DISCUSSION OF:

"FinTechs and the Market for Financial Analysis"

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Discussion by:

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Placement & Agenda

This paper falls under the Broad Agenda of:

- How platforms change the way households use financial services &
- And then how analysts and markets respond

We know very little on how platforms induces changes in individual's decisions

Most of the early literature concerns using platforms data for previously unanswerable economic questions, not people's behavior fundamentally changing because of FinTech.

Exceptions: how platforms induces changes in: …. (very incomplete list)

- Households borrowing behavior
  - Installment loans rather than open lines credit (Morse 2015, Hertzberg, Lieberman Paravisini, et al 2016, 2018)
  - Borrowing at all/ access (Butler, Cornaggia, Gurun 2013, Morse 2015, Balyuk 2016)
- Households portfolio investing
  - Robo-advising (D'Acunto, Prabhala, Rossi 2018)
  - SRI versus traditional investments (to be done)
- Households saving-consumption decisions change
  - Budgeting & Saving
- Households investing in startups
    - Rewards/ product crowdfunding – kickstarter-like ()
    - Equity crowdfunding (Morse Wang, 2018)

Aside: Paper 2 -- I love these stats

Common capabilities	
Aggregating financial news	83%
Datamining for investment signals	57%
Evaluating and ranking existing financial advice	27%
Crowdsourcing financial advice	16%
Aggregating financial experts' opinions	11%

- 90% of financial blogs do not make buy or sell recommendations,
- Yet, Investors strongly prefer to visit financial blogs that make equity recommendations.
- Thus financial blogs with stock recommendations rank 40 percentiles above blogs without in terms of pages visits and dwell time

It would be great to see a paper on blog content and investor use by itself

Paper Findings

Explore the implications of FinTech entry in three different ways.

1. Investor level finding: "a significant substitution between the investors' use of traditional information and FinTech"

2. Data-producer level finding: "an associated crowd-out effect reduces the quality of the information provided by [traditional analysts] ..
   - And less market response to analyst recommendations

3. Market level finding:… "the increased use of these FinTechs result in an overall increase in price informativeness"

Comment 1:
I would write the paper about this table, up front and as the center

Dependent Var: Abnormal returns following analyst's upgrade or downgrade

Panel B. Change in Reaction Pre & Post FinTech En	(1)	(2)
FinTech Coverage	-0.28%***	-0.25%*
T-stat	(3.36)	(1.87)
Time Fixed Effects	Y	Y
Analyst Fixed Effects	Y	-
Firm Fixed Effects	Y	-
Firm-Analyst Pair Fixed Effects	-	Y
Include 5 Years Before FinTech	N	N
Observations (Recommendations)	35,790	18,905
Firm-Analyst Pairs	-	7,593

- This is a phenomenal estimation
- When the source material for FinTechs aggregation (the variable FinTechCoverage) is high on a particular stock, the market reacts to an analyst's opinion less
  - Control for the extent to the revision, media coverage, etc, so not capturing the newsworthiness.
  - Spend more time helping the reader understand this source material idea
  - But this would be a shocking (in a good way) result, if it stands.

Big picture = > narrower picture

Explore the implications of FinTech ~~entry in three different ways~~.

1. ~~Investor level finding: "a significant substitution between the investors' use of traditional information and FinTech"~~

2. Data-producer level finding: "an associated crowd-out effect reduces the quality of the information provided by [traditional analysts] ..
   - And "less [market] responsive to analyst recommendations even using such a within-comparison.

3. ~~Market level finding:… "the increased use of these FinTechs result in an overall increase in price informativeness~~"

Investor level finding: "a significant substitution between the investors' use of traditional information and FinTech".

$$OriginalAnalysis_{it} = \alpha + \beta FinTechVisit_{it} + f_i + \delta_t + \epsilon_{it}$$

- *Original Analysis:* a visit to website containing original-content financial analysis

- Including user & time fixed effects

For Investors, FinTechs Replace Traditional Research

Authors' Slide: ➔

But one piece is not quite accurate

- Using ComScore's U.S. sample with full internet click history.
- Investors visit 31 p.p. fewer websites with original-content financial analysis, view 17 p.p. fewer pages, and spend 5 p.p. less time there when they visit a FinTech.

	Dep. var. = Reads original-content financial analysis	Page views of original-content financial analysis	Time spent on original-content financial analysis
Visits a FinTech website	**-0.31*** (0.30)**	**-0.17*** (0.01)**	**-0.05*** (0.01)**
User FE	Y	Y	Y
Time FE	Y	Y	Y
Adjusted R-squared	25.5%	1.2%	2.0%
Obs.	260,003	260,003	260,003

Pseudo investors

- But ComScore is not a panel:

  "The ComScore sample of internet users changes on a monthly basis, which prohibits within-person comparisons over time."

- Authors make pseudo individuals:

  "*Using demographic data on education, race, age, income, household size, number of children, internet connection speed, and census location, we create about 36,000 pseudo-individuals that perfectly match on these categories and follow them over time.*"

- The authors then use terminology "user fixed effects"

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- Meaning… investor-level results could be identified off <u>selection in pseudo-matching</u>
  - Unlikely to come close matching a national sampling of 36,000 individuals on education, race, age, income, household size, number of children, internet connection speed, and census location

  - Likely (?): people are either original content types or they are FinTech types

Market level finding:… FinTech entry reduces price informativeness

- On Price Informativeness… It's hard to get far making this claim, even in a suggestive way, without doing a within-firm analysis

	Dep. Var. = Price Informativeness	
Panel A.	(1)	(2)
FinTech Coverage	0.460***	
	(0.046)	
High Quality FinTech Coverage		0.454***
		(0.046)
Additional Controls	Y	Y
Time Fixed Effects	Y	Y
First Stage F-Stat	190.4	179.9
T-Stat on Instrument	13.8	13.4
Adjusted R-squared	48%	48%
Observations	79,543	79,543

Data-producer level finding: "an associated crowd-out effect reduces the quality of the information provided by [traditional analysts]"

$$Analysts'\ Report\ Quality_{it} = \alpha + \beta\ FinTechCoverage_{it} + controls$$

- Controls: newspaper coverage, analyst coverage, firm size, daily return volatility, mean monthly return, log market-to-book, volatility of ROE, profitability, S&P 500 membership, equity f.e
- (!) Authors should make more fuss about how saturated their model is (in an good way)

- FinTechCoverage is availability of blogs on that stock
  - Nice idea = coverage proxied by source material available to aggregate

- Issue = proxy does not meet the condition of it being correlated with outcome only through the latent variable
  - Something could happen to attract blogging and make the analyst do more detailed analysis

$$Analysts' Report Quality = \alpha + \beta\, FinTechCoverage + controls$$

IV: Short headlines attract more attention on stock news website SeekingAlpha

- Exclusion: length of headline correlated with an analysts' reporting quality only through FinTechCoverage
- Authors: headlines are quasi-random since they are selected at the discretion of the editor
  - But this assumes
    - Short headlines in ***newspapers*** (not a blog site) are random to information content
    - Newspaper editors don't know that short headlines are popular
  - Lasso:

	Dep. Var. = Headline Length (1)	R-squared When Variable Is Included (2)
quarterly	24.89	2.25%
available	10.69	7.42%
annual	5.76	7.94%

Lasso Suggests: short headlines are picking up filings

- If Media covers filings when they come in as a surprise, expect less accuracy in reporting
  - Opposite story possible: media coverage of filings is boring
  - Hard to make a quasi-random assertion

Discussion Retrench & Punchline

Tell me more about analysts. Go after careers more, etc.

- I am skeptical on the investor- & market-level estimations and I am not a big fan of the instrument

- BUT…
- There is something to the (non-IV) pattern in analysts accuracy
  - Those are within-firm regressions
- AND…

This table is phenomenal:

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