# Employee Output Response to Stock Market Wealth Shocks

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# Summary

- **Question:** how do fluctuations in stock market wealth impact worker output/performance?

- **Approach:** compare performance of life insurance sales agents within large company
  - Compare *same individuals* over time at *same point in time*
  - Comparison alleviates concerns about macro trends, individual heterogeneity

- **Main Findings:**
  - Find a **10% ↑** in monthly stock market wealth causes a **3.8% drop** in commission income
  - Response is short-lived

- **Comments:** interpretation & mechanisms – focus on directions for future research

# Wealth Shocks and Labor Market Outcomes

- **Cash windfalls**
  - Lottery wins reduce labor earnings, winners reduce more than spouses (Cesarini, Lindqvist, Notowidigdo, and Östling, 2017)
  - Windfalls from mineral payments $\Rightarrow$ extend self-employment spells (Bellon, Cookson, Gilje, and Heimer, 2021)

- **Housing wealth** – job-lock
  (Brown and Matsa, 2020; Bernstein, 2021; Gopalan, Hamilton, Kalda, and Sovich, 2021)

- **... and debt**
  - Student loans $\uparrow$ earnings but lower returns to experience (Alon, Bachas, and Wong, 2020), reduce mobility (Di Maggio, Kalda, and Yao, 2020)
  - Credit access $\Rightarrow$ longer search when unemployed, more entrepreneurship (Herkenhoff, 2019; Herkenhoff Phillips Cohen-Cole, 2021)
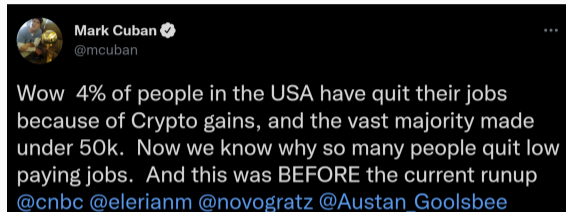
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- **Stock market wealth** – reduces effort/performance (this paper!)

# Stock Market Wealth and Labor Market Outcomes

- How large is the labor supply response to wealth shocks?

- How does employment react? Hours? Effort?

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  - …and Crypto gains?



Mark Cuban ✔
@mcuban

Wow  4% of people in the USA have quit their jobs because of Crypto gains, and the vast majority made under 50k.  Now we know why so many people quit low paying jobs.  And this was BEFORE the current runup @cnbc @elerianm @novogratz @Austan_Goolsbee

**Have you, or someone you know, quit your / their job at some point over the last year due to financial freedom earned by investing in cryptocurrency?**



Yes, I have — 4%
Yes, someone I know has — 7%
No, not at all — 88%

6,741 responses from 10/20/2021 to 10/27/2021
Weighted by U.S. Census 18+
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**Justin Wolfers** ✔
@JustinWolfers

This is what measurement error looks like.

> 🌐 **Mark Cuban** ✔ @mcuban · Nov 3, 2021
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>
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# Behavioral or Rational?

# Is this a behavioral phenomenon?

- Paper interprets short-lived response as evidence of behavioral bias
  - **Idea:** "short-term mental account" reduces labor when income reaches a reference point

- To what extent do agents view increases in stock market wealth as *income*?
  - Corresponding change in permanent income likely larger than given month's stock gains
  - Do people lump together labor income and stock gains in the same mental account?
  - Evidence from lab. settings and gov't benefits suggests separate mental income accounts (e.g., Heath and Soll 1996; Thaler, 1999; Hastings and Shapiro)

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- Realized vs. unrealized gains
  - Estimated effect of returns is similar after controlling for *realized gains*
  - Do agents lump both realized and unrealized gains into the same mental account?

## Is this a behavioral phenomenon? An alternative (rational) explanation:

- Paper finds a larger work reduction if reference level was reached in the last month

    ▶ Company evaluates agent performance over last 3 calendar months (quarterly)

    ▶ Define reference income as last quarter's average monthly income

- Does the performance evaluation (rationally) induce slacking?

    ▶ Is there is a discontinuous cost of slacking around the benchmark?

    ▶ If slacking is less costly after reaching the benchmark, could this explain the stronger output decline in response to stock wealth gains?

# Peer Effects

## Friends with Financial Inclusion Benefits

- How does co-worker participation (and success) in stock markets influence peer...
  - ▶ Participation?
  - ▶ Portfolio choice?
  - ▶ Success?

- Setting like this could help identify effects of peer success

- But likely need a different source of variation to identify effects of participation

- Co-worker peer effects can be significant for financial decisions
  - ▶ In bankruptcy context: Pr(file) rises when coworkers successfully file (i.e., not dismissed) (Kleiner, Stoffman, and Yonker, 2019)

# Conclusion

## In conclusion...

- Well-executed and fascinating paper!

- Unique data enables examination of how labor *effort* responds to stock gains

- Helps round out our understanding of how wealth shocks impact labor supply

- Future work:
  - ▶ Is financial wealth contributing to the Great Resignation?
  - ▶ Does financial sophistication/literacy alter the impact of stock gains on labor supply?
  - ▶ Peer effects from stock market participation/success?
  - ▶ Do wealth shocks enter through different mental accounts? How does this impact behavior? Does this lead to costly mistakes?

# Thanks!