

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

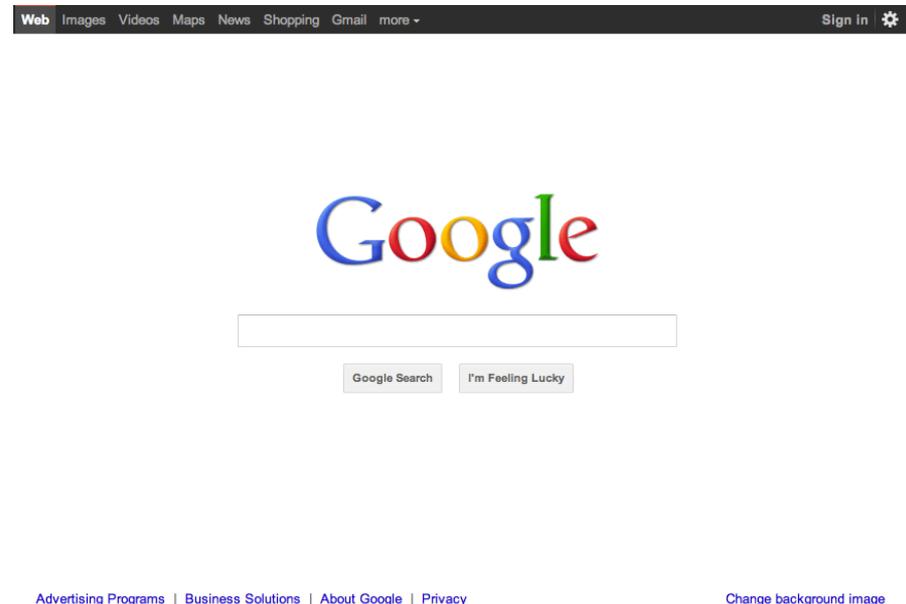
- If this is distribution (Kellogg cornflakes brands sold through Walmart) then downstream data can be used by managers

Thoughts

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

Then:

Now:

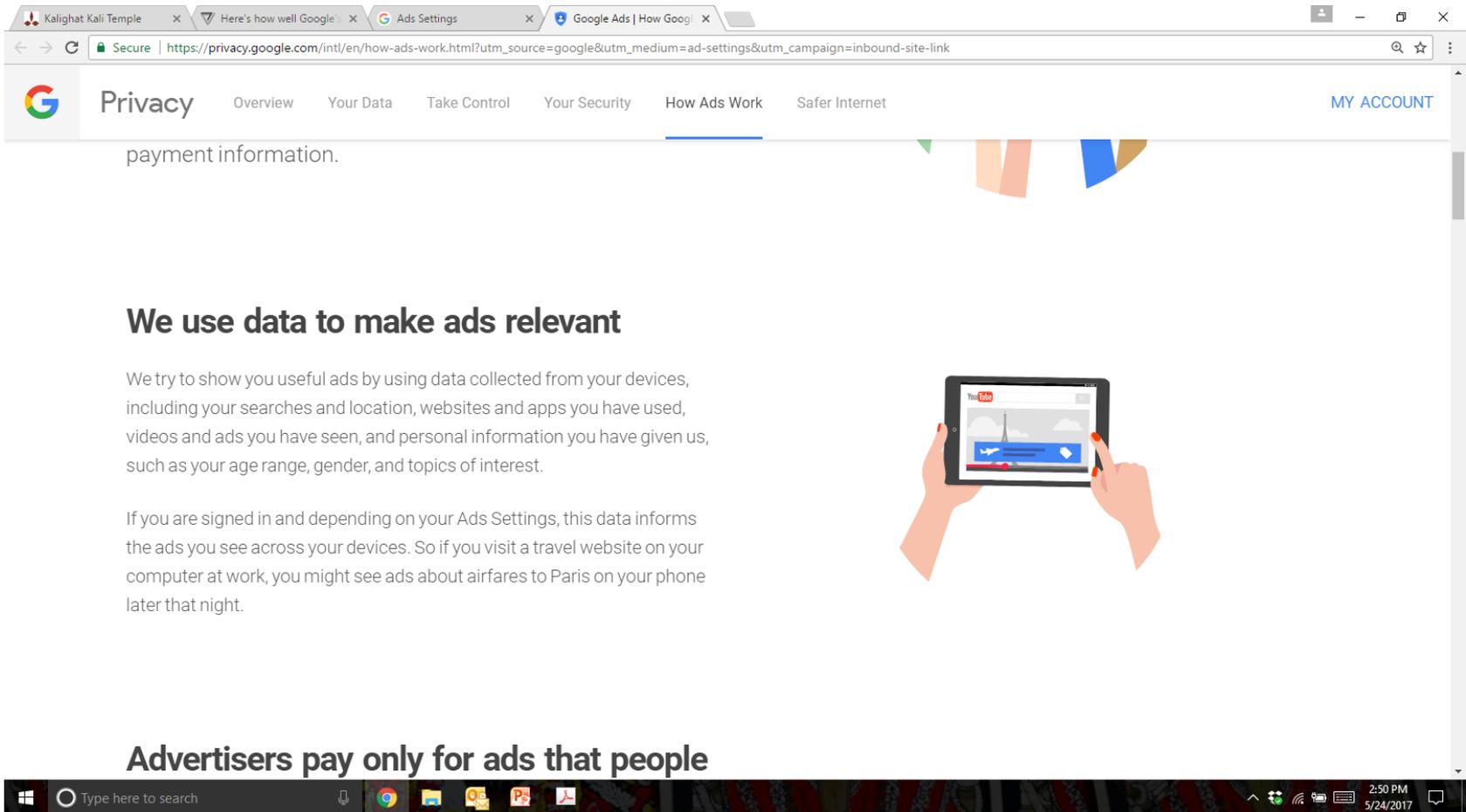


Thoughts

- **Alternative Pitch:**

- **Perhaps more interesting:**

Result:



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If you are signed in and depending on your Ads Settings, this data informs the ads you see across your devices. So if you visit a travel website on your computer at work, you might see ads about airfares to Paris on your phone later that night.



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Thoughts

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

Banks then:



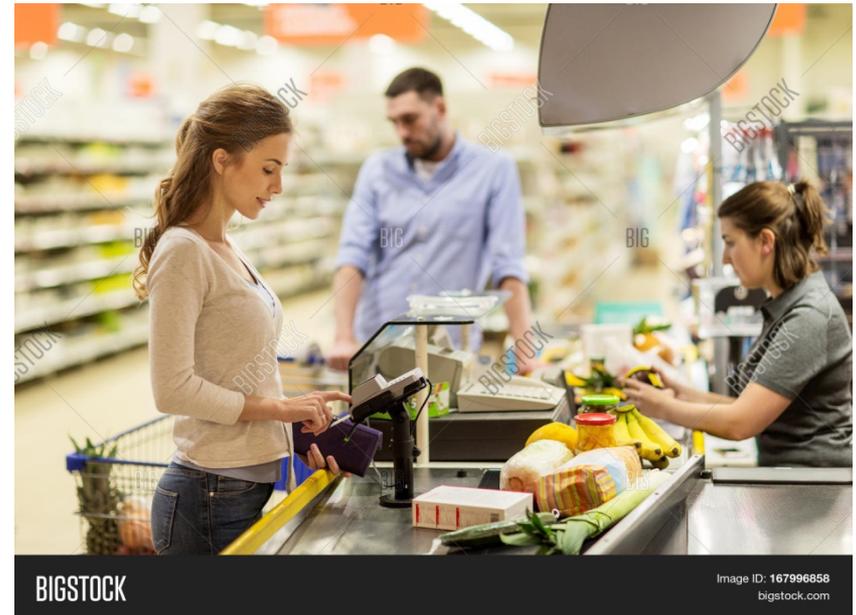
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Thoughts

- **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!