SFS Keynote lecture, 2018
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Is it time get rid of Earnings-per-Share (EPS)?

ILLINOIS
Gies College of Business

Thank you

SFS council
Wei Jiang and Hanno Lustig
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Marshall School of Business at USC, specially Oguz Ozbas, John Matsusaka and PhD students
SFS participants

My talk

Growing concern with short-termism, and possible negative effects on long-term investments

Series of recent papers linking earnings-per-share (EPS) targets to real investment decisions

Is it time to get rid of EPS?

If so how can we do it?

Real effects of short termism

Short termism and long-term investments
    Gutierrez and Philippon (2016, 2017)

Low investment relative to profits and Q

Suggestion that it may be partly due to increase in institutional ownership and activism

Evidence on activism

Current evidence does not support claim that activism leads to short-termism

Brav, Jiang and Kim (2015), Brav, Jiang, Ma and Tian (2017), Bebchuk, Brav and Jiang (2015)

EPS targets and short termism

More compelling evidence of short-termist behavior

Firms change investment and payout decisions to meet EPS targets

Evidence from vesting equity

Edmans, Fang and Lewellen (2017) and Ladika and Sautner (2017)

Vesting equity increases CEO's concerns for the current stock price

Executives with more short-term incentives reduce long-term investments and increase EPS

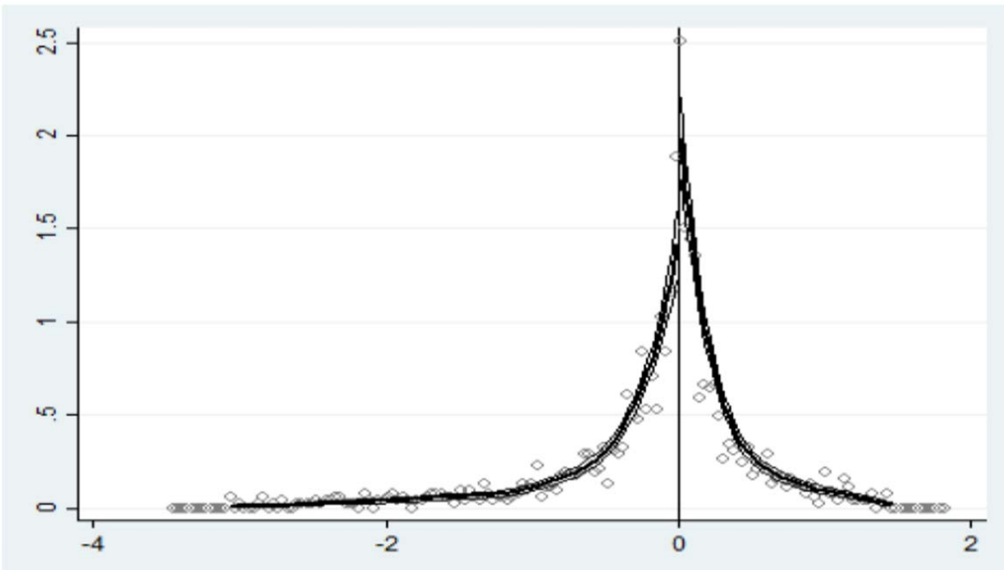
Bennett, Bettis, Gopalan and Milbourn (2016)

Equity and non-equity grants linked to explicit performance goals

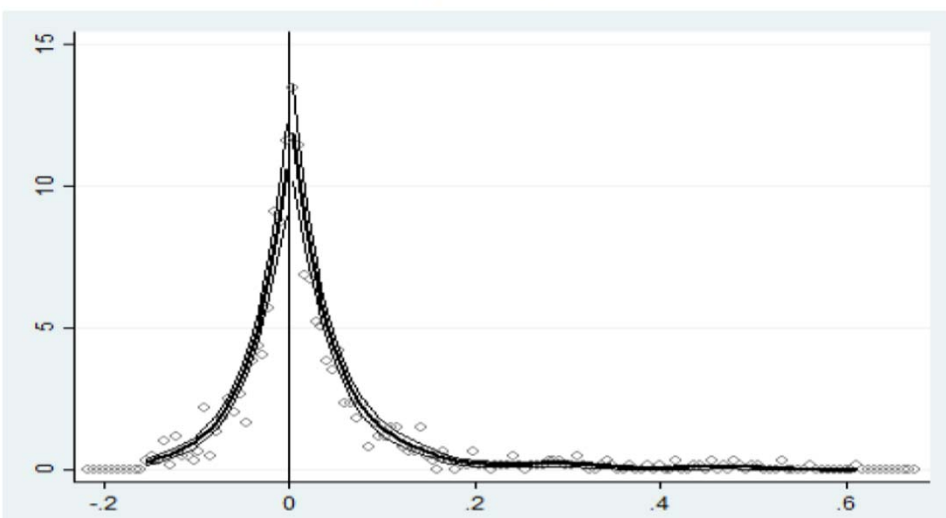
- Kinks in levels and slopes

Strong evidence that firms take actions to meet these compensation targets

(a) *Test of discontinuity:* EPS



(b) *Test of discontinuity:* Sales



How do firms meet their EPS goals?

Firms that just exceed their EPS goals have higher abnormal accruals and lower R&D expenditures than firms that just miss EPS goals

Terry (2017)

Analyst EPS forecasts also matter

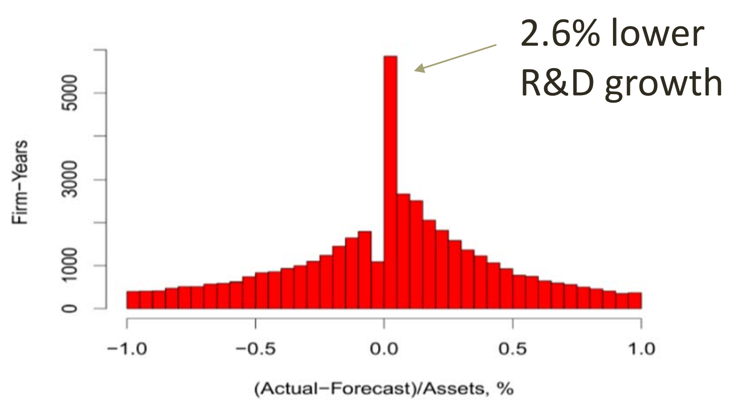


Figure 1: Firm profits bunch above targets

EPS and repurchases

Almeida, Fos and Kronlund (2016)

Managers are willing to trade-off investments and employment for stock repurchases that allow them to meet analyst EPS forecasts

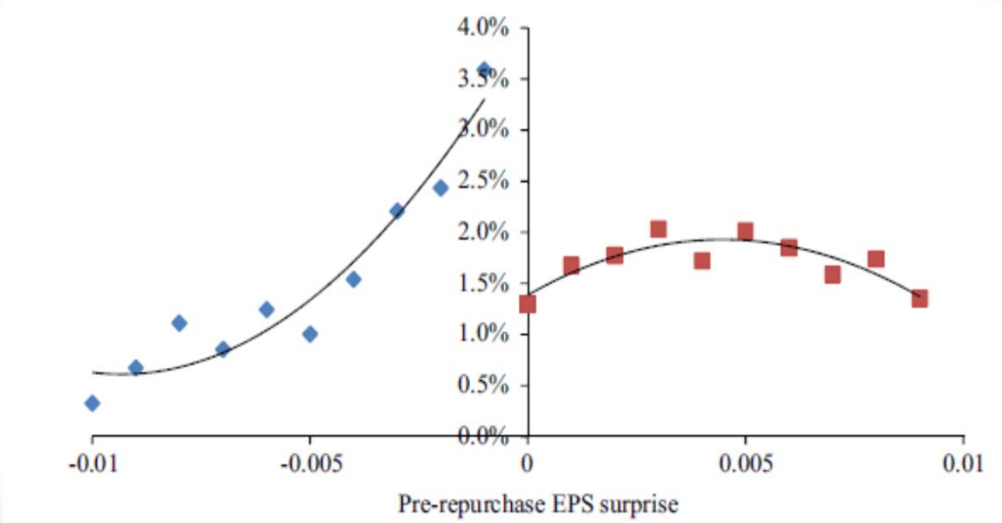
Pre-repurchase EPS surprises

What would the EPS have been without the repurchase? (Hribar, Jenkins and Johnson, 2016)

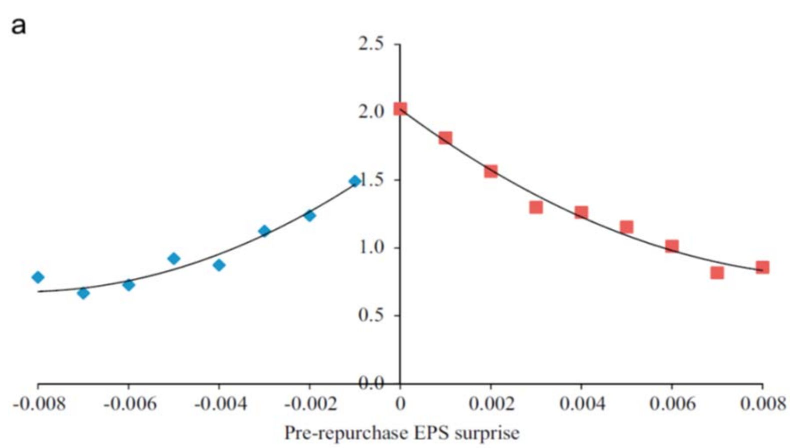
$$\frac{NI_{reported}+Forgone\ interest}{S_{reported}+Repurchased\ Shares} = \boldsymbol{EPS_{Pre-repurchase}}$$

We use it to compute pre-repurchase surprise

Discontinuity in repurchases



Employment



5% of mean number of employees (per million dollar in assets)

EPS and mergers

Garvey, Milbourn and Xie (2013)
What Will It Do For My EPS? A Straightforward But Powerful Motive for Mergers

A firm is more likely to be a target when others in the industry could acquire them and increase EPS even after paying a substantial premium

Does EPS management also drives M&A?

Summary

EPS management has been associated with

Declines in investment when managers need to sell vesting equity

Clustering in reported performance right at the point that triggers increase in managerial pay

Decline in R&D growth to meet analyst EPS forecasts

Stock repurchases that allow managers to meet EPS forecasts, at the cost of reducing investment and employment

Mergers that increase acquirer's EPS

Is there anything to worry about?

Overinvestment or short termism?

It is not enough to look at announcement returns

Short-termism requires "short-term stock price" (Stein, 1989)

Short-term reaction to meeting EPS targets tends to be positive

Evidence from the literature

Long-term underperformance

Ladika and Sautner (2017) and Edmans, Fan and Huang (2018) find that short-term concerns due to vesting equity lead to long-term underperformance

Almeida, Fos and Kronlund (2016) find that firms that cut investments because of EPS-driven repurchases have lower future ROA

Macroeconomic consequences ?

Terry (2017)

Structural growth model with profit targets

Short-termism leads to 0.1% lower annual growth, or 0.5% loss in household welfare

Same ballpark as business cycles, gains from trade, or inflation

Fixing compensation

Edmans, Fang and Lewellen

Investors and boards need to scrutinize managers when equity is vesting

Longer vesting periods, and spread dates throughout the year

Bennett et al.

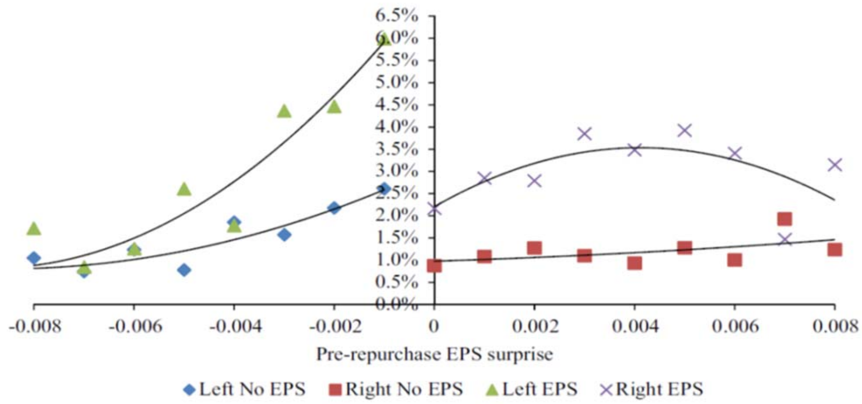
Smooth link between performance and pay, rather than targets

Profits and sales targets rather than EPS

Multiple rather than single targets

Relative rather than absolute targets

EPS compensation and repurchases



See also Cheng, Harford and Zhang (2015) and Almeida and Cheng (2018)

Anecdotal evidence

Reuters special report (2015)

https://www.reuters.com/investigates/special-report/usa-buybacks-cannibalized/

Amgen spent 8.32 B in buybacks in 2011, mostly in Q4

EPS went above the target that determined 30% of CEO's bonus

Amgen's board **removed EPS** as a performance metric in 2012

Is it enough to change compensation?

Probably not

EPS drives stock prices and stock prices drive managers irrespective of compensation targets

EPS targets and stock prices

Meeting analyst EPS forecasts matters, controlling for the magnitude (Bartov, Givoly and Hain, 2002)

Updated evidence from Almeida, Fos and Kronlund

Just meet CAR (-1,1) = 0.23%

Just miss CAR (-1,1) = - 0.34%

Is it time to get rid of EPS?

This evidence seems to suggest that as long as managers care about stock prices they should have incentives to manage EPS

So perhaps the only real solution is to get rid of EPS altogether!

Replacing EPS

Analysts and companies also need to stop focusing on EPS

What would we replace it with?

$$ROA = \frac{Operating\ income}{Lagged\ Assets} \quad ?$$

Ranges and multiple measures

Any single measure is likely to generate similar issues

Ranges

Next quarter ROA (or EPS) is expected to be between X and Y

Multiple measures

EPS should be X

ROA should be Y…

Would we be losing anything?

Is there an underlying rationale for the current equilibrium?

Why does the market respond so strongly to EPS?

Market cannot be reacting to performance

Not being able to come up with one or two cents of EPS can be a signal of hidden problems and lack of flexibility (De Jong, Mertens, Van der Poel and Van Dijk, 2014)

Earnings surprises contain information about future earnings (Bartov, Givoly and Hain, 2002)

Signaling?

Is this a type of signaling game?

What exactly is being signaled?

My student’s theory

Some managers don’t understand that they can use tricks to meet EPS forecasts

Using a trick is a sign of financial/accounting skills

Bad equilibrium?

Maybe it is possible to come up with a positive theory that explains why we focus so much on a single metric that does not measure performance

But it may also be that finance is trapped in a "bad equilibrium"

How do we do change this situation?

Research

Several open research topics in this area

Media

Non-academic articles, interviews, etc.

Teaching

Talk about these issues with our students