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Moving Targets

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Motivation

- Targets are used ubiquitously throughout society
 - Sales targets, growth targets, exercise targets, etc., are all examples of how targets are used throughout economies and in agents' lives
- Targets are made in order to have a verifiable ex-ante metric that can be easily compared against ex-post.
- Targets can be fixed (e.g., sales revenues over 100M) or relative and floating (e.g., above the 75th percentile in our industry cluster).
- When a firm has an externally imposed target, there is no scope for strategic behavior on the target itself.
- Relatively less attention has been paid to firms' abilities to move the target itself, and to how these moving targets are interpreted by broader market participants.
- In this paper, we show that firms consistently exploit this in the universe of publicly traded firms.

What do we do in this paper

• Using the universe of conference calls made by firms from 2006-2020, we examine how firms strategically set, and then move, the targets that they use to measure and express firm growth

• We show that when firms "move" targets, it is largely because they can no longer attain the same level (or growth rate) around the given target

• On average, this predicts negative realizations for the firm in terms of returns and real outcomes

Example – Research In Motion (BlackBerry Limited)

- Research in Motion was a Canadian hardware and software firm founded in Waterloo, Canada in 1984. It was founded by Mike Lazaridis and Douglas Fregin, at the time both engineering students, Lazaridis at the University of Waterloo, and Fregin at the University of Windsor.
- The firm was one of the first wireless technology developers in North America, but it is best known for it s pioneering position in the hand-held device market with its smartphone, the BlackBerry.
- BlackBerry was in fact the market leader in the smartphone device market in many countries, including the United States. This was until (and peaked) in the year 2010 when the iPhone4 was announced.



Example – Research in Motion (RIM)

• In the quarters leading up to December 2010, RIM consistently touted its <u>handheld</u> <u>device sales</u> as a key metric of its performance, value, and strategy.

 In fact, in the <u>18 quarters</u> leading up to December 2010, the firm mentioned "handheld device" revenues as a target: often leading with this target in the curated Presentation Section that began each conference call.

• In December 2010, however, RIM took a sharp turn from this engrained strategy, conspicuously leaving out any mention of handheld revenue <u>at all</u> in its Presentation.



Q1 2007 Research In Motion Limited Earnings Conference Call - Dennis Kavelman (CFO): Thank you and welcome to RIM's fiscal 2007 first quarter results conference call [...] Handheld devices represented \$433 million or 71% of revenue, consistent with the previous quarter. Total devices shipped [...]

Q2 2007 Research In Motion Limited Earnings Conference Call - Dennis Kavelman (CFO): Thank you and welcome to RIM's fiscal 2007 second quarter results conference call ... Handheld devices represented 475 million or 72% of RIM's revenue during the quarter, up slightly from the 71% of total revenue in the previous quarter. Total devices shipped[...]

Q3 2007 Research In Motion Limited Earnings

Conference Call - Dennis <u>Kavelman</u> (CFO): Thank you and welcome to RIM's fiscal 2007 preliminary third-quarter results conference call. [...] Handheld devices represented \$626 million or 75% of RIM's revenue during the quarter, up from the 72% of total revenue in the previous quarter. Total devices shipped [...]

Q4 2007 Research In Motion Limited Earnings

Conference Call Brian Bidulka (CAO): Thank you, Jim. I will now provide an overview of our preliminary results, and as Adele mentioned, these results are preliminary pending the restatement associated with the stock-option review [...] Handheld devices represented \$683 million, a 73% of RIM's revenue during the quarter, down slightly from the 75% of total revenue in the previous quarter. This decrease in percentage was due [...]

Q1 2008 Research In Motion Limited Earnings

Conference Call Brian Bidulka (CAO): Thank you, Jim. Revenue for the first quarter ended June 2nd was \$1.08 billion, up 16% from \$930 million in the previous quarter. Handheld devices represented \$824 million, or 76% of RIM's revenue during the quarter, up from the 73% of total revenue in the previous quarter. Total devices shipped [...]

Q2 2008 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the second quarter ended September 1st was \$1.37 billion, up 27% from \$1.08 billion in the previous quarter. Handheld devices represented \$1.08 billion or 78% of RIM's revenue during the quarter, up from 76% of total revenue in the previous quarter. Total devices shipped in [...] Q3 2008 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO)<u>:Thank</u> you, Jim. Revenue for the third quarter ended December 1st was \$1.67 billion, up 22% from \$1.37 billion in the previous quarter. Handheld devices represented \$1.34 billion or 80% of RIM's revenue during the quarter, up from 78% of total revenue in the previous quarter. Total devices shipped [...] Q4 2008 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the fourth quarter ended March 1, was \$1.88 billion, up 13% from \$1.67 billion in the previous quarter. Handheld devices represented \$1.52 billion or 81% of RIM's revenue during the quarter, up from 80% of total revenue in the previous quarter. Total devices shipped [...]

Q1 2009 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the first quarter ended May 31st was \$2.24 billion, up 19% from \$1.88 billion in the previous quarter. Handheld devices represented \$1.84 billion, or 82% of RIM's revenue during the quarter, up from 81% of total revenue in the previous quarter. Total devices shipped [...]

Q2 2009 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the second quarter ended August 30, was \$2.58 billion up 15% from \$2.24 billion in the previous quarter. Handheld represented \$2.12 billion or 82% of RIMs revenue during the quarter, in line with the previous quarter. Total devices shipped [...]

Q3 2009 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the third quarter ended November 29, was \$2.78 billion, up 8% from \$2.58 billion in the previous quarter. Handheld devices represented \$2.25 billion or 81% of RIMs revenue during the quarter, in line with the previous quarter. Total devices shipped [...]

Q4 2009 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the fourth quarter ended February 28 was [...] Handheld devices represented \$2.88 billion or 83% of RIM's revenue during the quarter, up from \$2.25 billion, or 81% in the previous quarter. Total devices shipped [...] Q1 2010 Research In Motion Limited Earnings Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the first quarter ended May 30 was \$3.42 billion [...] Handheld devices represented \$2.8 billion, or 81% of revenue during the quarter, down slightly from \$2.9 billion, or 83% in the previous quarter. Total devices [...]

Q2 2010 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the second quarter ended August 29th was \$3.53 billion, which was slightly higher than the \$3.42 billion reported in the previous quarter and in line with the guidance we provided on the June conference call. Handheld devices represented \$2.9 billion or 81% of revenue during the quarter similar to the \$2.8 billion or 81% in the previous quarter. Total devices shipped [...]

Q3 2010 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the third quarter ended November 28 [...] Handheld devices represented \$3.2 billion or 82% of revenue during the quarter, slightly higher than the \$2.9 billion or 81% in the previous quarter. Total devices shipped [...]

Q4 2010 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the fourth quarter ended February 27th, was \$4.08 billion which was slightly higher than the [...]. Handheld devices represented \$3.3 billion or 80% of revenue during the quarter, as compared to \$3.2 billion or 82% in the previous quarter. Total devices [...]

Q1 2011 Research In Motion Limited Earnings

Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the first quarter ended May 29 was \$4.24 billion, which was [...] Handheld devices represented \$3.35 billion or 79% of revenue during the quarter as compared to \$3.3 billion or 80% in the previous quarter. Total devices shipped in the quarter were higher than Q1 at approximately 11.2 million units.

Q2 2011 Research In Motion Limited Earnings

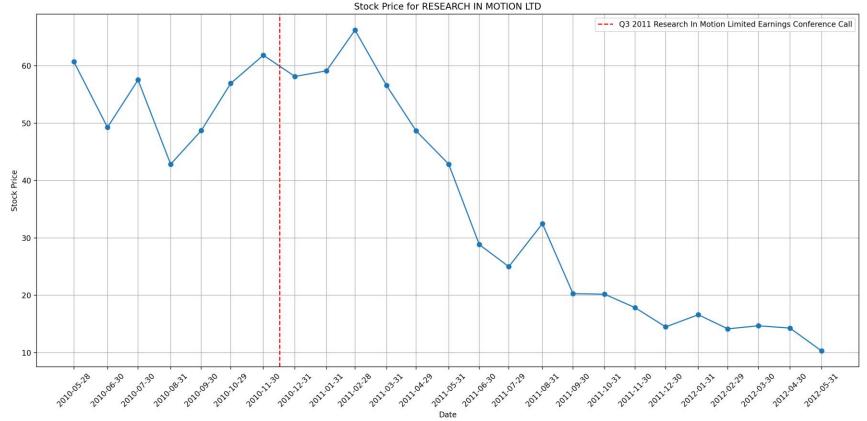
Conference Call - Brian Bidulka (CAO): Thank you, Jim. Revenue for the second quarter ended August 28, was \$4.62 billion, which was [...] Handheld devices represented \$3.64 billion, or 79% of revenue during the quarter, as compared to \$3.35 billion, or 79% in the previous quarter. Total devices shipped [...]

Wharton

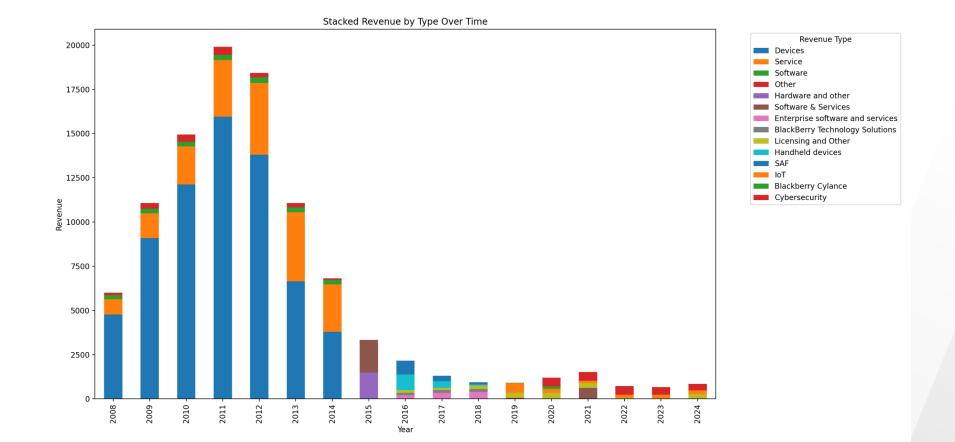
Dec 16, 2010

Mar 24, 2011

Q3 2011 Research In Motion Limited Earnings Conference Call (First Q4 2011 Research In Motion Limited Earnings Conference Call (Again Conference Call since 2006 no mentioning of Handheld Devices) - Brian no mentioning of Handheld Devices) - Brian Bidulka (CAO): Thank you, Bidulka (CAO): Thanks, Jim. During the third quarter, RIM shipped 14.2 million Jim. During the fourth quarter RIM shipped 14.9 million devices and total devices at an ASP of approximately \$315, where 50% of the total quarterly revenue was approximately \$5.6 billion with hardware accounting for shipments occurred in the last month of the quarter as our partners prepared for approximately 81% of the total. Sales outside of the US, UK, and Canada the holiday buying season and new products rolled out in markets around the comprised approximately 52% of total revenue. Sales in the US represented approximately 30% of total revenue, the UK represented approximately 11% world. Revenue in the quarter was approximately \$5.5 billion, with sales outside of the US, UK, and Canada comprising approximately 44% of total revenue. and Canada represented the remainder. Estimated sell-through in the quarter Revenue in the US represented approximately 34% of total revenue, UK was approximately \$14.5 million, including phone only sales which have been represented approximately 12%, and Canada represented the remainder. RIM's increasing as BlackBerry penetration of the prepaid market grows. We estimate revenue base is increasingly diversified and no one country represented that weeks of channel inventory decreased slightly at the end of Q4. Service significantly more than 5% of the 44% of the sales outside of these three revenue in Q4 was approximately \$898 million, up 8% from last quarter. And regions. Net subscriber account additions in Q3 were approximately 5.1 software revenue was approximately \$81 million. ARPU was down slightly due million, in line with guidance. Estimated sell-through in the quarter was to growth in tiered business and prepaid service plans. Gross margin in the approximately \$12.3 million, including phone-only sales. quarter was 44.2% and operating expenses increased to approximately \$1.2 billion, in line with our expectation. Accounts receivable decreased from \$4.1 billion to \$4.0 billion in Q4. And DSOs decreased from 68 days to 65 days. RIM's cash balance at the end of the quarter increased by \$227 million to approximately \$2.7 billion. After capital expenditures, approximately \$300 million. Intangible asset purchases of approximately \$365 million. RIM's corporate tax rate was slightly lower than forecast in Q4 due



∞Wharton



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Further Examples: Why aren't managers simply upfront with investors?

Apple will no longer report iPhone numbers after growth went to 0%, and analysts are now worried iPhone sales may decline



Tim Cook's decision to stop reporting iPhone sales raises the question of whether the smartphone is going into decline. REUTERS/Stephan Lam

Apple announced Thursday night that it would no longer be reporting iPhone sales numbers — or sales numbers for any of its products — on future earnings calls. Investors hated it: AAPL stock tanked 7% on the news in after-hours trading and was still down 5% in premarket trading before the New York exchanges opened Friday.

"Some people may fear that this now means that the iPhone units are going to start going negative year over year **because it's easier to talk about great things and not show the details of things that aren't so great**," the Citi analyst Jim Suva said.

➡Wharton

Further Examples:

Why aren't managers simply upfront with investors?

Adobe Stops Reporting Subscription Figures for Creative Clou(

By Bryant Frazer / March 17, 2016



Oracle has stopped reporting growth in its cloud business after several quarters of disappointing numbers - culminating in a sharp fall in its stock price after it reporting its fourth quarter figures...

Wharton

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The move s obfuscating after <u>loud (</u>

...shares of afternoon. ' fall 2.1% th 1.1%

McDonald's, Unable to Fix Its Dismal Monthly Sales Numbers, Will Now Just Stop Sharing Them

By ALISON GRISWOLD



MAY 27, 2015 • 12:13 PM

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Moving Targets – Main Findings

- We find that managers strategically shift targets in their communications with investors and markets.
- We employ natural language processing techniques to analyze conference calls and find that managers choose and re-choose targets to ensure they clear their endogenously chosen hurdle.
- When managers change the target, this predicts significant negative returns and realizations for the firm in question.
- In particular, in the quarter following a moving target, firms underperform by on average 78 basis points per month (t-stat = 4.38) in value-weighted monthly abnormal return (alpha) (over 9% per year in abnormal return).



Moving Targets – Main Findings

- These returns are larger when firms use a larger and more complex set of targets.
- Moreover, the returns are also larger for non-financial targets vs. financial targets (e.g., 'subscribers', Apply Pay vs. revenue, or sales growth).
- The results become even stronger the longer and more engrained the target is at the firm. When managers change 'persistent' targets, returns increase to 99 basis points per month (t-stat = 4.40) in VW monthly abnormal returns, so nearly 12% per year.
- Lastly, if the analyst highlights a dropped target by a CEO, and the CEO is forced to address the missing target, the firm attenuates this moving target effect considerably.
- Investors should pay close attention to the metrics upon which firms choose to focus, and the subtle changes to those metrics that firms make over time, as moving targets contain important information for future firm value and realizations.



- Our approach leverages a number of natural language processing (NLP) techniques, specifically utilizing an English transformer pipeline that incorporates several integrated components: the RoBERTa transformer model, a part-of-speech tagger, a syntactic parser, an attribute ruler, a lemmatizer, and a named entity recognizer (NER).
- We use spaCy, a free, open-source library for advanced Natural Language Processing (NLP) in Python to analyze firms' quarterly earning call transcripts.
- We utilize spaCy's pretrained pipelines that consist of multiple components that use a statistical model trained on labeled data text data.
- We use spaCy's Named Entity Recognition to search for named entities that are **Products**, **Money**, or **Percent**. All noun-chunk that is a **Product** entity is recorded as a target.
- For each named entity in a sentence that is either a **Money** entity or a **Percentage** entity, we use spaCy's Part-of-Speech method to identify the nouns and noun chunks that those entities are related to.

Excerpt from Apple Conference Call on October 19th, 2009

Peter Oppenheimer, Apple Inc. - VP - Finance, CFO: Thank you, Nancy. Thank you for joining us. We're extremely pleased to report Apple's most profitable quarter ever and sales of more Macs and iPhones than in any previous quarter. We are thrilled with these record-breaking results, particularly given the economic environment around us. Revenue for the quarter was \$9.87 billion, representing 25% growth over the prior September quarter's results. This was Apple second highest quarterly revenue ever, next to the record results reported for last December quarter. Operating margin was Apple's highest ever at \$2.19 billion, representing over 22% of revenue and higher than our guidance, due to better than expected revenue and gross margin. Net income was \$1.67 billion, which translated to earnings per share of \$1.82. In terms of non-GAAP measures, adjusted sales totaled \$12.25 billion for the September quarter, which was almost \$1.2 billion higher than our reported revenue. Adjusted gross margin was \$5.21 billion, which was almost \$1.6 billion higher than our reported net income. We believe that these non-GAAP measures provided added transparency to our business and hope they are helpful to you in your analysis and understanding of our performance in the September quarter. Turning to the details of our results, I would like to begin with our Mac products and services. We generated outstanding Mac sales of \$3.05 million, meeting our previous record set in the year-ago quarter by over \$440,000. The Mac is showing fantastic momentum, growing faster than the market in 19 of the past 20 quarters. We believe this is the result of our unmatched innovation and commitment to providing customers with the best hardware, the best software, and the best user experience in the world. Quarterly Mac sales grew 17% year-over-year and this compares extremely favorably to IDC's latest published estimate of 2% growth or the market overall in the September quarter. Customers continue to respond very positively to our Mac portable lineup,

To demonstrate how we identify targets, let us look at this discussion by Peter Oppenheimer, Apple's VP of Finance in Apple's Conference Call on October 19th, 2009.

Excerpt from Apple Conference Call on October 19th, 2009

Peter Oppenheimer, Apple Inc. - VP - Finance, CFO: Thank you, Nancy. Thank you for joining us. We're extremely pleased to report Apple's most profitable quarter ever and sales of more Macs PRODUCT and iPhones than in any previous quarter. We are thrilled with these record-breaking results, particularly given the economic environment around us. Revenue for the quarter was \$9.87 billion MONEY , representing 25% PERCENT growth over the prior September quarter's results. This was Apple's second highest quarterly revenue ever, next to the record results reported for last December quarter. Operating margin was Apple's highest ever at \$2.19 billion MONEY , representing over 22% PERCENT of revenue and higher than our guidance, due to better than expected revenue and gross margin. Net income was \$1.67 billion MONEY , which translated to earnings per share of \$ 1.82 MONEY . In terms of non-GAAP measures, adjusted sales totaled \$12.25 billion MONEY for the September quarter, which was **almost** \$1.63 billion MONEY higher than our reported gross margin. And adjusted net income was \$2.85 billion MONEY in almost \$1.2 billion MONEY higher than our reported net income. We believe that these non-GAAP financial measures provided added transparency to our business and hope they are helpful to you in your analysis and understanding of our performance in the September quarter. Turning to the details of our results, I would like to begin with our Mac products and services. We generated outstanding Mac sales of \$3.05 million MONEY , meeting our previous record set in the year-ago quarter by over \$ 440,000 MONEY . The Mac PRODUCT is showing faster than the market in 19 of the past 20 quarters. We believe this is the result of our unmatched innovation and commitment to providing customers with the best hardware, the best hardware, the best ware experience in the world. Quarterly Mac PRODUCT mix. Our execution in the quarter was outstanding, and we were particularly pleased with the **42% PERCENT** year-over-year and this compares extremel

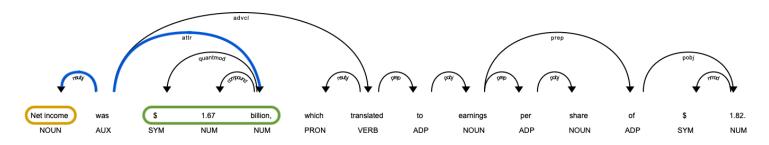
We use spaCy's Named Entity Recognition to search for named entities that are **Products**, **Money**, or **Percent**:

- **Product** (highlight in yellow): Macs, Macbooks, Snow Leopard, etc.
- Money (highlighted in green): \$9.87 billion, \$2.19 billion, \$1.67 billion, etc.
- Percentage (highlighted in purple): 25%, 22%, 17%, etc.

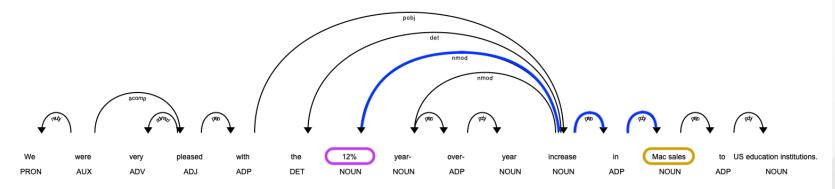
- All Product entities (Macs, Macbooks, Snow Leopard, etc.) are identified as targets

- For **Money** and **Percentage** entities, we use spaCy's Part-of-Speech method to traverse the sentence dependency tree to identify the nouns and noun chunks related to those entities.

Example: \$1.67 billion, we traverse the dependency tree as follows to identify Net Income as a target



Example: 12%, we traverse the dependency tree as follows to identify Mac Sales as a target



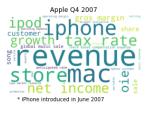


How we identify "targets"



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Apple Q4 2009

Apple Q4 2011

venue

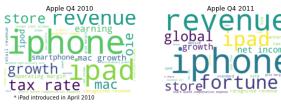
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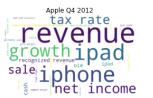
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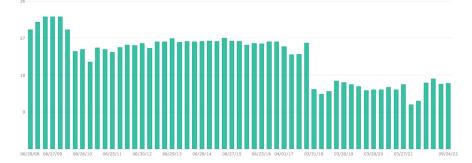
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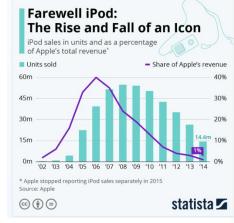
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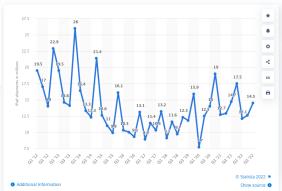




Apple Inc (AAPL) Quarterly Effective Tax Rate Chart







➡Wharton

Future Stock Returns Associated with Firm Changes to their Targets (Value-Weight Calendar Time Portfolio Returns)

		Panel A:	Equally Weigh	nted Quintile		
			Moving Targe	ets		
	Q1	Q2	Q3	Q4	Q5	Q5 – Q1
Excess	0.0083*	0.0081*	0.0083*	0.0082*	0.0067	-0.0016**
Return	(1.9241)	(1.8067)	(1.8817)	(1.7944)	(1.4621)	(-2.2081)
	Q1	Q2	Q3	Q4	Q5	Q5 - Q1
3-Factor	-0.0000	-0.0004	-0.0001	-0.0006	-0.0021**	-0.0021***
Alpha	(-0.0341)	(-0.5567)	(-0.1051)	(-0.6895)	(-2.3137)	(-2.8669)
1	Q1	Q2	Q3	Q4	Q5	Q5 - Q1
5-Factor	0.0002	-0.0001	0.0002	-0.0003	-0.0019**	-0.0021***
Alpha	(0.4232)	(-0.1847)	(0.2910)	(-0.4777)	(-2.3335)	(-2.8418)

		Panel B:	Value Weight	ed Quintile		
			Moving Targe	ts		
	Q1	Q2	Q3	Q4	Q5	Q5 - Q1
Excess	0.0109***	0.0081**	0.0077**	0.0076**	0.0061*	-0.0048***
Return	(3.0305)	(2.2999)	(2.1455)	(2.0781)	(1.6921)	(-3.5313)
	Q1	Q2	Q3	Q4	Q5	Q5 - Q1
3-Factor	0.0024**	0.0001	-0.0007	-0.0011	-0.0025***	-0.0050***
Alpha	(2.4089)	(0.1076)	(-1.0708)	(-1.3067)	(-3.1207)	(-3.5020)
	Q1	Q2	Q3	Q4	Q5	Q5 - Q1
5-Factor	0.0028***	0.0000	-0.0004	-0.0006	-0.0027***	-0.0055***
Alpha	(2.8534)	(0.0489)	(-0.6535)	(-0.7842)	(-3.3773)	(-3.8780)

Future Stock Returns Associated with Firm Changes to their Targets (Value-Weight Calendar Time Portfolio Returns)

	Value Weighted Decile										
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q10 - Q1
Excess	0.0131***	0.0110***	0.0091**	0.0079*	0.0073*	0.0071*	0.0067	0.0081**	0.0059	0.0067*	-0.0064***
Return	(3.1932)	(2.7401)	(2.2597)	(1.9707)	(1.8619)	(1.6879)	(1.6467)	(2.0076)	(1.3944)	(1.6808)	(-3.6985)
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q10 - Q1
3-Factor	0.0042***	0.0022	0.0009	-0.0003	-0.0012	-0.0020*	-0.0014	-0.0009	-0.0033***	-0.0026**	-0.0068***
Alpha	(2.9654)	(1.5778)	(0.7033)	(-0.2563)	(-1.1651)	(-1.8993)	(-1.1904)	(-0.8149)	(-3.1516)	(-2.4540)	(-3.7704)
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q10 - Q1
5-Factor	0.0048***	0.0026*	0.0008	0.0001	-0.0009	-0.0019*	-0.0013	-0.0000	-0.0026***	-0.0030***	-0.0078***
Alpha	(3.4588)	(1.8491)	(0.6583)	(0.0750)	(-0.8735)	(-1.8203)	(-1.1026)	(-0.0237)	(-2.6471)	(-2.9335)	(-4.3795)

 Target Movers underperform firms that Stay the Course by over 9% per year in abnormal returns following the subtle Target Moving.

Characteristics of Quintile Portfolios

	Q1	Q2	Q3	Q4	Q5
Size	6543374	8200199	8337254	8259805	8419977
Monthly Turnover	0.1837737	0.23842	0.2467544	0.2359856	0.1881331
Moving Targets	0.3989665	0.5026246	0.5601085	0.6176733	0.722707



Fama-MacBeth Regressions

	(1)	(2)	(3)
		Future Ret	
Moving Targets	-0.0056***	-0.0059***	-0.0059***
	(-2.8969)	(-3.1951)	(-3.2397)
Size		0.0007**	0.0007**
		(2.0435)	(2.0476)
Log(BM)		-0.0638	-0.0492
		(-0.5408)	(-0.4326)
Ret(-1, 0)		-0.0167***	-0.0171***
		(-2.7213)	(-2.7759)
Ret(-12,-1)		0.0002	-0.0002
		(0.0801)	(-0.0584)
SUE			0.0133**
			(2.4792)
R-Squared	0.0008	0.0295	0.0309
Ν	369248	369248	369248

 Even controlling for firm characteristics and other known return determinants and dynamics (e.g., SUE, one-month reversals, etc.) Target Movers continue to strongly and significantly underperform in future months following target moving.

Persistent Targets

	(1)	(2)
	High persistent Targets	Low persistent Targets
	Futu	re Ret
Moving Targets	-0.0149***	-0.0009
	(-4.4185)	(-0.2668)
Size	0.0010***	0.0010***
	(2.8656)	(3.0192)
Log(BM)	-0.1752	-0.7974
	(-0.4694)	(-1.2948)
Ret(-1, 0)	-0.0132**	-0.0170***
	(-2.1170)	(-2.9631)
Ret(-12,-1)	0.0008	0.0001
	(0.2947)	(0.0604)
SUE	0.0136*	0.0253***
	(1.7837)	(2.6757)
R-Squared	0.0540	0.0584
Ν	186466	183624

• Consistent with the target – and moving of the target – is the important dynamic driving the results, we find that the results are significantly more concentrated (larger and more significant) for targets that are the most persistently utilized by firms and firm management.

Complexity of Target Set

	(1)	(2)
	Complex Target Set	Simple Target Set
	R	et
Drop Targets	-0.0106***	-0.0030
	(-3.7212)	(-1.1713)
Size	-0.0001	0.0003
	(-0.2269)	(0.8118)
Log(BM)	-0.0010*	-0.0012*
	(-1.7538)	(-1.7884)
Ret(-1, 0)	-0.0135*	-0.0161***
	(-1.7894)	(-2.6929)
Ret(-12,-1)	-0.0022	0.0009
	(-0.6423)	(0.3694)
SUE	0.0329*	-0.0239
	(1.9281)	(-0.8182)
R-Squared	0.0540	0.0584
Ν	175873	182097

• The results are significantly larger for more complex target sets, measured using the number of targets that a firm regularly utilizes and there is no significant return predictability when the target sets are simpler

Financial vs. Non-Financial Targets

	(1)	(2)
	Non-Financial Targets	Financial Targets
	Re	et
Moving Targets	-0.0046***	-0.0027*
	(-2.6671)	(-1.7431)
Size	0.0007**	0.0007**
	(2.0791)	(2.1007)
Log(BM)	-0.2586	-0.2625
	(-0.9074)	(-0.9286)
Ret(-1, 0)	-0.0144**	-0.0143**
	(-2.3813)	(-2.3512)
Ret(-12,-1)	0.0002	0.0002
	(0.0839)	(0.0574)
SUE	0.0224***	0.0214***
	(3.4266)	(3.2935)
R-Squared	0.0326	0.0328
Ν	373334	373334

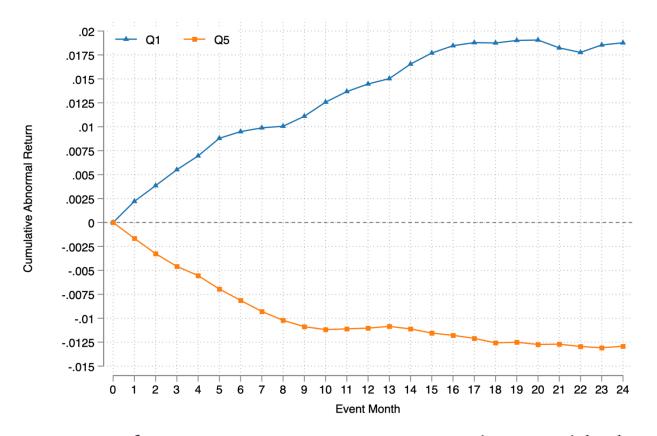
Results are weaker in point estimate for explicit financial targets (-0.0027, t-stat = -1.7431), and relatively stronger for more unique, firm-specific targets (-0.0046, t-stat = 2.6671).

	(1)	(2)	(3)
	Targets in Presentation	Targets in Presentation + Analysts Q&A	Targets in Presentation + Analysts Q&A + CEO Answers
		Ret	<u>.</u>
Moving Targets	-0.0062***	-0.0056***	-0.0032
0 0	(-3.3593)	(-3.0003)	(-1.3367)
Size	0.0011***	0.0007*	-0.0005
	-3.4187	-1.9372	(-1.0895)
Log(BM)	-0.0286	-0.3081	-0.0021***
	(-0.2237)	(-1.0518)	(-3.1776)
Ret(-1, 0)	-0.0184***	-0.0138**	-0.0156**
	(-3.0877)	(-2.2810)	(-2.0677)
Ret(-12,-1)	0.0006	0.0003	-0.0005
	-0.2283	-0.1108	(-0.1570)
SUE	0.0047	0.0199***	0.0301**
	-1.1299	(2.9212)	(2.0926)
R-Squared	0.0309	0.0332	0.031
N	391368	373568	338630

Forcing the Issue of Dropped Targets

• The strongest return predictability is found when targets are: (1) dropped during the presentation (2) if analysts asked about those dropped targets, the return predictability is slightly weaker (3) drop significantly to half the magnitude and is no longer significant when the CEO is forced to answer and address those dropped targets.

Event Time Returns



• The returns we document never reverse - consistent with the moving target capturing something that is important for true, firm fundamentals as opposed to some type of overreaction that is then subsequently reversed.

Moving Targets: Robustness

- Lastly, we find that the Moving Target effect is:
 - Not concentrated in small stocks (it is actually strongest in value-weighted)
 - $\circ\,$ Not concentrated in any given industry
 - Unrelated to any known factors and return determinants
 - $\circ\,$ Strong up through the present day

Conclusion

- In this paper, we show that firms consistently exploit their ability to strategically shift targets in their communications with investors and markets.
- We employ natural language processing techniques to analyze conference calls and find that managers choose and re-choose targets to ensure they clear their endogenously chosen hurdle.
- When managers change the target, this predicts significant negative returns and realizations for the firm in question.
- In particular, in the quarter following a moving target, firms underperform by up to 99 basis points per month (t-stat = 4.38) in value-weighted monthly abnormal return (alpha) (nearly 12% per year in abnormal return).
- Consistent with the mechanism, we find that the results are significantly stronger with more complex targets, non-financial targets, and the most persistent targets.



Conclusion

- Stepping back, given how ubiquitously targets are used throughout financial markets and communications (from firms to policy makers, to Central Banks) understanding this subtle ability to move targets, and that target-moving implication can be critical to understanding future likely dynamics.
- While technology and technological advancements in information collection and processing could aid in this, we show that far from needing complicated state-of-the-art solutions, simply collecting performance targets from year to year contain powerful information, which is seemingly being ignored by capital markets.
- This simple insight likely applies more broadly to other forms of transmitted firm information, as well. Documents and verbal communications, such as bond covenants, lease arrangements, securities offering documents, M&A prospectuses, interviews, investor presentations, and shareholder meetings may be rich places for researchers to explore further.
- More broadly, the implications of moving endogenously specified targets in the corporate setting provides a critical, yet understudied area, in both corporate finance and asset pricing.



To Do:

- Continue to explore the Missing Targets measure and other formulations
 - Explore Net Changes in Targets
 - Weight to find the most important or central targets, as of now they are equally weighted
 - Explore more manageable vs. less manageable targets
- We have some evidence of real effects, but continue to explore these:
 - Future SUEs (earnings), Future analyst revisions, Future bankruptcies, Dropping sales of existing products (Compustat product database), Change in "segment" diversification (Compustat segment database)
- Explore what happens contemporaneously when analysts force the CEO on missing target issue in the call
 - Do returns drop immediately (instead of delayed response), summing to roughly the same return response?
- Examine relationship between Moving Targets, and other firm-level behavior of strategic information disclosure
 - Insider trading, earnings restatements, accounting fraud, etc.

