, not just because they can search better than Bing.

- Maybe so should your banks'?

# Thoughts

- **Alternative Pitch:**
  - **So should they also derive value for the data they have?**
    - Privacy concerns: regulatory philosophy
      - Hard to see how this would harm people
      - Might benefit market efficiency
      - Firm managers making policy decisions

# Conclusion

- Interesting paper on an important topic where more work is needed

Thank you!