The Value of Openness

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Discussion by:

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Background: Location and firm valuation

What explains the cross-sectional variation in firms' valuation ratio (Q)?

- Dougal, Parsons, and Titman (2022 RFS)
  - City fixed effects explain 31% of R^2 of cross-sectional Q variation, controlling for industry.
  - Firms in San Jose, San Francisco, San Diego, Seattle, and Boston show high Q after controlling for industry fixed effects.
  - Firms in Richmond, Cleveland, Hartford, Charlotte, and Milwaukee show low Q after controlling for industry fixed effects.
  - Cities' appealingness to high skilled workers drives, at least in part, the explanatory power of cities on firms' Q.

This paper: A unique heterogeneity of cities

A fresh angle—Cities' culture in terms of "openness"

A novel measure:

- Measuring MSA's openness by the share of new songs on its radio stations

$$NEW_{i,t} = \frac{\#NewSong_{i,t}}{\#AllSong_{i,t}}$$

- $NEW_{i,t}$ is highly persistent across time

Interesting empirical findings:

- Firms headquartered in MSAs with higher *NEW* (i.e., greater openness) have greater Tobin's Q
  - City Openness $\longrightarrow$ Growth potential
- MSAs with higher *NEW* also witness more new ventures and new product introductions
  - City Openness $\longrightarrow$ Actual innovation in products
- and $\cdots$

Outline

Measuring cities' openness is a challenging task.

This paper provides an innovative measure and finds important and interesting results on firms' value creation.

My discussion will focus on strengthening the measurement and testing.

Comment 1: On measuring “openness”

Big Five Personality Traits

- openness to experience (inventive/curious vs. consistent/cautious)
- conscientiousness (efficient/organized vs. extravagant/careless)
- extraversion (outgoing/energetic vs. solitary/reserved)
- agreeableness (friendly/compassionate vs. critical/rational)
- neuroticism (sensitive/nervous vs. resilient/confident)[2]

Openness to experience

- Openness involves six facets, or dimensions: active imagination (fantasy), aesthetic sensitivity, attentiveness to inner feelings, preference for variety (adventurousness), intellectual curiosity, and challenging authority (psychological liberalism).

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Music choice is a powerful indicator of personal traits

- Edmans et al. (2022 JFE): Music sentiment predicts investor choices

Comment 1: On measuring "openness"

Openness to new music appears a good proxy for personal openness

Suggestions for refinement:

- Songs within the same genre are more similar (and less new) than songs across genres
- Many cities are labeled with certain genres:
  - NASHVILLE – for Country. ...
  - NEW ORLEANS – for Jazz. ...
  - SEATTLE – for Grunge. ...
  - NEW YORK – for Hip Hop. ...
- A city may be more open if it introduces a song from a different genre than introducing a song from the same genre in the past
- Suggestion: consider constructing a refined measure up-weighting songs from genres different the previous genres in the MSA

Comment 2: On testing technology adoption

The mechanism of this paper:

"*As cities differ in their openness toward adopting new innovative products, local firms consequently differ in their ability to capitalize on their growth opportunities.*"

Comments:

- All results are based on cross-sectional evidence so far

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- All results are based on cross-sectional evidence so far
- Some thoughts on testing "adopting technologies"
  - Technological bursts happen with waves (e.g., Mestieri et al. (2021))
  - A diff-in-diffs test would ask: Are firms in cities with higher openness more likely to adopt tech and create value when the aggregate technology burst occurs?
  - That is, do firms in high-NEW cities have especially higher Q than firms in low-NEW cities when aggregate Q is higher?
  - This DID test can shed light on your mechanism beyond the cross-sectional evidence
  - You can test this prediction by interacting MSA's NEW with aggregate Q.

$$Q_{j,t} = \beta_1 NEWj,t \times Agg.Q_t + \beta_2 NEWj,t + \gamma X_{j,t} + \epsilon j,t$$

  - One would expect β_1 to be positive...

Comment 3: Extensive margin or intensive margin?

Entry and exit is severe in stock market:

- Bessembinder (2018 JFE): "*The median life of a common stock on CRSP, from the beginning of sample or first appearance to the end of sample or delisting, is just 90 months*"
- Fama and French (2004 JFE): over 550 new firms enter the U.S. stock market per year in 1980-2000, compared to less than 150 firms in the previous two decades

We should think of the modern stock market as some large firms with relative stability of being in the market, while many firms may be "in and outs"

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Sharpening the mechanism: extensive vs. intensive margin

- Do higher-NEW MSAs attract more high-Q entries, or do they foster existing firms to improve Qs (e.g., through openness to adopting future technology)?

Suggestion: Decompose MSA's Q using stable firms and entry-exit firms.

It helps to understand the mechanism no matter which component of MSA's Q is driven by NEW

Comment 4: Some "loose ends" on standard errors

- Clustering standard errors
  - This paper relies on the cross-sectional variation in NEW, which is persistent across time
  - Q can also be persistent within a firm
  - Regression residuals may not be i.i.d across years
  - Clustering standard errors by MSA seems necessary

Conclusion

- An innovative and interesting paper!
- An innovative measure of cities openness, which is extremely challenging to measure
- A fresh angle towards understanding geographic heterogeneity in Q pioneered by Dougal, Parsons, and Titman (2022)
- Highly recommend. Many directions to go with the interesting measure and findings...