

Education Session No. 672: Trading Games...in the Moment of Decision

October 20, 2016 at 6 PM New York

Trading success is reliant on instantaneous decision-making using a myriad of imperfect data. In an effort to improve decision-making, some turn to Neuroscience research. Building on the foundation of Behavioral Finance, we grasp the interplay between human cognition and biochemistry. As traders become more self-aware, how might they change their decision-making process? How can trading decisions benefit from this research? Explore the factors at work in the moment of decision on a trading desk.

Participants

Zack Ellison, CFA, CAIA, Sun Life Investment Management Karolina M. Lempert, PhD, University of Pennsylvania Denise Shull, The ReThink Group Ray Tierney, *Moderator*, Bloomberg Trading Solutions

Event Details

Date: October 20, 2016
Time: 5:15 PM Registration.
We will begin *promptly* at 6 PM; please arrive early. Since it is disruptive to everyone when latecomers enter the session, those arriving after an education session has begun will only be admitted at the discretion of 100WHF and the host. Please note the start time on this invite and plan to arrive early.
Networking and cocktails will follow.
Host: Bloomberg Tradebook
Location: Bloomberg L.P.
731 Lexington Avenue, 28th Floor, MPR, New York, NY 10022
RSVP: RSVP Now

Please note: guests to Bloomberg offices are not permitted to take pictures or video inside the building without prior written consent of Bloomberg.

If you have any questions about this event, please contact the New York Education committee.

This event is NOT FOR ATTRIBUTION. All 100WHF events are private events and we require that no one reports publicly on any aspect of them.

Admission is free, but there is a \$25 charge if you register and do not attend, even if you cancel in advance. No-show proceeds will be donated to the beneficiary of 100WHF's most recent US philanthropic initiatives.

If you have no-show fees in arrears, the system cannot register you for an event. You can view and pay for any outstanding no-show fees online from your <u>Member Profile</u>

Space is limited. No walk-ins will be permitted.

Biographies

Zack Ellison, CFA, CAIA, Director, U.S. Public Fixed Income, Sun Life Investment Management Zack Ellison, CFA, CAIA is a Director in U.S. Public Fixed Income at Sun Life Investment Management, whose teams manage over \$100 billion in assets.

Zack is primarily responsible for corporate credit trading and portfolio management and actively contributes to the firm's corporate credit strategy, investment processes, portfolio construction, and risk management practices. Additionally, he is a frequent speaker at industry conferences, with recognized subject matter expertise in market structure and liquidity, who has presented his views on how the credit markets need to evolve in order to make them more efficient and less risky.

Prior to joining Sun Life, Zack developed his investment and risk management skills at Deutsche Bank as a sell-side corporate credit trader focused on crossover credits, hybrid securities, and preferred stock and at Scotia Capital as a corporate banker and leveraged loan analyst during the Global Financial Crisis.

Zack earned a Bachelor of Arts degree from Swarthmore College while majoring in Economics. He holds an MBA with concentrations in Analytic Finance and Economics from The University of Chicago Booth School of Business, earned the Chartered Financial Analyst (CFA) and Chartered Alternative Investment Analyst (CAIA) designations, and passed the Series 7, 55, and 63 security licensing exams. Additionally, Zack is in the process of earning an MS in Risk Management from NYU Stern with an expected completion date of May/2017.

Karolina M. Lempert, PhD, Penn Memory Center Scholar, University of Pennsylvania

Karolina Lempert is a postdoctoral scholar at the University of Pennsylvania, working jointly with the Department of Psychology and the Penn Memory Center. Her research focuses on the cognitive neuroscience of economic decision-making. In particular, Karolina is studying individual differences, situational factors, and neural mechanisms that influence intertemporal choices, or choices with consequences that play out over time.

She has published empirical papers in several prestigious journals, including Journal of Experimental Psychology: General, Journal of Neuroscience, PLOS ONE, and Emotion. Karolina authored the chapter about emotion and economic decision-making in the second edition of Neuroeconomics: Decision Making and the Brain, the foundational textbook for the burgeoning field of neuroeconomics. She has also co-authored reviews about emotion and decision-making for the Handbook of Emotions, Trends in Cognitive Sciences, and Annual Reviews of Neuroscience. She is a member of the Society for Neuroscience, the Society for Neuroeconomics, and the Social and Affective Neuroscience Society, and she has presented her work at annual meetings of these societies.

Karolina received her PhD in Experimental Psychology at New York University, where she was supported by the National Science Foundation graduate research fellowship. She received her B.A. in Neurobiology from Harvard University.

Denise Shull, Decision Neuroscientist and Performance Coach, The ReThink Group Denise Shull MA, a Decision Neuroscientist and Performance Coach, founded The ReThink Group in 2003 after an update to her 1995 Master's thesis was published in an academic journal. Realizing that the emerging science of risk and emotion could solve the challenges of slumps, repetitive mistakes and confidence crises in portfolio managers and traders, Denise created proprietary assessments and advanced coaching methodologies to identify and develop the X factor in human performance under pressure.

The head of regional trading for a top five global bank says:

"...the work I have done with her has enabled me to make more progress in my trading than my 15 years of experience did on their own."

Shull currently coaches portfolio managers, bank traders, former CME Floor traders, a professional poker player and select members of the US Snowboard team. She leads ReThink's research on measuring the X factor in human decision performance and in 2016 partnered with Bloomberg Tradebook to create the first Trader Brain Exercise game (TBX>Go) based on neuroscience.

A former short-term trader and trading desk manager herself, Ms. Shull's trading career began in 1994 "upstairs" at the Chicago Board Options Exchange. Later she traded futures as a member of the Chicago Mercantile Exchange. Her 2012 book, Market Mind Games, a Radical Psychology of Investing, Trading and Risk has been described as the "best of its genre", a "veritable Rosetta Stone of trading psychology" and "ahead of its time".

The Financial Times, WSJ, Bloomberg Markets and New York Times' Dealbook have each profiled Shull's work. NPR's Marketplace Radio, Fortune and The Guardian have covered Shull in 2016 as a result of her coaching role being portrayed in the Showtime drama, BILLIONS. CNBC's Squawk Box has featured Shull in both the US and Asia. She has also appeared on Bloomberg TV, Cavuto, PBS, The Discovery Channel and CNBC's Halftime Report where she analyzed the traders' implicit motivations.

Shull holds a Master of Arts degree from The University of Chicago and completed the Harvard Kennedy School's executive program, Investment Decisions and Behavioral Finance.

Ray Tierney, Global Head, Bloomberg Trading Solutions

As the Global Head of Bloomberg's Trading Solutions group. Based in New York, Ray oversee all aspects of Trading Solutions including product innovation, sales and strategy in providing multi-asset order management solutions to buy-side and sell-side firms worldwide. These solutions are delivered through the Bloomberg Professional® service, the world's most trusted source for data, news and analytics.

From 2010 to 2014, Ray served as CEO of Bloomberg Tradebook LLC, Bloomberg's agency broker that partners with institutional traders, broker-dealers, hedge fund managers, plan sponsors, market makers and portfolio managers to provide high-quality liquidity, market insight and customized solutions based on innovative technologies. During my tenure at Bloomberg Tradebook, Ray was regularly recognized in Institutional Investor's annual Trading Technology 40 innovator rankings.

Prior to joining Bloomberg, Ray worked at Morgan Stanley for 16 years, starting in 1994 as an executive director and senior sales trader. He became a managing director in 1998 and was named head of North America cash sales trading in 2004. He later became the global head of equity trading for Morgan Stanley Investment Management in 2006, responsible for leading MSIM's worldwide trading efforts. Ray started my Wall Street career as a trader at Paine Webber (1981-1986), served as a vice president at First Boston (1986-1991), and was a vice president and sales trader at UBS (1991-1994).

Bloomberg

About Bloomberg Tradebook

Bloomberg Tradebook is a leading agency broker that partners with both the buy side and sell side to provide direct market access, access to high-quality liquidity, market insight, independent research and innovative technologies through the Bloomberg Professional service. Established in 1996, Bloomberg Tradebook and its affiliates offer its global customer base trading solutions for equities, futures, options and ETFs so they can execute complex-trading strategies across more than 100 global exchanges in over 40 countries. Bloomberg Tradebook Services LLC offers clients trading capabilities in spot FX. For more information, visit www.bloombergtradebook.com

About 100 Women in Hedge Funds (www.100womeninhedgefunds.org)

100 Women in Hedge Funds is a global, practitioner-driven non-profit organisation serving over 15,000 alternative investment management investors and finance professionals in 20 locations through educational, professional leverage and philanthropic initiatives. Formed in 2001, 100 Women in Hedge Funds has hosted more than 600 industry education events globally, connected more than 400 senior women through Peer Advisory Groups and raised over \$38 million gross for philanthropic causes in the areas of women's and family health, education and mentoring.