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Millstein Center for Global Markets
and Corporate Ownership

Session Brief No. 3

Conference on the Use and Misuse of Stock Price

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About the Millstein Center for Global Markets and Corporate Ownership

Building on Columbia Law School's longstanding strength in corporate and securities law, the mission of the Millstein Center for Global Markets and Corporate Ownership is to bring world class scholarship, research and academic rigor to the vital task of restoring and strengthening long-term financing of innovative and durable public corporations, which are the underpinning of economic growth.

This mission is essential given today's capital markets which are global, complex and volatile, and bring consequences and uncertainties to those who rely on them: companies, investors, and ultimately the wider economy.

The Center's research on the capital market and its impact on corporate governance and performance builds upon the work of the earlier successful "Institutional Investor Project" at Columbia University (1986-94), as well as the successes of the Millstein Center for Corporate Governance and Performance at the Yale School of Management (2005-12). The value of the Center's research is enhanced through active engagement with practitioners.

This paper provides a brief summary of discussion points, presentations, and findings from the "Use and Misuse of Stock Price" Conference held in September 2014.

The Center's Session Briefings are framed as concise summaries of events or reports designed to promote policy discussion or further research. They strive to encompass a diversity of perspectives and are based on a combination of presentations, independent research, and the experiences of market leaders and thought leaders who participate in Center events or workshops. Participants generally include corporate board members and managers, institutional investors, advisors, leading academics, regulators, and other thought leaders.

Marcel Bucsescu, Executive Director of the Millstein Center served as lead editor. Jonathan Kim, former Senior Vice President, General Counsel and Secretary of Montpelier Re Holdings Ltd., and Rosemary Dodemaide, Operations Coordinator of the Millstein Center, served as secondary editors. Allison Mitkowski of Little Foot Communications served as the reporter.

The Millstein Center is extraordinarily grateful to all of its sponsors and partners, which provide support on an ongoing basis (a list of supporters can be found on the Center's website).

We would also like to extend a special Thank You to the IRRC Institute for their collaboration, contributions, and participation in this event.

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In 2013, in an effort to better understand the purpose, use, and potential misuse of stock prices in public equity markets, the Millstein Center and the Investor Responsibility Research Center Institute (IRRCi) issued a call for papers on the role prices play as a corporate governance mechanism. In lieu of completed projects, proposals were sought for new research that explored how equity prices affect the decision-making processes of corporate management, boards of directors, and investors. On September 19, 2014, the Millstein Center and the IRRCi hosted a gathering entitled the *Conference on the Use and Misuse of Stock Price*, during which several authors presented papers examining the topic from various angles. The following summaries highlight key takeaways from the panel discussions.

Presentation #1

Market Efficiency and the Development of the Market for Corporate Control

Authors

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Abstract

Historically, the manner in which hostile takeovers have been executed has just begun to receive serious academic attention. In this paper the authors consider an important facet of this history: the relationship between the pricing of shares and the way in which hostile change of control transactions were planned and executed. The paper identifies potential linkages between control transactions and stock market efficiency and reviews historical and empirical literature on the evolution of market efficiency over time to make predictions concerning the future development of the market for corporate control. The authors test their propositions using a hand-collected dataset of open market bids, contested tender offers (both for cash and exchange offers) and proxy contests occurring between 1900 and 1965.

The conference participants agreed generally with the authors' conclusions and raised a number of questions and challenges for consideration. One panelist summarized the key takeaway as an assessment of leverage, with bidders adjusting their strategies according to what target shareholders believe stock prices reveal at any given point in the bidding process. The panelist noted that the strategy behind hostile, as opposed to friendly, takeovers is always leverage, and countered that hostile bids often depend on a degree of information asymmetry—i.e. lesser rather than greater information-efficiency in stock prices. Hostile bids appear to flourish when information-efficiency is less robust, the panelist contended.

The panelist complimented the authors' "nuanced and careful account" of the relationship between plausible increases in market efficiency and the rise of the tender offer. Rather than asserting a causal claim, however, the authors explore whether or not the growing number of control contests coincided with advances in stock price accuracy. Another panelist commented that the abuses which prompted the Williams Act suggest that the rise of the cash tender offer may have resulted from a series of marginal improvements on the prior transactional models. The panelist wondered whether or not a causal link could provide a satisfactory explanation for the rise of cash tender offers.

A question from the audience raised an interesting point. Namely, whether the stock market crash of 1929 was the primary reason for the shift in control contests to open market bids (OMBs)? The crash that led to the Great Depression certainly impacted stock market liquidity and trading volume, so could this turning point in our country's economic history be responsible for the shift? OMBs were successful in the early part of the 20th century because there was so much trading going on back then. Investors could acquire a large stake in a company through an OMB before the crash of '29, but not afterward. One of the authors responded that it would be interesting to examine trading volumes and spreads across this time period.

Presentation #2

Market Predators

Authors

Lauren H. Cohen, Associate Professor of Finance & Marvin Bower Fellow, Harvard Business School;

Karl Diether, Associate Professor, Department of Finance, Brigham Young University;

Dong Lou, Assistant Professor, Department of Finance, London School of Economics and CEPR; and

Christopher Malloy, Professor of Business Administration, Harvard Business School and NBER

Abstract

The authors find evidence of predatory trading in the corporate bond market. Exploiting novel data on the short selling behavior of institutional investors, the paper demonstrates that short sellers target precisely those bonds likely to experience the largest negative events in the future: bonds about to be downgraded to junk status, and specifically those held by insurance companies and other institutions that they are required to liquidate by ratings agencies or internal investment guidelines when the bonds fall to junk status. The authors show that shorting in these bonds predicts large negative returns, which largely reverses over the trailing 12 months. Short sellers' trading activity is premedi-

tated: they build up large short positions in an issuer's liquid bonds first, and then help to trigger cascades and downgrades by trading in the illiquid bonds after they have already built up their positions.

Conference participants responded to the presentation with a series of questions and comments, noting that the authors' work is part of the broader debate on the overall value of short sellers in the market. One panelist said most of the evidence in financial economics circles seems consistent with the view that short sellers are net positives for price discovery and liquidity, although there was evidence of manipulative trading strategies driving prices below fundamental values. The panelist also raised the possibility of return reversals or corrections to the stock price, saying there was no evidence of reversal in the early 2000s. Rather, the panelist's own research concluded that short sellers seemed to have information that is permanently embedded in prices.

The panelist went on to point out an interesting finding from the authors' research concerning the sizeable return differentials from bonds that are heavily owned by insurance companies. Insurance companies are strongly incentivized (or in some cases compelled) to sell bonds in their investment portfolios that are downgraded to junk status due to strict capital allocation rules determined by credit ratings. *"As soon as something falls off that cliff, they find it doesn't make sense from a capital requirement standpoint to hold it, given their constraints,"* the panelist said.

The panelists agreed with the authors' candid assessment of the difficulty in proving that actual abuse occurs in the short selling market. One must either have clear evidence or rule out all benign alternatives. For example, short sellers would have to deliberately drive down prices. Ratings agencies would have to use the depressed bond prices when calculating their ratings, and then issue downgrades. Downgrades would prompt institutions to sell bonds in their portfolios, which would further depress prices below the fundamentals. One panelist, however, posited that benign alternatives are always plausible. Negative information may be disseminated by the issuers of bonds, causing rating agencies to downgrade the bonds and short sellers to trade based on the information. Bond prices fall, and the short sellers are viewed as prescient. Nevertheless, the panelist further noted that there is no evidence that shorting is actually driving bond prices down. As such, some demonstration would be needed in order to prove that price declines are causally linked to shorting.

Another panelist felt the bigger issue at stake was that ratings agencies don't seem to pay any attention to bonds targeted by short sellers when calculating ratings. The panelist cited Moody's website, which states their focus on fundamentals and explains that their ratings are designed to measure long-term risk. Accordingly, bond market prices would have no bearing on the determination of ratings. The panelist said it would be helpful if the authors included evidence that downgrades were somehow unwarranted based on fundamentals, or if they were related to price moves that occur naturally through short selling.

Presentation #3

Managerial Learning from Stock Prices: A Structural Examination

Authors

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Andrew Di Wu, Ph.D. Student of Finance, Wharton School, University of Pennsylvania

Abstract

The authors develop a new measure of stock price informativeness that utilizes data on both price and volume, which they call the INF measure. Compared to traditional gauges, they contend that their model is better at capturing information in prices as evidenced by increases in INF, but not in other measures, when companies disclose material information publically via 8-K filings with the SEC. Next, using INF, the authors find evidence of managerial learning from changes in stock prices as the sensitivity of company investment to price is higher when INF is higher. In addition, the authors demonstrate that the momentum effect[1] *is stronger for stocks with higher INF.*

Participants in the conference responded to the authors' presentation with a host of questions, comments and suggestions. One panelist offered potential measures for testing by suggesting that work like that of the authors should focus on takeover targets. Following a takeover announcement, the target's share price increases 20-30% on average, the panelist said. Another comment emphasized how critical it is for the authors to evaluate trading volume and stock prices together as part of their valuation process. *"We look at the strength of conviction as much as the prices themselves,"* the panelist noted, adding that evaluating share prices in isolation is not as useful as evaluating the arc spread, particularly around mergers and acquisitions.

Another panelist pointed to an area of tension that exists in the authors' model regarding the definitions of current value and expected value based on current stock prices. To track within the model, the panelist said one would have to assume the stock market closes every day in order to track the current closing price. The solution would be to model price based on

[1] The momentum effect in finance refers to the tendency of securities to continue following trends lines, particularly as that trend strengthens, at least in the near term.

expected or true value in relation to the current trading price; however, the panel agreed with the authors' assessment that this is unrealistic.

The panel also discussed the challenges of progress within the feedback portion of the model, noting that separating information about fundamentals from managerial action is extraordinarily difficult. One panelist also noted that the model could artificially shut down certain strategic behaviors. The panelist contended that while we assume investors trade on information, we don't know if management will use the same information in their decision-making processes. This allows information to flow only one way and not the other. "Each shortcut becomes more elegant," the panelist explained. "The authors are in the process of moving toward finding information equivalence between the fundamentals [of the company] and what they may signal—the productivity [of the company]—and the eventual value."

Presentation #4

The Potential Use of Sustainability Scenarios as a Supplement to Stock Price in Equity Valuation by Long-Term Investors

Author

Steve Lydenberg, Partner, Domini Social Investments; Founding Director, Initiative for Responsible Investment, Harvard University

Abstract

This paper examines the use of sustainability scenarios as a potential supplement to stock price in equity valuation and decision-making by investors. Its central argument is that stock price as a valuation tool is often too short-term in its predictive abilities to fully serve the needs of long-term investors concerned about environmental, social and governance (ESG) and sustainability challenges. The author traces the development and use of scenario analysis by corporations in strategic management decision-making—in particular when situations of uncertainty are involved—and reviews the use of scenario analysis by ecological scientists in the understanding and management of complex physical systems. An anecdotal account of the range of scenario analyses with a sustainability focus in contemporary corporate strategic decision-making is provided through a case study and interviews with corporate social responsibility and strategic management officers as well as CEOs.

The paper notes the current use of interest-rate and economic scenario analyses by mainstream investors in their asset allocation decisions. From there, it considers the potential use by such investors of data on the incorporation of sustainability scenario analysis by corporations into their strategic management decision-making. With the commitments of various long-term investors (primarily pension funds) to the incorporation of ESG and sustainability factors into their investment decision-making as background, the paper then summarizes a case study and a number of interviews with asset managers on their views of the potential usefulness of such data. It concludes that, for long-term investors concerned with sustainability, data on the corporate use of sustainability-related scenario analyses could be a useful supplement to stock-price considerations in investment decision-making and outlines how these investors might make use of such data.

Response to the author's thesis and findings began with a comment from a panelist employed by a major metropolitan pension fund. The panelist noted that his fund is actively engaging its portfolio companies around environmental, social, and governance practices as an effective risk management strategy. Better practices will hopefully create value while protecting investors against a disaster like the Massey Mine explosion that killed 29 workers and destroyed 40 percent of the company's value, the panelist said, noting that there had been red flags in the mine's business operations prior to the explosion. The panelist explained how the pension fund asks companies to adopt a policy affirming that they will be environmentally responsible and prohibit workplace discrimination, among other actions. The fund also requests robust reporting to evaluate metrics and monitor performance. *"What gets measured gets monitored, and what gets disclosed gets managed,"* the panelist noted. The panelist went on to cite a sustainability survey of firms in which 79 percent of the respondents said sustainability risks are incorporated into their enterprise risk-management framework.[2] The panelist also said that investors who are most concerned about longer-term industries have the least influence on share price, as they aren't active participants in buying and selling those stocks on a day-to-day basis.

The panel agreed that disclosure matters a great deal when it comes to sustainability reporting. Investors may consider sustainability scenario analysis an indicator of management quality. The challenge with confidentiality, however, made one panelist skeptical of information that companies report about their sustainability initiatives. Another panelist raised the question of whether or not scenario analysis would be a valuable tool for both corporations and investors—especially given investors' tendency to over-discount long-term cash flows and under-invest in high-return but timeframe-distant cash flows. Yet another panelist thought sustainability issues could engage investors on a more meaningful level by prompting them to ask more questions in order to hold cor-

[2] EY, 2013 six growing trends in corporate sustainability (New York, 2013)

porations accountable. Or, perhaps scenario analysis is creating more uncertainty because it is difficult to translate the effect of sustainability on profitability and return on investment. *"It's hard to take a series of stress tests and translate them into stock price evaluation,"* one panelist said.

The author acknowledged the obstacles to translating the language of sustainability into daily corporate management terms. He also agreed with the panelists' points about disclosure and confidentiality. The panel discussion concluded with questions around what companies will need to report about their sustainability efforts and how this data will relate to stock price.

Conclusion

The daily price movement of a company's public equity is often viewed as an indicator of market approval or disapproval to routine news, such as quarterly earnings, or unexpected developments, such as takeover offers or restructurings. It is assumed that the market price reflects the clearing price for all or the majority of a company's shareholders. At the same time, much has been written in recent years about the increased "short-termism" of the market. Data indicates that the mean holding period for U.S. investors has been steadily decreasing: in the 1930s the average holding period was 10 years for NYSE-traded stock as opposed to an average holding period of only six months since 2010.[3] Nevertheless, the data also indicates that historically the time horizon of top shareholders at large companies has remained relatively stable. Recent research suggests that mutual funds have not materially shortened the duration of their holdings over the last 30 years.[4] Other research has suggested an increase in the velocity of trading by short-term traders.

Regardless of how these trends have changed over time, today's senior corporate managers and boards of directors appear to be significantly influenced by short-term stock prices. Managers' reliance on market price as an indicator of investor sentiment suggests that understanding how short-term price fluctuations actually reflect investors' views is a critical yet under-examined area for research. As the presentations of the selected papers show, this area is ripe for further research and debate. The markets and their participants will benefit greatly from the deeper understanding of the evolving market dynamics in this regard.

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3 Saft, James. Reuters. "The wisdom of exercising patience in investing." March 2, 2012.

4 Cremers, Martijn; Pareek, Ankur; and Sautner, Zacharias. "Stock Duration and Misvaluation." February 14, 2013.

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