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The Center for the Study of Financial Regulation at the University of Notre Dame has as its mission to promote sound economic analysis of current and proposed financial regulation. Poorly conceived financial regulations can impose large costs on the economy and may harm America's leadership in the financial industry by driving financial transactions offshore. We believe that more independent economic analysis of financial regulation is needed.

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ARE HIGH-FREQUENCY **TRADERS A BASIC "EVIL" FOR INSTITUTIONAL INVESTORS**?

"It's legalized front-running. I think it is basically evil and I don't think it should have ever been allowed to reach the size that it did," he said. "Why should all of us pay a little group of people to engage in legalized front-running of our orders?" -Warren Buffett's confidant

traders (HFTs) are often judged in moral Charlie Munger referred to them as "evil" in

A sense of morality even entered one of the arguably most important regulatory documents, the Exchange Act of 1934. Its summary statement in Section 2 talks about the need for regulation in order to ensure "fair and honest markets" (p. 3).

As an economist, such statements leave me empty-handed. Who am I to judge "fairness?" And, how can all stakeholders ever agree on what is fair?

A much more productive approach to regulation is to simply track transaction cost for various end-users of securities markets. Secondary markets exist to enable trade. They facilitate the re-allocation of assets across (long-term) investors so that those who have the largest appetite for them get to hold them. Trading further leads to price discovery or, perhaps better, value discovery. It ensures that funds get channeled to the most valuable firms, which benefits economic growth.

How has the evolution towards electronic markets, and the subsequent arrival of HFTs, affected transaction cost? Retail investors can execute their market orders at a much lower spread today. Institutional investors, however, trade in sizes much larger than the depth available at the best quote. They split their parent order into smaller child orders, and execute them sequentially. They care about incremental price impact, not about the half-spread they pay on a single market order. Ideally, intermediaries lean against their order in the course of its execution. Price impact is minimized that way. Institutional investors worry about the opposite behavior: HFTs who "front-run" them and increase their price impact.

Vincent van Kervel and I released a study this summer on how HFTs trade around large institutional orders. We studied how the top-ten HFT firms collectively traded around the orders of four large institutional investors (names below). We analyzed 5,910 orders. A single order was worth about \$2 million and led to 135 child trades

Continued on page 2

Inside:

How well do futures markets limit manipulation? By Vladimir Atanasov, Ryan J. Davies, and John J. Merrick Jr.	P3
Day 30: The Tacit Quarterly Information Event in the Banking Industry By Brad Badertscher, Jeff Burks, Peter Easton	p4
Textual Classification of SEC Comment Letters By James Ryans	P5
Employment Conditions and SEC Enforcement	P7

By Jonas Heese

By Albert J. Menkveld

'IEW OF FINANCIAL REGULATION

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a CNBC interview.

terms. Warren Buffett's right-hand man

Charlie Munger, CNBC, May 2013 It is interesting that high-frequency

"... it seems HFTs do not 'front-run' institutional orders. Instead they trade against them initially ..."

on average. The data pertains to trading in Swedish blue chip stocks in 2011–2013.

We ask two basic questions:

- Do HFTs supply liquidity to institutional orders? In other words, do they "lean against the wind"? Or do they "go with the wind?"
- 2. Should institutional investors care? Or, does their transaction cost depend on what HFTs do in the lifetime of their order?

Do HFTs lean against institutional orders?

To answer the first question, we simply compute the net flow of HFTs in the lifetime of an institutional order. If they lean against the wind — supply liquidity — then we should see them sell when an institutional investor is buying. We find that they do so in the first hour after an institutional investor initiated execution. They however turn around and "go with the wind" if child executions keep coming. This turning point is after six hours for institutional buy orders, and after two hours for institutional sell orders.

Does HFT behavior affect investor transaction cost?

Should institutional investors care about against-wind or with-wind trading by HFTs? In other words, does it affect their transaction cost? A standard measure for such cost is "implementation shortfall." For a buy order it is defined as the average trade price minus the price that prevailed at the time when it began executing. This difference is expected to be positive as repeated buying typically drives the price up. For sell orders it is defined as the starting price minus the average trade price.

We find that implementation shortfall correlates with how HFTs trade. The implementation shortfall for the tercile of orders where HFTs leant against the wind is 9 basis points. It is 13 basis points for the tercile where HFTs were more or less neutral. It however is 22 basis points when HFTs traded with the wind. In a regression analysis we show that this pattern is robust to adding standard control variables such as order size, order duration, volume, and volatility. In a "Placebo analysis" we pair the trade interval of each institutional order with an interval where none of our investors was active, yet market conditions were similar in terms of volume, volatility, and the price pattern. We find that the HFT withwind pattern is only present in the "treated" sample. It therefore seems uniquely attributable to the presence of the institutional order. HFTs detected the order.

Why would HFTs go with the wind on orders only after a couple of hours? Further analysis reveals that such behavior is profitable to them. It turns out that these long-lasting orders are informed. Institutional buy orders, for example, are likely to be the result of research effort spent to generate private signals on which stocks are undervalued. These buy orders then push the price up so that this private information slowly becomes public, and prices become more efficient (in a fundamental sense).

Regulatory implications

In sum, it seems HFTs do not "front-run" institutional orders. Instead they trade against them initially and thereby reduce transaction cost for institutional investors. But, for long-lasting informed orders they eventually do trade along with them, and increase transaction cost. They apparently need repeated signals to identify these orders.

One might argue that with-wind trading by HFTs raises price efficiency, but at a cost. Prices move to their fundamental value more quickly when order flow become more one-sided. This however comes at an important economic cost. We run into what Grossman and Stiglitz (1980, p. 405) famously called the "fundamental conflict between the efficiency with which markets spread information and the incentives to acquire information." Will institutional investors continue to generate private signals if they cannot trade on them profitably? If not, prices will become less efficient and capital allocation suffers.

I believe this type of economic analysis benefits the debate on market structure. Monitoring transaction cost for groups of investors will help identify inefficiencies which, in turn, could motivate regulatory intervention. I believe the current Consolidated Audit Trail initiative (Rule 613) is a step in the right direction. We should measure and analyze execution-cost trends and their determinants before adding more regulation. Let us not forget that regulatory overhaul itself is a costly endeavor.

P.S.: The identified HFTs are: Citadel, Flow Traders, Getco, IAT, IMC, Knight, Optiver, Spire, Susquehanna, and Virtu. The institutional investors who provided order execution data are: APG, DNB, NBIM, and Swedbank Robur.

Albert J. Menkveld is URC Professor of Finance at VU University Amsterdam and fellow at the Tinbergen Institute. He can be reached at albertjmenkveld@ gmail.com.

References:

Grossman, Sanford and Joseph Stiglitz. 1980. On the Impossibility of Informationally Efficient Markets. American Economic Review 70(3): 393-408.

Kervel, Vincent van, and Albert J. Menkveld. 2015. High-Frequency Trading around Large Institutional Orders. Working Paper. VU University Amsterdam.

HOW WELL DO FUTURES MARKETS LIMIT MANIPULATION?

By Vladimir Atanasov, Ryan J. Davies, and John J. Merrick Jr.

Can competitive market forces be relied upon to limit the distortionary impacts of would-be futures market manipulators? Maybe not. In a recent paper, we study the response of NYMEX floor traders to an alleged trade-based manipulation of platinum and palladium futures settlement prices.¹ Detailed court records provide us with a unique opportunity to examine whether the floor traders mitigated or magnified the alleged manipulative scheme.²

In this case, a hedge fund portfolio manager (PM) submitted large bang-theclose buy orders for platinum and palladium futures contracts over a seven-month period. Court transcripts expose the PM's aim to purchase these contracts at the highest possible prices, thereby triggering "buy signals" through new highs. The PM had a significant financial motive to increase these prices as his fund held large net long positions in these contracts - worth almost a billion dollars at one point during this period. Higher fund profits would result in both higher compensation for the PM and the prospect of higher fund management fees from attracting new inflows.

To maximize price inflation, the PM directed his orders to the NYMEX floor rather than to Globex – the more liquid, parallel electronic market. Regardless of the PM's motives, competition among NYMEX floor traders should have limited the price impacts of his repetitive bang-theclose trades to a normal "size and immediacy" mark-up, because these trades were predictable and contained no fundamental market information. Our results indicate otherwise. The floor traders, numbering less than a dozen and interacting on a daily basis, appear to have extracted significant rents through noncompetitive pricing and behaved in a manner consistent with tacit (implicit) collusion.

Regulators and exchanges often presume that the workings of a competitive market will discipline traders to keep markets orderly and liquid, with fair prices and narrow bid-ask spreads. But by facilitating and magnifying the PM's alleged manipulative scheme, these financial intermediaries share part of the blame for damages caused by distorted contract settlement prices. Our paper's methodology separates the share of estimated damages caused by the noncompetitive behavior of floor traders from the share caused by the direct impacts of the PM's bang-the-close trades. We base this methodology on counterfactual futures contract pricing benchmarks constructed using data from trades and orders on the parallel Globex electronic platform. Our "smoking gun" evidence compares prices for the PM's exchange floor-filled orders to the concurrent volume-weighted average price for tradable depth on the Globex platform. Custom pricing benchmarks such as ours properly attribute damages caused in a case with multiple actors.

Contrary to the predictions of a competitive market environment, the price impact of the PM's bang-the-close trades *increased* over time. During the second half of the period, floor traders executed the portfolio manager's platinum futures contract buy orders at prices that were 40 to 80 ticks above competitive benchmarks. This impact is much larger than Pirrong's conjecture of a one-to-two tick impact of collusion by traders in a typical open outcry market.³

Our results have general implications for regulators and operators of market platforms, including:

 The settlement price determination mechanism can magnify the impact of the bang-the-close trades. By sending orders to the floor, the PM executed larger orders and amplified his influence on the value-weighted settlement price (based on all trades in the last two minutes for the electronic and floor markets). While NYMEX subsequently changed the settlement price mechanism for platinum and palladium futures, concerns remain in other markets where settlement prices are determined using inputs from multiple platforms.

- 2. Our empirical evidence supports theoretical predictions that tacit collusion can occur in an environment with repeated interaction by a small number of participants in a transparent market with barriers to entry. Similar conditions were also present in the traditional LIBOR poll mechanism, as well as the mechanisms for many important commodity, foreign exchange, and interest rate benchmarks.
- 3. Market access plays an important role in preventing market manipulation. Closing price differentials between the Globex and NYMEX floor platforms existed because frictions kept off-the-floor traders from participating fully in the floor trade order flow.
- 4. Participants may not be fully forthcoming about possible misconduct. As Pirrong suggests, traders reporting misconduct may be shunned by other firms, affecting their future employment and inclusion in trading and social circles.
- 5. Timely, accountable enforcement of exchange rules is lacking. The CFTC's settlements did not incorporate any admission of guilt by the parties involved in this case. Final settlement of the main class action lawsuit was reached almost seven years after the alleged manipulation.
- 6. Counterparties to manipulative trades can be responsible for a significant share of the total artificiality in prices cause

"... tacit collusion can occur in an environment with repeated interaction by a small number of participants in a transparent market ..." Center for the Study of Financial Regulation

by the manipulation scheme. Regulators should direct their enforcement actions not only against the original manipulating trader, but also against market makers who respond in a noncompetitive manner. Enforcement threats against such counterparties may limit both the impact of manipulative behavior and reduce the original incentives of potential manipulators.

Vladimir Atanasov is an Associate Professor of Finance at the College of William and Mary and a Principal at WEFA, LLC. Ryan J. Davies is an Associate Professor of Finance at Babson College. John J. Merrick Jr. is the Richard S. Reynolds Professor of Business at the College of William and Mary and a Principal at WEFA, LLC. Vladimir can be reached at vladimir.atanasov@ mason.wm.edu, Ryan can be reached at rdavies@babson.edu, and John can be reached at john.merrick@mason. wm.edu.

References:

- 1 Atanasov, V., Davies, R.J., Merrick, J.J. Jr. (2015). Financial intermediaries in the midst of market manipulation: Did they protect the fool or help the knave? *Journal of Corporate Finance*, forthcoming.
- 2 In Re: Platinum & Palladium Commodities Litigation, No. 10-cv-3617, 2011. WL 4048780 (United States District Court, Southern District of New York, Sept. 13, 2011).
- 3 Pirrong, C. (1996). Market liquidity and depth on computerized and open outcry trading systems: A comparison of DTB and LIFFE bund contracts. *Journal of Futures Markets* 16(5), 519-543.

DAY 30: THE TACIT QUARTERLY INFORMATION EVENT IN THE BANKING INDUSTRY

By Brad Badertscher, Jeff Burks, Peter Easton

As U.S. banks are announcing earnings and filing 10-Qs or 10-Ks with the SEC each quarter, they are also filing Call Reports and Y-9Cs with bank regulators, which the

regulators then publicly release on the web. The Call Reports and Y-9Cs include an income statement and balance sheet, and considerably overlap with the information found in earnings announcements and 10-K/Q filings. However, the bank regulatory reports tend to contain finer subcategories of financial statement items and additional details about mortgage lending activity, regulatory capital, and credit risk. The information is presented in standardized schedules, with virtually none of the qualitative disclosures found in 10-K/Qs. Y-9Cs present information consolidated at the bank holding company level, while Call Reports present a similar set of information for each individual bank in the holding company or for banks that are not part of holding companies.

Call Reports and Y-9Cs are released outside of SEC-governed channels. The reports do not appear on the SEC's EDGAR platform and banks rarely file SEC form 8-Ks to notify investors that the reports are available, despite the large amount of information they contain. Little is known about the timing of Call Report and Y-9C releases because bank regulators do not release the reports in a single batch on a particular day but instead release the reports serially, usually within one to two days of receipt. The regulators post the reports on the web without announcing their release or making a historical record of release dates available.

After we were denied a Freedom of Information Act request for a history of the release dates, we tracked the release of the reports in real time from January 1, 2012 to March 31, 2014 through SNL Financial, which provided us with a daily listing of the reports that had become available for download from the regulatory reporting websites. Our study reveals the timing of the report releases and examines their role in banks' information environments.

We find that releases of Call Reports tightly cluster around the due date of 30 calendar days following quarter end (or on the next business day if the 30th calendar day falls on a weekend or holiday). Approximately 92 percent of Call Reports are released in the five trading days around the 30th calendar day, beginning on day 27 and ending on day 31. Days 29 and 30 are the peak days, with 17 percent released on day 29 and 56 percent released on day 30. Releases of Y-9Cs cluster around their due date as well, which is the 40th day following interim quarter ends and the 45th day following the fourth quarter end. Peak times for Y-9C releases are days 36 to 44 following interim quarters and days 40 to 49 following the fourth quarter. As explained later, we estimate that the regulatory reports began exhibiting these timing patterns in late 2005 or 2006.

The regulatory reports are released in the same general time frame as earnings announcements and 10-K/Q filings, giving rise to questions about their role in banks' information environments. Interestingly, about 19 percent of the time regulators release a bank's Call Report -- which includes the bank's quarterly earnings -- before the bank holding company itself announces earnings. These early releases by regulators frequently reveal the vast majority of the holding company's earnings (because about 80 percent of publicly-traded bank holding companies hold just a single bank). We examine whether the stock prices of bank holding companies respond to the release of the reports, whether the response depends on the timing of the reports relative to earnings announcements and 10-K/Q filings, and whether the response to earnings announcements is lower when they follow Call Reports.

We find that Call Reports elicit stock price and volume reactions when they are publicly released. The market reaction is statistically and economically significant even when the Call Report is released after an earnings announcement (which is the most common scenario). Our price reaction metric is based on the bank's squared market-adjusted returns on the report release day and the following day (event days 0 and +1). Our abnormal volume metric is also measured over the same two-day window. We find that mean price reaction around the report release date is about 18

DAY 30: THE TACIT QUARTERLY INFORMATION EVENT IN THE BANKING INDUSTRY *Continued*

"Call Reports tend to preempt information in earnings announcements..."

percent higher than the non-event day mean. We find a statistically and economically significant mean reaction regardless of whether the Call Report is released before or after the earnings announcement, and do not find that the timing relative to the earnings announcement significantly affects the market reaction.

In contrast, we find lower price reaction to earnings announcements when they follow Call Report releases. For earnings announcements that follow Call Reports, mean volatility around the earnings announcements is only 113 percent higher than the non-event day mean, compared to 192 percent higher for earnings announcements that precede Call Reports. Thus, when one report arrives before the other, Call Reports tend to preempt information in earnings announcements, but there is no evidence that earnings announcements preempt information in Call Reports. Call Report releases are also associated with high trading volume. For Y-9Cs, we find no statistically significant price or volume reaction around release dates, likely because they occur later in the reporting season.

We also investigate whether the market reaction to Call Reports varies with bank characteristics. We find that market reaction to Call Reports decreases in bank size, consistent with large banks having stronger information environments that make Call Reports less relevant. After controlling for bank size, we do not find evidence that the market reaction to Call Reports varies with the bank's capital ratio, asset/liability maturity gap, use of derivatives, reporting complexity, or detail in the announcement of earnings.

Going back to the year 2000, we find a pattern of market responses to Call Reports that is consistent with the timing of a "modernization project" that bank regulators completed in late 2005 to speed the processing of the regulatory reports. Five of the eight years between 2006 and 2013 exhibit higher price reaction and/or trading volume around day 30 of the quarter. In contrast, none of the six years between 2000 and 2005 exhibit higher price reaction or trading volume around day 30, indicating that Call Report releases were not clustered around day 30 during this older time period.

In summary, a flood of market-moving information about banks is routinely released in a tight window around the 30th day of every quarter, a fact that has not been well publicized. For some banks this information release precedes and preempts the earnings announcement. Although the price reaction and volume metrics indicate that some investors are aware of the timing of Call Report releases and trade on them, questions remain about how widely this phenomenon is known by investors and whether the playing field could be leveled by more transparent announcements of the releases.

Jeff Burks is Associate Professor of Accountancy and Deloitte Faculty Fellow at the University of Notre Dame. He can be reached at jburks@nd.edu. Brad Badertscher is Professor of Accountancy and PwC Faculty Fellow at the University of Notre Dame. He can be reached at bbaderts@nd.edu. Peter Easton is the Notre Dame Alumni Professor of Accountancy at the University of Notre Dame. He can be reached at peaston@nd.edu.

TEXTUAL CLASSIFICATION OF SEC COMMENT LETTERS

By James Ryans

Many investors and business journalists are unaware that the SEC performs detailed reviews of the financial statements of all publicly listed companies on a regular basis. During a review, the SEC issues comment letters to the firm, outlining their questions and concerns, and the firm responds to these concerns in writing until the SEC is satisfied that the issues are resolved. The letters and the companies' responses are posted on ED-GAR 20 business days after the review ends. Section 408 of SOX mandates such reviews "... for the protection of investors", and the SEC implemented this requirement through their Full Disclosure Program, with a mission to "... assure that investors are provided with material information and to prevent fraud and misrepresentation".1

How can it be that a program with such an obviously useful purpose results in so little awareness among the investment community or the media? It is not for lack of effort: the SEC Division of Corporation Finance conducted 4,350 reviews in 2014, an activity that represented the significant majority of the division's headcount and \$135 million budget.² Instead, the lack of media or market activity surrounding comment letter disclosures is likely due to these letters being both hard to identify and hard to interpret. A recent paper by Dechow, Lawrence, and Ryans (2015), shows that EDGAR downloads of comment letters happen at a rate of about 1% of the volume of downloads of the reviewed annual report. In other words, investors rarely read comment letters.

This lack of attention is troubling given that comment letters are generally the result of an astute analysis of the annual report and supporting disclosures by an SEC staff accountant with deep industry expertise, and given that the SEC's questions and the company's responses can provide

TEXTUAL CLASSIFICATION OF SEC COMMENT LETTERS Continued

material new information. An explanation is that comment letters are relatively difficult to find and interpret. When comment letters are disclosed, Form UPLOADs and Form CORRESPs are inserted into the historical document list on EDGAR based on the letter date, not the date disclosed. This means investors may need to dig through old documents to see if comment letters happened to be inserted. Comment letters may be difficult for non-experts to interpret, as they often contain detailed accounting verbiage. Comment letters may also be simply uninformative, if Section 408 of SOX does not achieve its goals. Dechow et al. (2015) investigates the importance of comment letters, showing that insiders believe some comment letters are important, since insiders sell abnormal amounts of stock immediately before and after the disclosure of comment letters, especially when they contain revenue recognition-related questions and when short-sellers have taken an interest in the company.

In Ryans (2014), I investigate a technique for investors to more easily identify important comment letters, using statistical text analysis. I use the Naïve Bayesian text classification technique to categorize comment letters as important or unimportant, where importance is evidenced by belowmarket stock returns following comment letter disclosure. The first step of the procedure involves training the system using a test group of comment letters. Comment letters with large negative stock price responses after the comment letter was made public (bottom quartile over the subsequent 90 days) are compared to those without such a negative response, and the system flags the words or phrases that are more likely to occur in the important letters. In effect, the system assigns an importance score to every word or short phrase. To test the effectiveness of the technique, the scores from the training group of firms are applied to a holdout sample of comment letters. The system looks at the words of the new comment letter, and codes the letter as being important or unimportant according to the contents of the new letter.

Figure 1. Holdout Sample Stock Price Response After Disclosure of *Important* and *Unimportant* Comment Letters

Panel A. All Comment Letters Panel B. Letters with Above Median EDGAR Downloads





The results indicate that this technique can be useful for helping to flag important comment letters, giving a 10 to 40 percent improvement in the ability to identify important comment letters versus chance. What happens to the stock price of the companies with comment letters that get flagged? For all flagged companies, they have approximately a -5 percent return 30 days after the comment letters are disclosed (see Figure 1, Panel A). For a subset of firms whose comment letters were downloaded from EDGAR more than the median number of times (just 2 downloads), the negative price response is both faster and deeper, with a return approaching -10 percent over the 90 days following disclosure (see Figure 1, Panel B). Because the price drop is much

"The result of this study is that important comment letters can be identified..."

more pronounced for the firms with the text-based signal of importance, it is not just the fact that the comment letter was downloaded driving the result.

A benefit of the Naïve Bayesian technique is that we can see which terms are identified as important. In contrast to prior research, which focuses on revenue recognition-related comment letters as those likely to be important, this study identifies a wider variety of terms that the SEC chooses to question, or that appear in the companies' responses, e.g.: continue to monitor, income continuing, loan portfolio, accounting guidance, recoveries, brand, pension, historical experience, and effective tax. These terms indicate that the SEC finds issues associated with access to financing, asset portfolios, reporting issues, and other major accounts. When the SEC questions these issues, it appears that information comes out, either in the comment letter disclosure itself, or in other disclosures, to lead the stock price lower.

The result of this study is that important comment letters can be identified and are associated with future underperformance. Efforts to improve the accessibility and readability of comment letter contents might help better achieve the goals of the review process, by leading investors and business journalists to use comment letters more often to understand a firm's financial reporting weaknesses and potentially identify material new information.

James Ryans is a PhD candidate at the University of California Berkeley's Haas School of Business. He can be reached at: jim.ryans@berkeley.edu

References:

Patricia Dechow, Alastair Lawrence, and James Ryans (2015) SEC Comment Letters and Insider Sales. The Accounting Review In-Press.

Ryans, James, Textual Classification of SEC Comment Letters (2014). University of California at Berkeley Working Paper. Available at SSRN: http://ssrn.com/abstract=2474666

1http://www.sec.gov/about/oig/audit/326fin.pdf 2https://www.sec.gov/about/reports/ secfy16congbudgjust.shtml

EMPLOYMENT CONDITIONS AND SEC ENFORCEMENT

By Jonas Heese

Public trust in the effectiveness of the Securities and Exchange Commission (SEC) oversight is deteriorating after more than a decade of massive frauds, several of which the SEC failed to detect. A common allegation in many of these cases has been that the SEC avoids prosecution of politically connected firms. Accordingly, academics have started to investigate the role of political influence on the SEC's choice of enforcement targets and indeed find that politically connected firms are less likely to be subject to SEC enforcement (e.g., Correia 2014). In these studies, political influence usually starts with a corporation or other special interest group donating money to politicians, who are argued to "capture" the SEC's enforcement process on behalf of the corporation.

But what if companies were given preferential treatment by regulators not because of their actions to capture the regulatory process, but because they fulfill another goal important to politicians and the voters who elected them? This is the question I examine in my paper "Government Preferences and SEC Enforcement". In particular, I investigate whether the SEC-as a result of political influence-shows some favoritism to firms with large employment rolls in the form of reduced enforcement against these firms. Although such favoritism could benefit the public at large, regulators have to understand its impact on the public confidence in the effectiveness of SEC oversight.

SEC enforcement actions can have devastating consequences for firms and therefore employment conditions as about a third go out of business after being targeted, providing strong incentives for politicians to influence such enforcement. Members of the government have a range of control devices to influence SEC enforcement. For instance, Congress sets the SEC's budget and oversees the agency, while the president appoints SEC commissioners with the advice and consent of the Senate. In fact, anecdotes suggest that SEC Commissioners and senior staff might indeed consider the harm to employees that an enforcement action can create. For instance, Robert Khuzami, the former Director of the SEC's Division of Enforcement, states that the SEC has to ask itself "under what circumstances [it] should indict an entire institution for the misconduct of some number of its employees" as such action may cause harm to innocent employees (Orol 2013). In line with Khuzami's statement, Mary Jo White argues that prosecutors should consider the direct and collateral consequences when they make a decision as to whether to indict a company as their decision should be "thoughtful and in the public interest" (SEC 2014c).

Using 30 years of data, I find that large employers are less likely to be subject to an enforcement action. This result suggests that government's efforts to promote employment conditions are systematically reflected in SEC enforcement and thus emphasize the importance to consider political influence as a response to both voters' and special interests in understanding the SEC's enforcement choices.

Additional tests show that the lower likelihood of SEC enforcement against large employers is more pronounced in presidential election years if firms are based in closely contested states. I further investigate whether congressmen use their political influence to protect firms that employ a large proportion of their district's total workforce from SEC enforcement. Indeed, I find that these locally large employers have a lower likelihood of SEC enforcement and that this lower likelihood is more pronounced if the district's unemployment rate is high and the incumbent congressman serves on a committee that oversees the SEC. While these findings validate my earlier inferences,

"Using 30 years of data, I find that large employers are less likely to be subject to an enforcement action."

they also provide evidence on specific situations in which politicians have even larger incentives to influence SEC enforcement.

But what do these findings mean for the effectiveness of SEC oversight? One conclusion might be that my study documents additional reasons to be concerned. For instance, reduced enforcement for large employers could be problematic if these firms exploit such leniency by pushing or even crossing the boundaries of accounting standards. In fact, I document that large employers engage in more aggressive accounting choices-though not necessarily fraudulent ones. These choices may decrease the reliability of large employers' financial statements and, consequently, erode investor confidence in SEC oversight, leading to less investment and actually driving down employment.

So, is the conclusion that reduced enforcement for large employers negatively affects SEC oversight? Not necessarily. It might well be that the SEC uses alternative oversight tools for these firms. For instance, the SEC might choose to expose large employers to more (intensive) confidential investigations. Such investigations may ensure that these firms comply with accounting standards and prevent recidivism. Most important, as these investigations are confidential, they protect firms from the negative market reactions an SEC investigation triggers and thus avoid harm to these corporations. However, as the public can only observe the final enforcement actions as opposed to all investigations the Division of Enforcement conducted, the public perception that certain firms are subject to lax enforcement might grow, further decreasing confidence in SEC oversight.

This provides some food for thought for policymakers and regulators. Going forward, should the SEC make data on



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EMPLOYMENT CONDITIONS AND SEC ENFORCEMENT *Continued*

these investigations publicly available to allow the public to better understand how the SEC balances diverging pressures and to ultimately answer how these political pressures affect SEC oversight? If it did, how could the SEC ensure that firms do not get severely punished for investigations that find only minor mistakes or might turn out to be unwarranted? Is there reason to believe that market participants can differentiate between these different types of investigations? They potentially can. For instance, academics have shown that market reactions to restatements as a consequence of intentional misstatements differ largely from restatements because of errors (e.g., Hennes et al. 2008).

At a minimum, disclosing these investigations is a step towards more transparency that will help to rebuild public trust in the effectiveness of SEC oversight and allow market participants to make better informed decisions. As a final remark, in its recent history, the SEC can actually find a good example how a step towards more transparency strengthened public confidence in SEC oversight: the disclosure of comment letters regarding firms' financial statements. Jonas Heese is an Assistant Professor of Business Administration at the Harvard Business School. He can be reached at jheese@hbs.edu.

References:

Correia, Maria. 2014. Political connections and SEC enforcement. Journal of Accounting and Economics 57 (2–3), 241–262.

DOJ. 2008. Principles of Federal Prosecution of Business Organizations. Available at http:// www.justice.gov/opa/documents/corp-charging-guidelines.pdf.

Heese, Jonas. 2015. Government Preferences and SEC Enforcement. Available at http:// papers.ssrn.com/sol3/papers.cfm?abstract_ id=2542242

Hennes, Karen M., Leone, Andrew J., and Miller, Brian P. 2008. The Importance of Distinguishing Errors from Irregularities in Restatement Research: The Case of Restatements and CEO/CFO Turnover. The Accounting Review 83 (6), 1487-1519.

Orol, R. 2013. Enforcer in chief: A conversation with Robert Khuzami. Available at

http://www.thedeal.com/content/regulatory/ enforcer-in-chief-a-conversation-with-robertkhuzami.php

SEC. 2014c. Three key pressure points in the current enforcement environment - Chair Mary Jo White. Available at

http://www.sec.gov/News/Speech/Detail/ Speech/1370541858285#_ftn1