

The Fourth Israel Behavioral Finance Conference

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Abstracts

Antonio Gargano, University of Houston, **Marco Giacoletti**, USC Marshall, *Cooling Auction Fever: Evidence from the Housing Market*

Abstract

This paper presents novel evidence of the effects of bidders' behavioral biases, and sellers' strategic responses, on the outcome of high-stakes auctions. It also provides evidence of how policies improving the information environment, and limiting the ability of sellers to exploit bidders' biases, can be used to cool booming housing markets. We take advantage of the introduction of laws deterring "underquoting" in real estate auctions. Underquoting is the practice of advertising downward-biased listing prices. This practice is used by real estate agents and sellers to convey distorted signals on sellers' reservation values, and to increase the number of auction participants. The introduction of the laws leads to higher listing prices, reducing the bias between listing prices and market valuations by 60%, and to a relative drop in auction sales prices. Our findings are not consistent with the predictions of rational models, since underquoting only increases participation by low valuation bidders. However, they are consistent with models in which higher auction participation induces overbidding due to information frictions and behavioral biases.

Abigail Hurwitz, The Hebrew University of Jerusalem, **Johannes Hagen**, Jönköping International Business School, **Michal Hodor**, Tel Aviv University, *Private Information and Risk Preferences in the Annuity Market: Evidence from Sweden*

Abstract

Adverse selection has been the most-studied consequence of asymmetric information in the context of annuity markets, whereby individuals hold private information about their longevity risk expectations (i.e., risk type), which in turn increases the demand for life annuities among riskier individuals. Asymmetric information, however, may affect individuals' annuity choices through an additional channel of advantageous selection, which captures the extent to which one's risk attitude (i.e., risk preference) affects annuity demand and is irrespective of risk type; it is rather based on an inherent perception of annuity as a tool to reduce longevity risk. We leverage administrative Swedish data to separately identify and quantify the effects of advantageous selection and adverse selection on one's annuity choice. Our identification strategy classifies risk type using a cancer diagnosis. The research design exploits the potential random timing of an unexpected and severe shock relative to retirement age. Further, we proxy for risk aversion using observed behaviors and choices in various domains, including financial investments, health-care related consumption, and drug-related consumption. The results show that both risk type and risk preferences are crucial in shaping demand for annuities. Specifically, our findings support the well-established evidence of a positive correlation between investment in annuities and risk type. However, interestingly, the results show that risk aversion mitigates the negative effects of adverse selection on annuity demand. These findings advance our understating by explaining inefficiencies in annuity markets, and help to resolve them as well as mitigate the discrepancy between theory and reality on annuity choices.

Avi Wohl, Tel Aviv University, **Daniel Nathan**, Bank of Israel and Tel Aviv University,
Menachem Abudy, Bar-Ilan University, *Mutual Fund Flows and Government Bond Returns*

Abstract

We investigate daily flows to Israeli government bonds mutual funds, which are held primarily by retail investors. We divide the bonds into six categories: nominal/CPI-linked; short-term, intermediate-term, and long-term maturity. We find that daily net flows are contemporaneously correlated with price changes of all categories. These price changes are significant and they subsequently reverse fully or mostly within 10 trading days. The price reversal indicates that the initial price changes are due to “noise.” We find that these price distortions affect break-even inflation—a measure of inflation expectations. Our findings indicate that even government bonds are affected by retail sentiment.

Bharat Sarath, Rutgers Business School, *Accounting, Belief Formations and the Ellsberg Paradox*

Abstract

Behavioral Economics may be formally viewed as a framework where belief formations fall outside the scope of Bayes rule. The classic example of such “behavioral” findings is the Ellsberg paradox which cannot be reconciled with a Bayesian framework. The goal of this paper is to try to formalize a non-Bayesian belief formation within the context of accounting disclosures in the market. After outlining some of the established models of non-Bayesian updating that have been proposed in prior economic literature, the paper will discuss a theoretical approach focused on accounting disclosures. In particular, the paper will try and address how the use of non-Bayesian updating rule may differentially affect the stock and option markets around earnings announcements leading to possible testable predictions. This is intended as an attempt to integrate earnings disclosures within a market setting building on the ideas developed in “Ambiguity, Information quality and Asset Pricing” (Epstein and Schneider; JF 2008).

Carlo D’Augusta, Bocconi University, **Annalisa Prencipe**, Bocconi University, *Accruals Quality, Shocks to Macro-Uncertainty, and Investor Response to Earnings News*

Abstract

Prior research shows that Bayesian investors rationally place less weight on the earnings signal when they judge it as a noisier predictor of future outcomes, such as when accruals quality is low. Consequently, the market response to earnings news is weaker when a firm’s accruals quality is lower. We hypothesize that investors’ behavior will change in an asymmetric way when macroeconomic uncertainty spikes before the announcement. Drawing on the ambiguity aversion literature, we argue that investors will not update beliefs in a standard Bayesian fashion when shocks to macro-uncertainty shake investors’ confidence in how well they can judge the parameters of the distribution of future outcomes. Instead, investors will favor a “better safe than sorry” attitude, which leads them to react strongly (weakly) to bad (good) news regardless of accruals quality. Consistently, we find that macro-uncertainty shocks cause i) a stronger reaction to bad news for low-quality (but not high-quality) firms and ii) a weaker reaction to good news for high-quality (but not low-quality) firms. We find similar results when looking at periods of significant market uncertainty, such as the 2008 financial crisis or the onset of the Covid-19 pandemic. Finally, if macro-uncertainty resolves in the post-announcement weeks, investors correct the underreaction to high-quality good news, especially if the shock was not extreme.

Dan Levin, The Ohio State University, **James Peck**, The Ohio State University, *Misbehavior in Common-Value Auctions: Bidding Rings and Shills*

Abstract

We characterize the optimal misbehavior by bidding rings or an auctioneer in the ascending English auction with common values. We also show, in an extended game, that in equilibrium potential members join and truthfully reveal their signals. Under a separability assumption, behavior does not change if non-ring bidders are informed about the ring's existence. In general, misbehavior in dynamic settings is more profitable than in outcome-equivalent static settings. However, under a stronger separability assumption, the ring can do no better in the dynamic English format than in the outcome-equivalent, static Sophi format.

Doron Sonsino, Cyprus International Institute of Management, **Yefim Roth**, Haifa University,
The Decrease in Confidence with Forecast Extremity

Abstract

Three return forecasting experiments and a panel of more than 14,000 CFOs' forecasts of the S&P 500 annual return suggest that forecast confidence decreases as the forecasts diverge from zero, in the positive or negative direction. The decrease in confidence reflects in longer forecast intervals, weaker belief in the accuracy of the forecasts, and larger perceived volatility estimates. Assuming cumulative prospect theory, the increase in perceived volatility with forecast optimism is fast enough to fully offset the CFOs' response to more optimistic expectations in about 20% of the cross-sample comparisons. Permutation tests, more generally, confirm that the decrease in confidence significantly delays the response to optimistic forecasts. The decrease in confidence alleviates the underestimation of volatility in cases of optimistic forecasts, but even the optimistic CFOs underestimate the VIX volatility by more than 50%. A complementary empirical analysis reveals significant cross-sectional and time-series correlations between the absolute realized returns on the stocks composing the S&P 500 list and estimates of their contemporaneous volatility. The correlations emerge in five levels of analysis and separately show for positive and negative sub-sequences of the returns.

Doron Kliger, The University of Haifa, **Yosef Mentzer**, Technion - Israel Institute of Technology and The University of Haifa, *Wisdom of the Crowds Semi-Strong Form Efficiency in Prediction Markets*

Abstract

According to the Efficient Market Hypothesis (EMH), prices fully reflect all relevant information at any point in time. Much of the EMH theoretical and empirical basis has been challenged, researchers have been turning to theories including models of human psychology, and the field of behavioral finance emerged. In the last decade, due to some of its convenient features, prediction markets have been progressively employed by researchers as a test setting for the EMH and for behavioral finance hypotheses. We gather historical data on prediction markets of soccer match results from an online betting exchange and train a machine learning prediction model for the dynamics of prices associated with the team that scores a goal. We then devise an investment strategy based on the model's predictions and perform a Monte Carlo simulation to compare the returns of a naive portfolio based on all goals with the returns of a portfolio based on the investment strategy. The results allow us to shed light on semi-strong form efficiency of the prediction market in the minutes following a goal.

Federico Favaretto, Boston College, **Donato Masciandaro**, Bocconi University and SUERF
Austria, Populism, Financial Crises and Banking Policies: Economics and Psychology

Abstract

Financial crises often seem to be associated with populism, although the populist banking policies introduced to address such crises are far from homogenous. This apparent paradox - a sort of “sight-unseen consensus” - suggests that specific economic drivers coupled with general psychological components can explain populist consensus. We propose a model of populist consensus, which we term “democratic rioting,” in which individuals' decisions to support or resist a specific populist bailout policy after a financial crisis are heavily influenced by psychological group dynamics. Those dynamics, in turn, are driven by general, non-banking-related motivations, such as anti-elite sentiments. In a multiple equilibria setting, the more individuals are unhappy for general economic and/or psychological reasons, the more likely they are to support myopic and redistributive populist banking policies rather than long-sighted public interventions.

Fernando Zapatero, Questrom Boston University, **AJ Chen**, University of Southern California, **Suk Leey**, Bank of Korea, *Clinging Onto the Cliff: A Model of Financial Misconduct*

Abstract

We propose a novel pressure-based model of financial misconduct. We interpret the robust empirical findings of a high "success rate of crime" as evidence of skewness in the payoff of white-collar crime. Our model proposes skewness-seeking as a key driver of financial misconduct, as opposed to the conventional analysis that postulates (an empirically elusive) positive expected payoffs associated to crime. In our model, criminal motives arise as optimal responses to a "tunnel vision" that engrosses firm managers, whereby the intense pressure to attain the focused goal triggers strong demand for negatively skewed bets in the form of crime. We show results that are consistent with the notion of a "slippery slope to crime" that is finding growing support in the literature as well as in practitioner accounts. Comparative static analyses on the model also reveal several empirical implications - for example, a "pecking order of crime" indicating that serious infringements will only follow the depletion of the more preferred (and possibly prevalent) option of milder incursions of law, e.g., minor violations of financial reporting standards - many of which find empirical support in the literature.

Julia Klevak, QMA, **Joshua Livnat**, NYU and QMA, and Kate Suslava, Bucknell University
Benefits of Having a Female CFO

Abstract

We examine gender differences in the language of CFOs that participate in quarterly earnings calls. Female executives are more concise, less optimistic, are clearer, use fewer idioms or clichés, and provide more numbers in their speech. These differences are particularly strong in the more spontaneous Questions and Answers (QA) section of the calls. The tone of female CFOs is positively associated with future earnings surprises, while for male CFOs it is more related to future firm expansion. Finally, firms with female CFOs earn higher abnormal returns around the call date than those with male CFOs after controlling for variables that are related to the contents of the call.

Guy Kaplanski, Bar Ilan University, *The Race to Exploit Anomalies and the Cost of Slow Trading*

Abstract

This study explores how arbitrage capital reshapes out-of-sample returns and volume of trade. Studying 71 anomalies, we show that the discovery of an anomaly creates a contrarian effect on the general decay in returns. A consistent volume effect reinforces the arbitrage capital explanation. The effect duration has been shortened and starts earlier in more recent years, along with the reduction in costs of arbitrage. Also consistent with the limits-to-arbitrage hypothesis, the differences in long-side and short-side portfolios diminish in more recent years. The long-lasting effect indicates a persistent mispricing component in anomalies.

Haim Kedar-Levy, Ben-Gurion University of the Negev, **Elroi Hadad**, Shamoon College of Engineering (SCE), *The Impact of Retail Investor Sentiment on Conditional Volatility of Stocks and Bonds*

Abstract

We measure bond and stock conditional return volatility as a function of changes in sentiment, proxied by six indicators from the Tel Aviv Stock Exchange. We find that changes in sentiment affect conditional volatilities at different magnitudes and often in an opposite manner in the two markets, subject to market states. We are the first to measure bonds' conditional volatility of retail investors' sentiment thanks to a unique dataset of corporate bond returns from a limit-order-book with highly active retail traders. This market structure differs from the prevalent OTC platforms, where institutional investors are active yet less prone to sentiment.

Hui Guo, University of Cincinnati, **Haomiao Wang**, Dongbei University of Finance and Economics, **Hang Cheng**, Dongbei University of Finance and Economics, **Yongdong Shi**, Dongbei University of Finance and Economics, *Dissecting Sentiment-Beta Anomaly*

Abstract

Using a novel investor sentiment measure, we uncover a strong negative relation between sentiment betas with China's cross-sectional stock returns and provide unique textbook examples of behavioral asset pricing theory. Earnings extrapolation causes overvaluation of high sentiment-beta stocks. Arbitrage costs and disposition effects hinder correction of mispricing. Our findings also lend direct support to Brunnermeier, Sockin, and Xiong's (2021) theoretical predictions. Sentiment effects are deeply rooted in China's closely managed economic and financial system. Government interventions are a main driver of sentimental swings, and mispricing is most prevalent for big state-owned enterprises because of their close ties with the government.

Jacob Oded, Tel Aviv University, *Why Do Firms Repurchase Their Overpriced Shares?*

Abstract

Firms are commonly assumed to repurchase their shares to signal they are undervalued in the financial markets (underpriced), or take advantage of underpricing to enhance share value.

However, recent empirical evidence suggests that actual repurchases are often performed when the stock is overpriced. This paper explains why firms may repurchase overpriced shares, and characterizes the situations in which this is likely to happen. Focusing on agency costs of free cash flow, we show that benefits to insiders from waste have a substantial role in affecting the decision to repurchase and highlight the importance of having good corporate governance in place when managers get approval from the board to repurchase

Karolis Liaudinskas, Norges Bank, Oslo, Norway, *Human vs. Machine: Disposition Effect among Algorithmic and Human Day-traders*

Abstract

This paper studies whether and why algorithmic traders exhibit one of the most broadly-documented behavioral puzzles – the disposition effect. We use trade data from the NASDAQ Copenhagen Stock Exchange merged with the weather data. We find that on average, the disposition effect for humans is substantial and increases significantly on colder days, while for similarly-trading algorithms, it is insignificant and insensitive to the weather. This provides causal evidence of the link between human psychology and the disposition effect, and suggests that algorithms have the ability to reduce psychology-related human errors. Considering the ongoing AI adoption, this may have broad implications.

Jie Cao, The Chinese University of Hong Kong, **Yi Li**, Board of Governors of the Federal Reserve System, **Xintong Zhan**, Fudan University, **Weiming Zhang**, The Chinese University of Hong Kong, **Linyu Zhou**, The Chinese University of Hong Kong, *Carbon Emissions, Mutual Fund Trading, and the Liquidity of Corporate Bonds*

Abstract

This paper provides a detailed investigation on how firms' carbon emission levels affect trading behaviors of mutual funds and liquidity conditions of corporate bonds. Our analysis is conducted with a full sample from 2007 to 2019 and causality is further established by exploiting the Paris Agreement. We find that mutual funds are more likely to sell corporate bonds in herds if the bonds' issuing firms have higher carbon emissions, driven by funds' concerns for carbon-related redemption risks and regulatory risks, rather than by a permanent change in investing ethics or preferences. We show that higher carbon exposures in mutual fund portfolios lead to more investor out outflows, and bonds tend to experience more sell herding if their holding mutual funds have higher flow-to-carbon sensitivity. We also find that bonds issued by high-carbon firms experience worse liquidity conditions.

P. Joakim Westerholm, University of Sydney, **Levy Schattmann**, Karlsruhe Institute of Technology, Jan-Oliver Strych, Karlsruhe Institute of Technology, *Information Processing Skills of Short Sellers*

Abstract

We investigate to what extent short sellers rely on superior information processing skills, to evaluate public (macro) information, and to what extent they rely on private (company specific) information. To distinguish these two sources of information, our study contrasts short-seller trade-level performance in non-healthcare stocks during the 2020 pandemic period, to their performance in healthcare stocks during an earlier clean period. Since we expect that any short sellers' private information about healthcare stocks is unlikely to be material for non-healthcare stocks, we conclude that any observed outperformance in non-healthcare stocks is more likely relying on successful processing of public information. Using a unique German sample of daily short selling data, we find that treated short positions identified by general shorting outperformance are associated with economically significant 10-day CARs for non-healthcare stocks of 3.4 percent. Robustness test rule out that our results are driven by the use of private information on firms, governmental measures or non-information-based trading advantages such as better funding or lending ability of observed short sellers.

Luca Viarengo, Department of Economics and Business Management Università Cattolica del Sacro Cuore, **Annalisa Prencipe**, Department of Accounting Bocconi University, **Leonidas Barbopoulos**, University of Edinburgh Business School, *Earnout Agreements in the Covid Era*

Abstract

Since the COVID-19 pandemic began to sweep the globe, the world economy entered in an era of uncertainty, that affected the M&A market as well. Starting from march 2020, both the number and the volume of closed deals dropped significantly. In our paper we document that the use of earnouts, that are contractual solutions used in M&A deals to bridge valuation disagreement between the potential acquirer and the seller of the target firm, rose dramatically during the pandemic. We show that these contracts helped reduce the uncertainty on the value of the target and reach the closing of deals during turbulent times. We also provide evidence that these contracts were widespread also in the new wave of deals that occurred in 2021, for similar reasons. The use of earnout is associated with higher abnormal returns for the bidders, showing that the market responds favorably to the reduction of risk that these contracts entail.

Luigi Guiso, Einaudi Institute for Economics and Finance, **a Zaccaria**, Einaudi Institute for Economics and Finance, *From Patriarchy to Partnership: Gender Equality and Household Finance*

Abstract

We obtain a model-driven measure of gender norms on intra-household financial decision making by leveraging dramatic variation across Italian cohorts and regions in the gender of the household head. We use these estimates to identify the effects of gender parity on household financial decisions. More egalitarian norms increase household participation in financial markets, equity holdings, asset diversification, and returns on investments. This evidence suggests that gender roles can have large economic costs. Consistent with this view, we show that patriarchal norms began receding in the early 1990s, when a pension reform made it too costly to comply with traditional roles.

Abstract

This paper investigates the impact of a 2018 intervention by the European Securities and Markets Authority (ESMA) limiting the amount of leverage that investors can take on their trading activities. While it successfully reduced the usage of leverage, investors shifted their trading activities to riskier assets in the process, indicating risk-shifting in the sense of "regulatory arbitrage". Thus, the intervention was not as effective as the reduction in leverage suggests. Consistent with the notion that risky investment strategies spread through the population, I find some evidence of a spillover effect to investors who are not affected by the regulatory intervention.

Maurizio Montone, Utrecht University ,**Remco Zwinkels**, VU Amsterdam, *Risk, Return, and Sentiment in a Virtual Asset Market*

Abstract

The joint-hypothesis problem casts doubt on the results of market efficiency research. Specifically, it is hard to assess to what extent financial markets reflect economic fundamentals or mispricing. To address this issue, we study price formation in a large virtual asset market where fundamentals are predetermined and publicly known. We find that a number of well-established determinants of returns from the real world also affect asset prices in this market, despite the absence of systematic risk. The results suggest that prices in real financial markets include a substantial behavioral component, which is likely underestimated in canonical asset pricing tests.

Meir Statman, Santa Clara University, *Culture in Judgements of fairness: The Case of Insider Trading*

Abstract

We all care about fairness, yet perceptions of fairness vary greatly. My focus here is on perceptions of the fairness of insider trading, where some traders have information not available to other traders.

Disparity of information among traders is common. Owners of used cars often have inside information, such as information about faulty transmissions, unknown to potential buyers. Corporate executives often have inside information, such as information about disappointing earnings, unknown to potential traders.

Corporate executives who exploit inside information violate the law while car owners who exploit inside information do not violate it. Do perceptions of fairness in the car and stock markets correspond to the law? Do they vary by knowledge of the law? Are perceptions of fairness universal, or do they vary across countries? Do perceptions of fairness vary across groups, such as groups of university students and finance professionals? Do they depend on the incomes of traders or whether they have sure or only probabilistic information? Do they depend on whether an intermediary is involved?

I find that perceptions of the fairness of insider trading in the stock market vary greatly across eight countries and between professionals and students in each country. Whereas majorities of professionals and students in the United States, the Netherlands, Israel, and Australia judged insider trading in the stock market unfair, majorities of students and substantial portions of professionals in India, Tunisia, Italy, and Turkey judged it acceptable.

Stock trades usually are executed through market makers who act as intermediaries, such that sellers never face buyers or even know their identities. Used cars often are sold through intermediaries, such as used car dealers, but car sellers and buyers often engage in face-to-face transactions, bypassing intermediaries. I find that perceptions of insider trading in the car market are harsher when trades are conducted face-to-face than when conducted through intermediaries.

Moran Ofir, Harry Radzyner Law School Reichman University (IDC Herzliya), **Guy Hochman**, Baruch Ivcher Reichman University (IDC Herzliya), **Roy Fadida**, Baruch Ivcher Reichman University (IDC Herzliya), **Shahar Ayal**, Baruch Ivcher Reichman University (IDC Herzliya), *Financial Risk-Tolerance During a Major Negative Life Experience: The Case of COVID-19 Pandemic*

Abstract

The paper examines the effect of an unprecedented, widespread, and life-threatening experience on risk-taking behavior focusing on the case of the COVID-19 pandemic. We conducted an online questionnaire of a diverse sample of subjects (total $n = 658$) based on Holt and Laury's (2002) risk-tolerance measure in 4 different time points - before the pandemic and during each of its first three waves. The data demonstrates that a major life experience significantly reduces financial risk-taking. While the objective financial situation seems to deteriorate as the crisis became more severe, the observed decrease in risk-tolerance was the most apparent in the 1st wave, with no major differences between the three waves of the pandemic. Moreover, we find no connection between the objective measure of financial risk and subjective tolerance towards risk during the pandemic. This finding suggests that changes to risk tolerance are highly affected by contextual and emotional considerations.

Moshe Levy, The Hebrew University of Jerusalem, *Mutual Fund Selection and the Investment Horizon*

Abstract

Mutual fund investors typically invest for years, or even decades. In contrast, fund rankings are almost invariably based on monthly return parameters. This is a potentially severe problem, because rankings by the Sharpe ratio are not invariant to the horizon. Moreover, as the investment horizon increases, return distributions become positively skewed, and thus the mean-variance framework becomes inappropriate altogether. Is there a justification for employing the monthly Sharpe ratio by long horizon investors? This paper shows, both theoretically and empirically, that the efficient investment set rapidly shrinks with the horizon towards the fund with the maximal monthly Sharpe ratio. This is true not only for risk-averse investors, but for all investors with non-decreasing preferences, including Prospect Theory investors and those with various aspiration levels. Thus, perhaps surprisingly, monthly Sharpe ratios turn out to be even more relevant for long-run investors than they are for short-run investors.

Nataliya Gerasimova, Norwegian School of Economics, **Maximilian Rohrer**, Norwegian School of Economics, *Not by Whom but Where: Analyst Reaction to Firms' ESG Incidents*

Abstract

We document that financial analysts exhibit a local-event bias. In particular, we find that analysts located in countries affected by ESG incidents start issuing lower recommendations to the committing firms compared to analysts from other countries. The effect lasts for more than a year after the event, concentrates in hard-to-value firms, and is also reflected in financial forecasts. We show that this local-event bias is distinct from the localfirm bias, the general tendency of issuing optimistic forecasts for local firms. Our evidence is consistent with an underlying preference to rely on personal experience combined with attachment to a given geographic place and is not driven by informational advantage.

Nelson Camanho, Queen Mary University of London, **Daniel Carvalho**, Indiana University,
How Do Banks Shape Lending Co-Movement?

Abstract

Local lending decisions in distant areas of a country often move together and become unusually correlated around bad times such as financial crises. We study the role of individual banks in shaping this lending co-movement. As common banks operate in distant areas, many lending decisions are made within a same firm, creating potential linkages across local credit markets. In the context of Brazil, we exploit variation in these connections across areas through individual banks due to unique historical shocks to firm boundaries in banking. We find that, during normal times, the presence of common banks is an important determinant of local lending co-movement. However, individual banks have a much weaker and economically insignificant effect on the link between local credit markets around a financial crisis. We provide evidence that the reallocation of credit inside banks limits their effect on lending co-movement during bad times. Our findings are consistent with the predictions of a simple framework, where banks have increased incentives to reallocate credit across areas with different conditions during bad times and this limits their net effect on lending co-movement.

Olga Kandinskaia, Cyprus International Institute of Management – CIIM, **Jana Koleschnik**, Cyprus International Institute of Management – CIIM, **Elias Ktoris**, Cyprus International Institute of Management – CIIM, *Impact of COVID-19 Pandemic Announcement on the Market Value of Companies in the German Stock Index DAX30*

Abstract

While the literature in the range of Covid-19 related topics has started to examine the market impact of the pandemic, little evidence exists regarding the effect on the German stock index DAX30. This paper fills in the gap by analysing the impact of the COVID-19 pandemic announcements in March 2020 on the German Stock Index DAX30. Using an event study, we investigate how certain industries and specific companies in the index responded to the news, by using three event windows of different length. It mirrors the expectations and trust of the investors in the performance and valuation of certain industries. It was found that the impact of the event differs significantly among the 30 companies in 13 different industries. Some industries and their companies were strongly negatively affected, such as Real Estate, Utilities, Communication, Industrials and Financial Services. While three industries in our sample, Basic Materials, Online Food Ordering and Automobile, were found to be positively affected. Furthermore, possible reasons for those reactions for each of the companies are presented.

Orly Sade, The Hebrew University of Jerusalem, **Abigail Hurwitz**, The Hebrew University of Jerusalem, **Olivia S. Mitchell**, University of Pennsylvania, *What Getting Vaccinated Reveals about Insurance Preferences*

Abstract

Using an internet-based Prolific survey, we asked 2,549 US residents about their perceptions of COVID-19 along with their risk attitudes, risky behaviors, and vaccination status. We show that respondents who elected the vaccine were more likely to have life insurance and annuities and save for precautionary reasons, controlling on risk behavior and preferences. This pattern is consistent with the argument that insurance buyers are systematically different from non-buyers. Moreover, those who took the proactive step of getting vaccinated, thus reducing their pandemic risk, were also more likely to purchase insurance. Controlling on vaccination status, we find no statistically significant association between subjects' risk preferences and risky behaviors, and whether they advised others to buy life insurance or annuitize. Yet the vaccinated did recommend that people boost their savings and annuitize more, again supportive of the hypothesis that people who take health precautions also favor other measures that reduce risk.

Peter L. Swan, UNSW Sydney Business School, **Pallab Dey**, UNSW Sydney Business School,
Can Illiquidity Be Priced in an Active Secondary Market?

Abstract

Commencing with a Lucas (1978)-type representative investor but with differing endowments, we develop a new theoretical model of counterparty trading inclusive of frictions to show that symmetric liquidity costs, which could arise either from exogenous costs or from order- ow asymmetric information, are not priced. This is because seller costs cancel out the buyer costs correctly identified in Amihud and Mendelson's (1986a) seminal theoretical model. We test our generalization of the Lucas model utilizing NYSE (US) equity market microstructure data to show that we cannot reject our main hypothesis concerning the absence of liquidity pricing effect on stock returns. We split transaction costs into their buy (upside) and sell (downside) components to find they are priced with similar magnitudes in contemporaneous returns. Based on our NYSE sample, the balanced effect of buy and sell lambda price impact does not generate a downside lambda premium in future stock returns. We further report a positive pricing effect of the bid-ask spread on future returns on the extreme quintile of lambda asymmetry.

S. Abraham Ravid, Yeshiva University, **Gabriela Coiculescu**, Yeshiva University, **Yehuda Izhakian**, Baruch College, *Innovation under Ambiguity and Risk*

Abstract

We view innovation investment as a real option and explore the implications of ambiguity (Knightian uncertainty) and risk for innovation decisions. Our analysis uses a risk measure and a new outcome-independent measure of ambiguity. We find a consistently significant negative effect of ambiguity on R&D, patents, and citations supporting our theoretical notion. We also find a significant positive effect of risk on R&D, but the effect of risk on patents and citations is negative and significant. The different nature of R&D investments versus patent investments and citations may explain this difference. Ambiguity matters more for high-tech firms, consistent with intuition.

Shlomith Zuta, The Academic College of Tel Aviv-Yaffo, *The Alternative Meat Industry: Fad or Disruption?*

Abstract

The alternative meat industry has been all the rage over the past few years. But is this industry a true disruptive force in the meat industry, or is alternative meat just a blip in the history of meat? Should CEOs of large traditional meat companies be worried, devising strategies to fight back, or can they dismiss the threat? This is the question at hand.

Jiaxing You, Xiamen University, **Shuyi Zhu**, Xiamen University, **Jingjing Xia**, Wenzhou-Kean University, *Home Not So Sweet Home: An Examination of Retail Investors' Local Information Advantage Using Online Stock Forum Posts*

Abstract

Extensive research in economics and finance shows that agents exhibit home bias and tend to favor entities geographically closer to them. Contrary to these findings, we document that retail investors, a group frequently associated with behavioral biases and information disadvantage, have more negative sentiment towards local firms than non-local ones in online posts from one of the most popular stock forums in China. The differential sentiment is concentrated in posts related to firm operations, and is more pronounced in posts containing more credible information and for firms with more opaque information environment and greater local presence. Further analysis suggests that local users' sentiment is informative about the firm's future abnormal stock returns for up to one year and stock price crash risk for up to three years, while non-local users' sentiment is uninformative. These findings contribute to the debate on retail investor informedness and the sources of their private information.

Jeong Ho (John) Kim, Emory University, **Sudheer Chava**, Georgia Tech University, **Jaemin Lee**, Emory University, *Risk, Return, and Environmental and Social Ratings*

Abstract

We analyze the risk and return characteristics across firms sorted by their environmental and social (ES) ratings. We document that ES ratings have no significant relationship with average stock returns or unconditional market risk. Stocks of firms with higher ES ratings do have significantly lower systematic downside risk. Such reduction in downside risk delivers modest, yet non-trivial, gain in long-term returns of around 0.96% per annum. Realized firm news sentiment and institutional trading patterns are also consistent with these results. Our evidence suggests that investors who derive non-pecuniary benefits from ES investing need not sacrifice performance in the stock market.

Joshua Shemesh, Monash Business School, **Omer Lev**, Ben-Gurion University, **Yoram Bachrach**, Google DeepMind, *The Role of Soft Information in Crowdfunding: Evidence from Crowdsourced Data*

Abstract

Crowdfunding markets enable entrepreneurs to communicate material information even when it is nonstandard or more difficult to quantify or verify. As human evaluations are able to detect and process such soft information, they still have value when the world has gone toward big data. Using a large crowdsourced survey asking participants to rate live Kickstarter campaigns, we show that the accuracy of predicting whether a campaign would achieve its funding goal substantially improves by incorporating annotations made by human evaluators. Our results portray crowdsourcing as an affordable yet powerful tool to evaluate campaigns before they even go live.

Richard (Rick) Sias, University of Arizona, **Laura T. Starks**, University of Texas, **H. J. Turtle**, Colorado State University, *Long-Term Expectations*

Abstract

Perceived long-term (ten-year horizon) return distributions are remarkably bearish and most individuals believe that uncertainty is only marginally greater in the long term than the near term (one-year horizon), resulting in inferred variance ratios that require unprecedented levels of mean reversion. Although respondents' near-term beliefs are extrapolative, long-term beliefs are counter-cyclical. Long-term beliefs are more important than near-term beliefs in explaining equity market participation. Respondents agree more about long-term than near-term returns and respondents' characteristics better explain long-term, versus near-term, belief heterogeneity. These patterns have important implications for understanding household finance and both behavioral and traditional asset pricing.

Sivan Frenkel, Tel Aviv University, **Avanidhar Subrahmanyam**, University of California at Los Angeles, **Sahn-Wook Huh**, University (SUNY) at Buffalo, *Liquidity of Securities*

Abstract

I analyze the liquidity of a general security, whose cash flow is defined over the payoffs of an underlying asset. Examples include debt, equity, and options. Liquidity of the security arises endogenously in a micro-structure framework where traders have different levels of information. The equilibrium in this framework is unique and enjoys a number of useful properties for conducting comparative statics. It can be used to understand how the cash flow rights of the financial security and changes in the payoff distribution of the underlying asset affect the financial security's liquidity. I first use this framework to compare the liquidity risk of different securities that have the same underlying asset. I show that, all else equals, debt minimizes liquidity risk. I then endogenize the level of information asymmetry by allowing traders to acquire costly information. I show how small changes in the value of information may turn liquid markets to illiquid. These results are then used to analyze liquidity of debt. I show that bad news may turn a perfectly liquid debt market into a highly illiquid one, similar to the dry-up of debt markets that was observed during the financial crisis of 2008.

Sivan Riff, Ruppin Academic Center, *The Cost of Russia -Ukraine War to the Home Biased to the Russian Stockholders*

Abstract

A portfolio's home bias is a measure of the deviation of its composition from a globally, and optimally, diversified portfolio. It results from the (voluntarily or due to restrictions) tendency of investors to invest in the domestic market more than it is optimally correct. As of December 2020, Russia has a home bias ratio of 0.97 compared to an average of 0.65 for all countries and 0.55 for Israel. From the beginning of the Russian-Ukraine crisis in October 2021 until the actual invasion in March 2022, the Russian stock market fell by as much as 80% (according to iShares Russia ETF), and given the high home bias of Russian investors, the effect on the average Russian investor was immense.

During approximately five - year period before the war (between May 2017 until October 2021) the MSCI all countries index (a well-diversified portfolio that may be viewed as having a zero-home bias) gained an average monthly return of 1.10%, with a standard deviation of 4.47% and Sharpe ratio of 0.21. The full home biased portfolio (which approximates the 99% Russian home biased level) gained a higher return of 1.44% with much higher standard deviation of 7.45% and thus slightly lower Sharpe ratio of 0.17. The six months of war reduced the slightly lower zero-home bias portfolio Sharpe ratio from 0.21 to 0.20, while the full home biased Sharpe ratio turned negative: -0.08.

Mahmoud Qadan, University of Haifa, **Smadar Siev**, Ono Academic College, *Call Me When You Grow Up*

Abstract

Using recent US data about 1611 IPOs spanning 11 economic sectors for 2009 to 2019, we provide a fresh look at IPO performance in the near and long terms. We provide evidence that a firm's size and age do act as predictors for its price evolution in the future. In addition, there is a significant variation in the long-term performance between sectors and between small and large firms within each sector. Furthermore, there is a clear tendency of firms from sectors such as healthcare and technology to go public at a relatively younger age than other sectors. The results have implications for asset pricing and are useful for investors involved in IPOs.

Rachel Azurel Calipha, Academic College of Tel-Aviv Yaffo, **Enav Fridemann**, Ben-Gurion University and Yifat Reuveni, Ruppin Academic Center, *The gap between environmental and social attitudes and sustainable behaviors among lecturers in academia*

Abstract

The gap between attitudes and behavior is well known in the literature. However, it has yet to be researched among lecturers in Academia. Thus, this study explores this gap among lecturers who teach in the field of sustainable impact compared with those who do not teach in the field. We found that this gap can be mediated by perceived behavioral control. In addition, the boundary condition for this indirect effect depends on the number of sustainable impact courses taught by the lecturers. Lecturers who teach one or two courses, and have a positive attitude, show higher perceived behavioral control and sustainable behaviors. However, this indirect effect was not shown among lecturers who do not teach, as attitude was not related to perceived behavioral control. These findings suggest teaching sustainable impact courses may narrow the gap between attitude and behavior.

Stuart Gabriel, UCLA, **Danny Ben-Shahar**, Tel Aviv University, **Roni Golan**, Tel Aviv University, *The Cost of Political Belief Disagreement: Virus Transmission and Vaccine Resistance during the COVID-19 Pandemic*”

Abstract

We employ data from Israel to assess the costs of political belief disagreement on COVID-19 virus and treatment outcomes. We identify political belief groups based on votes in Israel’s 2020 general election. Results indicate substantial variation in COVID-19 virus transmission, vaccine uptake, and closure policy response across divergent belief groups in the wake of emergent virus risk. The disease costs of belief disagreement are substantial: simulated economywide adoption of COVID-19 risk-averse political beliefs would have reduced infection cases by 30 percent and increased vaccinations by 15 percent. Results underscore the importance of belief-targeted interventions to policy efficacy and social welfare.

Tingting Liu, Iowa State University, **Tao Shu**, Chinese University of Hong Kong Shenzhen, **Jasmine Wang**, University of Virginia, *Winner's Curse in Takeovers? Evidence from Investment Bank Valuation Disagreement*

Abstract

Existing literature debates the existence of the winner's curse in mergers and acquisitions, a phenomenon in which the winning bidder fails to account for the uncertainty about the target value and thus overpays for the acquisition. Using a unique setting where target firms hire multiple investment banks as advisors, we construct a novel measure of target valuation uncertainty based on the disagreement of investment banks on target valuation. We find that in the presence of high valuation disagreement, bidders on average pay significantly higher acquisition premiums, and bidders who pay higher premiums have lower returns around merger announcements and in the long run. These bidders also create lower merger synergies. Our results are robust to the control for selection bias using Heckman two-stage model with an exclusion restriction. Moreover, the winner's curse is more pronounced when bidders have overconfident CEOs. Overall, our findings suggest that the winner's curse does exist in takeovers and causes distortions in resource allocation.

Thomas Jansson, Sveriges Riksbank, **Michael Haliassos**, Goethe University Frankfurt CEPR, and NETSPAR, **Yigitcan Karabulut**, Frankfurt School of Finance and Management and CEPR, *Wealth Inequality: Opportunity or Unfairness?*

Abstract

This paper presents evidence of a new propagation mechanism for wealth inequality, based on differential responses, by education, to greater inequality at the start of economic life. It is motivated by a novel positive cross-country relationship between wealth inequality and perceptions of opportunity and fairness, which holds only for the more educated. Using unique administrative micro data and a quasi-field experiment of exogenous allocation of households, the paper finds that exposure to a greater top 10% wealth share at the start of economic life in the country leads only the more educated placed in locations with above-median wealth mobility to attain higher wealth levels and position in the cohort-specific wealth distribution later on. Underlying this effect is greater participation in risky financial and real assets and in self-employment, with no evidence for a labor income, unemployment risk, or human capital investment channel. This differential response is robust to controlling for initial exposure to fixed or other time-varying local features, including income inequality, and consistent with self-fulfilling responses of the more educated to perceived opportunities, without evidence of imitation or learning from those at the top.

Valeria Fedyk, London Business School, *This Time is Different: Investing Preferences in the Age of Robinhood*

Abstract

In this paper, I study how investing preferences of the relatively young, small, inexperienced, and well-connected individual investors on the Robinhood platform contrast with those of previously-studied individual investors. I find that unlike their predecessors, Robinhood investors do not have a preference towards investing in lottery stocks, value stocks, or small cap stocks. Instead, I find that Robinhood investments can best be explained by three main components: (i) attention-induced trading in response to extreme returns, volume traded, earnings announcement surprises, and analyst rating changes; (ii) a novel “buy-the-dip” effect favoring large, well-known companies that fell upon hard times; and (iii) peer effects on the WallStreetBets platform. Finally, I also provide a novel financial forum dictionary addition based on WallStreetBets sentiment to be used in future research.

Yakov Amihud, New York University, **Avanidhar Subrahmanyam**, University of California at Los Angeles, **Sahn-Wook Huh**, School of Management University (SUNY) at Buffalo,
Liquidity Spillovers: Evidence from Two-Step Spinoffs

Abstract

How does an idiosyncratic shock to the liquidity of a stock affect the liquidity and prices of related stocks? Utilizing the feature that the second stage of a two-step spinoff increases the float of an already-public firm, we document strong evidence that the enhanced liquidity of spun-off firms spills over to their industry peers after the spinoffs. These liquidity spillovers lead to value spillovers as well. The improved liquidity also induces greater pricing efficiency and larger institutional holdings in those stocks. The results provide support for the notion that the prices of spun-off firms provide additional public information about the related firms, thereby ameliorating information asymmetry in those firms.

Yevgeny Mugerman, Administration, Bar-Ilan University, **Doron Kliger**, University of Haifa, **Ruth Rooz**, Administration, The Hebrew University of Jerusalem and Visiting New York University, *I Am The Firm! Eponymous Firms and Rose-Coloured Forecasts*

Abstract

We invoke the famous Louis XIV quote “L’État, c’est moi,” applying it to the corporate world, and introduce the novel idea that a self-serving bias, which we define as “I Am The Firm,” is infused within the culture of certain companies. We hypothesize that the owners of eponymous firms – firms that bear the names of their owners – experience enhanced self-identification with their firms, and thus tend to inject their own subjective beliefs and desires into the realistic objective prospects of the firms. The “I am the firm” effect is a form of a self-serving bias, which arises from the blurring of boundaries between the owner and the corporate eponymy entity that carries the same name. Employing a unique corporate setting in Israel, we demonstrate that eponymous firms disclose unduly optimistic biased forecasts relative to their non-eponymous counterparts, which cannot be validated or justified solely by rational explanations. The obfuscation of the boundaries in eponymous firms between subjective illusory desires and objective realistic truths is revelatory and has far-reaching implications in various aspects of corporate decisions, which we suggest will require future research.

Ye Zhang, Stockholm School of Economics, *Impact Investing and Venture Capital Industry: Experimental Evidence*

Abstract

This paper examines the effect of startups' ESG characteristics on investors' decisions by employing an incentivized resume rating experiment with real US venture capitalists and matching investors with data on their involved deals. Investors need to evaluate multiple hypothetical startup profiles with randomized startup missions (impact ventures vs. profit-driven ventures), which they know to be hypothetical, in order to be matched with their preferred real startups in the collaborating incubators. I find the following main results: (i) aiming for environmental and social impact causally lowers investors' expectations in the startup's quality, hence reducing profit-driven investors' interest in contacting and investing in the startup. This effect mainly exists when investors only consider attractive startups, emphasizing the importance of implementing high-stake experiments. (ii) Investors pay more attention when evaluating attractive impact ventures, suggesting the existence of taste-driven preference towards impact investing. (iii) Sorting may happen as impact (profit-driven) investors expect impact ventures to be more (less) likely to collaborate with them. (iv) The negative ESG effect is more salient for startups with white male founders and less educated founders. Interestingly, impact ventures are correlated with better fundraising and business performance during the one year period after the experiment, indicating that investors may over-reject impact ventures due to inaccurate beliefs. A dynamic Bayesian model is used to illustrate the potential evolution of impact investment and how miscalibrated beliefs can hinder its development. Experimental evidence shows that there is still space to improve impact investing in the US private equity market.

Yoram Kroll, Ono Academic College and Ruppin Academic Center, **Andrea Marchioni**, University of Modena and Reggio Emilia Italy, **Moshe Ben-Horin**, Ono Academic College, *Coherent Portfolio Performance Ratios*

Abstract

In Quantitative Finance 2016, Chen, Hu and Lin (CHL) claimed the following: ‘...there is yet no coherent risk measure related to investment performance.’ (p. 682). This paper suggests and analyzes four coherence axioms that portfolio performance ratios should satisfy.

Our Portfolio Riskless Translation Invariance axiom must be satisfied to assure separation of the objective decision to optimize a portfolio’s risky composition from the subjective decision to optimize the weight of the portfolio’s level of risk-free asset. Performance ratios with fixed thresholds other than the risk-free rate do not satisfy this axiom, allowing portfolio managers to affect an ex-ante performance ratio merely by changing the proportion of the risk-free asset in the portfolio rather than by improving the composition of the portfolio’s risky components. The magnitude of this potential drawback is examined using the S&P-500 stock index data.

Replacing the fixed threshold, T , with a threshold $T(\gamma, \alpha)$ that equals γ times the portfolio’s risk premium plus $(1 - \gamma)$ times the risk-free rate, eliminates the above shortcoming for any selected γ . In addition, using performance ratios with the threshold $T(\gamma, \alpha)$ rather than the fixed T , assures consistency of the performance ratios with the effective stochastic dominance with the risk-free asset rules.

Zhiping Zhou, Tongji University, **Cheng Zhang**, Victoria University of Wellington, **Kai Wang**, Central University of Finance and Economics, **Xuan Zhang**, Nanjing Audit University,
The Impact of Financial Stress Shocks on Commodity Prices

Abstract

This paper examines the impact of financial distress on commodity returns over the 1990-2020 period. Using Markov switching vector autoregressive models that identify three regimes, we find that an unexpected increase in financial distress is negatively associated with commodity returns. The impulse response functions analysis suggests that the impact of financial stress shocks on commodity returns is nearly four times larger during the crisis regime that includes the subprime crisis and the COVID-19 pandemic than normal times. Further tests based on the returns of specific commodities, including foodstuffs, metals, and raw industrials, show that increased financial stress also leads to a larger decline in commodity returns in the crisis regime. We also show that the impact is stronger for metals than foodstuffs and raw industrials.

Zohar Tsuk, Ruppin Academic Center, **Yoram Kroll**, Ono Academic College, and Ruppin Academic Center, *Buy and Sell Decisions*

Abstract

When it comes to trading risky securities by individual investors, we have two leading and competing theories: Expected Utility (EU) and Prospect Theory (PT). Under EU theory, investors should ignore purchase price of a security and Risk-Aversion is the only factor that matters. On the other hand, under PT or CPT purchase price do matter and Loss-Aversion is the main factor driving investors behavior. This paper suggests a new extended theory, based on the insights of both, in order to explain buy and sell decision making by Quasi-Rational Agents. Unlike EU theorem, Quasi-Rational Agent emphasizes implications of unrealized gain or loss, namely it is not restricted exclusively by Risk-Aversion, but also Gain-Seeking and Loss-Aversion, depending on the context in which the choices are made. Subsequently, Quasi-Rational Agent will explain Disposition Effect phenomena, the tendency of investors to hold losing stocks too long and sell winning stocks too soon.

Zur Shapira, New York University, *Firms' Control of Their Market Actors: Managing the Risks Taken by Government Bond Traders*

Abstract

Risk management is an issue of great concern for financial institutions especially following the many scandals that occurred in the late 20th century. Investment houses dealing with volatile financial markets such as foreign exchange or government bonds find it difficult to maintain "proper" levels of risk taking. On the one hand they encouraged their traders to take risks but they also promote risk aversion since maintaining their reputation as careful and solid investors is considered to be their most important asset. This paper develops a framework that examines the reciprocal relations between the traders and their supervisors and analyzes the effects of reference points on the traders' risk taking. Qualitative data based on interviews and observations as well as quantitative data on real buy and sell decisions made by government bond traders of a large investment bank are used to illustrate the problem. The results show that avoiding losses is more important than gains, that daily profits and losses affect subsequent risk taking and that in the year's fourth quarter traders engage in strategic behavior that may be detrimental to the profitability of the firm.