The 2018 Hirtle Callaghan Investors' Conference

Serious Money: The Art of Responsibility

HIRTLE CALLAGHAN & CO

Chief Investment Officers

SUMMARY 2018

HIRTLE CALLAGHAN & CO
Chief Investment Officers

The 2018 Hirtle Callaghan Investors' Conference

Serious Money: The Art of Responsibility

EXECUTIVE SUMMARY

Over 200 clients and friends attended Hirtle Callaghan's 2018 Investors' Conference which took place from January 21st-23rd at The Phoenician in Scottsdale, Arizona. Our theme for the conference, The Art of Responsibility, centered on the notion that good investing results from finding a harmonic between science and art, data and intuition, conviction and deliberation. Recognizing that there is no single "right" investment solution, Hirtle Callaghan seeks to find the best harmonic for each client.

Playing off of our central theme, our keynote speaker Malcolm Gladwell engaged the audience with anecdotes that emphasized the importance of human judgment in data analysis. Delving into a number of studies underpinned by fundamentally flawed hypotheses, Gladwell showed that relying on data without questioning the underlying assumptions can lead to faulty outcomes. His presentation challenged us to investigate thoroughly even when conclusions are presented as fact.

At Hirtle Callaghan, we embrace this spirit of questioning and foster a culture that encourages healthy debate. This was reflected in a number of our panels where we tackled issues such as passive versus active investing and the search for true alpha in alternative investing.

We would like to share with you some of the key ideas and themes from our conference through this Executive Summary.

CONFERENCE SUMMARY

Monday January 22nd, 2018

Serious Money: The Art of Responsibility

Jonathan J. Hirtle, *Executive Chairman, Hirtle Callaghan*

Reflecting on Hirtle Callaghan's 30 years in business, Jon Hirtle opened the conference by taking us back in time to when the investment business was simpler. He reminded us that when Hirtle Callaghan pioneered the Outsourced Chief Investment Officer (OCIO) model in 1988, investors had three main options: stocks, bonds or cash. Fast forward to today, the investment landscape has exploded with a seemingly endless array of choices. Along the way, technological innovation has enabled non-stop information flow and shortened the market's reaction time. The role of OCIO has never been more critical to helping investors navigate this complex environment. Using a sailing analogy, Jon likened Hirtle Callaghan's job to maneuvering the boat's tiller in the perfect position such that the sail catches the wind and "hums." As the winds shift, sailors are continuously challenged to re-adjust the tiller to maintain speed. It is much the same in investing, and 30 years later Hirtle Callaghan is constantly adjusting and innovating to find the perfect harmonic in investing and in serving our clients.

Deepening the Conversation

Ranji H. Nagaswami, CFA, *Chief Executive Officer, Hirtle Callaghan*

Donald V. Budinger, *Chairman & Founding Director, The Rodel Foundations*

Ranji moved from the past to the future, addressing how Hirtle Callaghan is building on our strengths across the organization. We continue to innovate with one purpose in mind – to improve outcomes for your institutions and families – bringing you all closer to fulfilling your mission and meeting your life goals.

Ranji defined our key advantages as:

1) We put clients at the heart of everything we do
2) We are focused on delivering a world-class investment solution
3) We have a culture that prizes progress, evolution and entrepreneurship

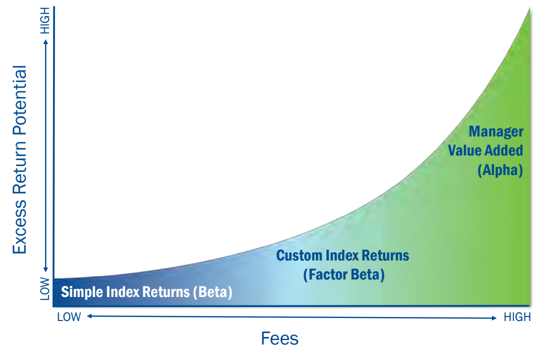
In all of these areas, we are looking to delve deeper and continue to enhance our capabilities. First, we are looking to deepen the conversation with clients, augmenting the planning process by asking more insightful questions to determine your true risk profile. Second, we are looking to deepen our investment expertise, enhancing our valuation-driven framework by paying more attention to the factors that influence valuation such as corporate earnings, interest rates and market dynamics. Third, we are looking to deepen our culture by adding talented team members who share our values and have complementary skillsets.

Ranji's presentation was followed by a lively and inspiring interview with Don Budinger in which she expounded upon her and Jon's shared vision for Hirtle Callaghan: To change the investment industry by demonstrating that a business model based on putting clients interest first – offering a conflict-free total investment solution – is the best model for the entire asset management industry and good for society.

Bogel vs. Buffett: What if Passive or Active is not a Binary Decision?

T. Brad Conger, CFA, *Deputy Head of Investments, Hirtle Callaghan*
Anup Agarwal, *Head of MBS/ABS, Western Asset Management Company*
Syed Zamil, *Portfolio Manager, Mellon Capital Management*

Brad Conger addressed the issue of active vs. passive investing by demonstrating that there is a place in portfolios for both approaches to investing, and in fact a continuum of strategies that combine elements of each. For certain highly commoditized asset classes where the democratization of information has made it harder for managers to add value, it may make sense to use passive vehicles that are less expensive. However, while information flow has made markets more efficient, information asymmetries still exist and skilled managers can achieve outsized returns by taking advantage of them. Hirtle Callaghan sees the decision not as active or passive, but rather as how to find the right combination of solutions that best meets your needs. There is a continuum on which active and passive in their purest forms sit at opposite ends of the spectrum, and in between investors can take advantage of strategies that combine the best of each.



Brad introduced Syed Zamil from Mellon Capital who made the case for using factor-based portfolios which combine elements of active and passive investing. Factor-based portfolios utilize alternate index construction rules instead of the traditional cap-weighted method. Using a rules-based approach, portfolios are tilted toward investment factors designed to capture market inefficiencies. Research suggests that 60-70% of what was "alpha" is explained by factors, which commonly include value, quality, momentum and low quality among others.[1] Factor-based portfolios have the advantage of being cost effective while also exploiting market inefficiencies.

Following Syed, Anup Agarwal from Western Asset Management used his strategy, which invests in Mortgage-Backed Securities (MBS) and Asset-Backed Securities (ABS), as an example of where pure active management adds value. Anup has had success investing in MBS and ABS opportunities that are not included in traditional indices and therefore, often harder to access. His strategy actively allocates capital to sectors that have more attractive risk- and liquidity-adjusted returns, and uses loan-level analysis to search for the best ones, thus seeking to provide an arbitrage opportunity for investors over traditional index products.

Change is the Only Constant: Is Your Asset Allocation Still Right for You?

William L. Hagan, CFA, *Director & Senior Portfolio Manager, Hirtle Callaghan*
Douglas J. Monty, CFA, *Director of Portfolio Management, Hirtle Callaghan*
John W. Griffith, CPA, *Vice President & Endowment Specialist, Hirtle Callaghan*
Garrett R. Wilson, *Investment Officer & ESG Investment Specialist, Hirtle Callaghan*

A central component of Hirtle Callaghan's holistic client engagement model is comprehensive planning. In this break out session for families and institutions, we explored our Planning Framework, which starts with asking the right questions to gain an understanding of your true risk profile. We believe that the biggest threat to your long-term success is having a mismatch between your risk tolerance and your asset allocation, especially in periods of turmoil. We seek to avoid that mismatch by having an interactive, deeper discussion to assess your need, ability and willingness to take risk.

[1] *Based on Andrew Ang PhD's study of Norges Bank Pension Fund. See "Evaluation of Active Management of the Norwegian Government Pension Fund – Global", December 2009*

- Planning starts with establishing your NEED, which is ultimately the fulfillment of your family's or organization's mission and goals.
- Next, we assess your quantitative ABILITY to take risk. For families this analysis considers your net worth, spending and time horizon among other factors. For institutions, we perform a thorough 3D risk analysis of investment, operating and financial risk.
- Successful planning also includes a deep understanding of your WILLINGNESS to take risk, or your emotional capacity to withstand volatility.

Hirtle Callaghan has enhanced its planning process, using tools such as scenario analysis and stress testing, to help assess your true risk profile. By finding your unique harmonic between need, ability and willingness to take risk, we believe that we can develop a more optimal asset allocation to help you achieve long-term success.

Tuesday January 23rd, 2018

2018 Keynote Speech

Malcolm Gladwell, *Best Selling Author*

Malcolm Gladwell, the best-selling author known for his thought provoking books including *The Tipping Point, Blink, Outliers* and *David and Goliath*, engaged the audience with anecdotes that emphasized the importance of applying integrative thinking, blending human judgment and data analysis. Delving into a number of studies underpinned by flawed hypotheses, Gladwell showed that relying on data without questioning the underlying assumptions can lead to faulty outcomes. In addition, Malcolm spent time dissecting the criteria for rankings systems that many take for granted, such as school rankings in U.S. News and World Report. He showed that even the most innocuous data has inherent biases built in. For instance, if you change the questions and criteria, the rankings are altered substantially. His presentation challenged us all, as consumers of information, to investigate thoroughly even when conclusions are presented as fact.

The Holy Grail: Can Alternatives Deliver Uncorrelated Returns?

Hedge Fund Investing

Matthew S. Mead, CFA, *Vice President, Investment Strategy, Hirtle Callaghan*

Anthony A. Yoseloff, *Co-Executive Managing Member, Distressed Investments, Davidson Kempner*

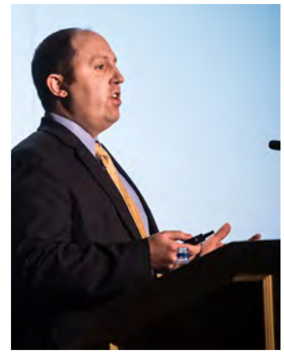
Jenni Kleine Lanktree, *Managing Director, Sales & Client Service, Davidson Kempner*

Matt Mead engaged the audience by likening the hedge fund diligence process to detective work. He walked us through an example of Hirtle Callaghan's research-based approach to identifying those managers who are truly skilled and can add value. In performing diligence on an India-focused equity strategy, Matt's team discovered that the manager was investing in a narrow subset of Indian public companies, and yet was measuring his performance against the broad equity index. Hirtle Callaghan created a more accurate benchmark that captured the manager's small universe, and found that the returns appeared less favorable, especially after fees. In this example, Hirtle Callaghan's thorough, rigorous diligence led to the conclusion that manager's special skill was not obvious, and thus did not justify the high fees being charged.

Andrew Yoseloff of Davidson Kempner discussed his firm's strategy for adding alpha through investment in distressed securities. Davidson Kempner's distressed strategy focuses on a portfolio of unique ideas oftentimes created by stresses related to a particular event. The firm analyzes each specific situation and identifies opportunities to realize and/or create value unrecognized by the market. Critically, Davidson Kempner often takes an active role in driving the outcome, using its influence, deep resources, and specific expertise.

Private Equity Investing

Matthew R. Curtolo, CAIA, *Vice President, Investment Strategy, Hirtle Callaghan*
John M. Roth, *CEO, Freeman Spogli*



Matt Curtolo made the case for private equity investing emphasizing that it expands the breadth of available investment opportunities which is a key cornerstone of Hirtle Callaghan's process. Based on best estimates, private companies make up the vast majority (99.9%) of all companies in the U.S. By tapping into the private market, investors can take advantage of a much larger opportunity set of growth companies that cannot be accessed through an index or passive investment vehicle. Matt also talked about the importance of manager selection in private equity. Truly skilled private equity managers have the ability to add value by significantly improving the operations of businesses, most importantly, outside the constant pressure of the public markets. Ultimately, their improvements can translate into gains for investors upon a positive exit, either through M&A, a sale to another private equity firm or an IPO. Through a rigorous, multi-step diligence process, Hirtle Callaghan aims to hone in on the best opportunities and invest in managers with the ability to add value and generate strong returns.

John Roth, CEO of Freeman Spogli, provided a case study for one of his firm's portfolio companies, Floor & Décor. He highlighted how a private equity firm with specialist skills can work with business operators to make the necessary changes for a successful exit, thereby generating positive outcomes for investors.

Hirtle Callaghan Investment Leadership Award

Keith P. Ambachtsheer, *Director Emeritus, Rotman International Centre for Pension Management*

Hirtle Callahan awarded its 2018 Investment Leadership Award to Keith Ambachtsheer, honoring his success in advancing the discourse on pension design, governance and investing through his unwavering intellectual curiosity, integrative thinking, enduring innovation and unflagging academic rigor.

Keith Ambachtsheer is recognized as one of the globe's most original thinkers on pension design, governance, and investing issues. Since its founding in 1985, KPA Advisory Services has become known as a trusted incubator for new thinking in pensions, and for providing strategic advice to a global clientele in person, and through its monthly Ambachtsheer Letter. CEM Benchmarking Inc., co-founded by Keith in 1991, has earned a reputation as the premier benchmarking organization in the global pensions and investments industry. Keith was named "One of the Most Influential People in Pensions" by Pensions & Investments and has received many honors and awards over the course of his professional career.

In addition to being closely connected to the business side of the pension and investments industry, Keith has strong ties to its related fields in academia. He has helped guide the discourse in the field through a variety of academic positions at various institutions. He has also authored four critically acclaimed books on pension management.

He has personal governance experience as a member of two corporate boards, and has served as Board Chair of a major medical foundation. He is a member of the Melbourne-Mercer Global Pension Index Advisory Council, the CFA Institute's Future of Finance Advisory Council, the Georgetown University Center for Retirement Initiatives Scholars Council, and Ontario's Advisory Group on Retirement Income Security.

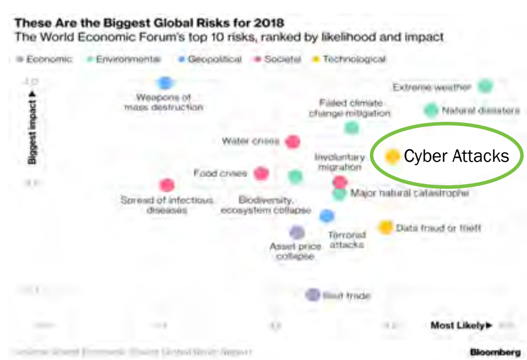
Governance Alpha and Personal Dynamics: Avoiding Investor Pitfalls

Susan H. McEvoy, CFP, *Director, Investment Officer, Hirtle Callaghan*
Keith P. Ambachtsheer, *Director Emeritus, Rotman International Centre for Pension Management*
James P. Garland, *Former Chairman, The Jeffrey Company*

Jim Garland and Keith Ambachtsheer pooled their collective wisdom and provided insight into what constitutes good governance for boards. Each pulled from his respective experience. Jim with the board of a family business; Keith with corporate boards to reveal best practices that have broad application for families and institutions. Highly functional boards start with a well-defined mission and clear set of objectives for members to follow. They also have a deliberate board selection process that actively seeks out individuals with diverse, but complementary skillsets. Keith likened a well-planned board to an orchestra, bringing together highly skilled instrumentalists that play well in harmony. He pointed out that recruitment is often an afterthought for boards, and as a result politics and personality get in the way of finding the right people. The best boards bring together individuals who have the ability to think strategically and the willingness to engage in healthy, collegial debate. Transparency is also a key driver of success. Sharing information freely with board members and constituents helps curtailpotential conflicts. Strong boards are also transparent in their own self-evaluation, looking introspectively at how to improve as a group. To this end, they prioritize education and are constantly learning how to be more effective.

Rule Number One, Don’t Lose the Money: Phishing, Social Hacking, and Security Awareness

Dierk A. Flemming, *Chief Legal Officer & Chief Compliance Officer, Hirtle Callaghan*
Mark Sangster, *Vice President, eSentire*



In our session on cybersecurity, Dierk Flemming talked about the ever-evolving nature of cyberattacks and their potential impact on our business. As stewards of your capital, Hirtle Callaghan is responsible first and foremost for safeguarding your assets, and is hypervigilant to the increased sophistication of hackers. In recent years, hackers have become increasingly deceptive, luring unsuspecting people into revealing sensitive information through fake email messages that appear to be from legitimate institutions, such as banks and government institutions, among other tactics. To protect against such attacks, Hirtle Callaghan has partnered with eSentire, which provides an extra layer of security across multiple facets of our business, including infrastructure and network safety, as well as providing enhanced employee training programs.

Mark Sangster expanded upon the role of cyber security in protecting against fraud, especially in the finance industry which is a natural target. He delved into eSentire’s use of sophisticated analytics to detect fraud across the complex web of communications and online activity that exist today. His firm’s comprehensive analytical solution is backed up by a robust team that functions much like “detectives” to safeguard clients against potential deception.

Does History Rhyme? Analyzing Market Poetry

Scott Jacobson, CFA, *Director, Investment Strategy, Hirtle Callaghan*

The ever-creative Scott Jacobson started with a Moody Blues-inspired poem to remind investors that we should be wary of making too much of the market's past to predict its future.

Breathe deep the gathering gloom
Watch lights fade from every room
Bearish people look back and lament
Another day's useless energy is spent
Stock investors wrestle as one;
Bond trader cries for love and has none
Market picks up and soars to the sun
Senior citizens wish they were young
Cold-hearted data rules the night
Removes the colors from our sight
Red is grey is yellow white
But we decide which is right
And which is an illusion

Sharp data in a colorless sky
Let insipid fickle hindsight pass by
The mighty light of ten thousand sims
Challenges infinity and is soon gone
Night time, for stocks a brief interlude
For others fear of the mini-SPU
Brave traders, wake your PCs
Bring the returns the country needs

Scott discussed the dilemma investors face today when synthesizing a complex web of market data, signals, and noise. Historic data is certain, but viewed in a rear-view mirror. We use historic information to recognize patterns, but its predictive powers are limited in an uncertain future. History may rhyme, but rarely mimics the same exact patterns. Scott walked through examples of data obsolescence where decades-long patterns for GDP growth and equity market returns did not extend into the future.

At Hirtle Callaghan we approach our role as OCIO with confident humility. We cannot perfectly predict the future, but we work diligently to synthesize data and information to avoid pitfalls and seize opportunities. We do not believe any single data point is completely useful when viewed in isolation. Instead, we construct a mosaic of information that together gives us better insight for the future. We try to sort signals from market noise to help clients achieve their investment goals in a responsible, objective manner.

Only Net Returns Matter: What Does the Tax Overhaul Mean for You?

Alan E. Weissberger, Esquire, *Senior Tax & Estate Planning Solution Specialist, Hirtle Callaghan*

Blanche Lark Christerson, *Managing Director, Deutsche Bank Wealth Management*

Alan Weissberger and Blanche Christerson discussed the implications of the recently passed Tax Cuts and Jobs Act, which is the most significant tax change since the Tax Reform Act of 1986. The most widely sweeping changes are those that will permanently affect corporations, with the top tax rate going down substantially from 35% to 21%. In addition, corporate AMT will be repealed and U.S. companies will be able to repatriate overseas earnings at a more favorable rate than at the previous top rate of 35%.

The Act also has important implications for individuals and families, although it is worth noting that the individual reforms are set to be in place for a finite period from 2018 through 2025, at which point they will expire unless renewed. To summarize the changes for individuals:

- Individual tax rates are lower, with the top marginal rate down to 37% (from 39.6%)
- Most itemized deductions are modified or eliminated
- Personal exemptions are eliminated
- The child tax credit is doubled and the minimum qualifying income has increased
- Fewer individuals are subject to alternative minimum tax (AMT)
- The gift, estate and generation skipping transfer (GST) tax exclusions are doubled to $10mm per person, or $20mm per couple (indexed for inflation)
- There is a new 20% deduction for “qualified business income”

For individuals and families looking for planning opportunities, some naturally arise as a result of the finite timetable that the reforms are set to be in place. Individuals who are considering setting up trusts may want to do so before 2026 to take advantage of the increased gift, estate and GST tax exemptions. This is especially applicable for grantor trusts where the grantor pays the tax on any realized gains, interest or other income. Another planning technique that is very effective in this low interest rate environment is Grantor Retained Annuity Trusts (GRATs). Clients are using GRATs for marketable securities as well as other illiquid assets like LLC or partnership interests. Investors looking to move assets from their estate to future generations might also consider direct payments of tuition, medical expenses and health insurance premiums, which are “extras” in addition to annual gift exclusions (in 2018, $15,000 per donee, or $30,000 per couple) and do not erode the gift exclusion.

CONFERENCE HIGHLIGHTS










INVESTMENT SOLUTIONS FOR A COMPLEX WORLD

HIRTLE
CALLAGHAN
& CO
Chief
Investment
Officers

Five Tower Bridge
300 Barr Harbor Drive, 5th Floor
West Conshohocken, PA 19428

610 828 7200 Tel / 610 828 7425 Fax

www.hirtlecallaghan.com

AMERICA'S FIRST OUTSOURCED CHIEF INVESTMENT OFFICERS®
TIMELESS VALUES | CUTTING-EDGE SOLUTIONS